CNMV BULLETIN Quarter I 2021



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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
ССР	Central Counterparty
CDS	Credit Default Swap
CFA	Atypical financial contract
CFD	Contract For Differences
CISMC	CIS Management Company
CNMV	(Spanish) National Securities Market Commission
СР	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
	Initial Coin Offering
IE	Investment Firm / Investment Fund
IFRS	International Financial Reporting Standards
	Ihere American Securities Market Institute
	International Monetary Fund
	International Organization of Socurities Commissions
	Initial Public Offering (for cale/subscription of segurities)
	Pariadia public information
	Internal Pata of Potum
	Internal Kate of Keturn
15IN	
KIID/KID	Key investor information Document
T (1)	
Latibex	Market of Latin American Securities
Latibex LEI	Market of Latin American Securities Legal Entity Identifier
Latibex LEI LIIC	Market of Latin American Securities Legal Entity Identifier Spanish Collective Investment Companies Act
Latibex LEI LIIC LMV	Market of Latin American Securities Legal Entity Identifier Spanish Collective Investment Companies Act Spanish Securities Market Act
Latibex LEI LIIC LMV MAB	Market of Latin American Securities Legal Entity Identifier Spanish Collective Investment Companies Act Spanish Securities Market Act Alternative Stock Market
Latibex LEI LIIC LMV MAB MAD	Market of Latin American Securities Legal Entity Identifier Spanish Collective Investment Companies Act Spanish Securities Market Act Alternative Stock Market Market Abuse Directive
Latibex LEI LIIC LMV MAB MAD MAR	Market of Latin American Securities Legal Entity Identifier Spanish Collective Investment Companies Act Spanish Securities Market Act Alternative Stock Market Market Abuse Directive Market Abuse Regulation
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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
ТОВ	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 Securities markets and their agents: Situation and outlook

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1 Executive summary

- In the first few months of the year, the international and national macroeconomic and financial environment was still marked by the COVID-19 pandemic. Although fresh outbreaks of infection continue to appear, the vaccination process launched on an international scale has slightly reduced the existing uncertainty, prompting an improvement in economic expectations, especially in economies such as Spain which have been most affected by the crisis due to their productive model. Expectations have also improved for other economies such as the United States, which have launched substantial packages of fiscal measures. In some of these jurisdictions, the expected uptick in activity has been accompanied by fears of rising inflation, which has carried over to returns on debt assets. In the area of monetary policy, there have been no significant developments with respect to the situation in recent months, but rather a continuation of the expansive tone.
- In this context, the main international equity indices marked significant gains in the first quarter of the year,¹ in tune with the vaccination process and improved economic expectations. Gains were relatively similar in the different economic areas during this period, compared to the uneven performance observed in 2020 between the US and Japanese indices and their European counterparts (except for the German Dax 30) in favour of the former. US stock market indices presented rises ranging from 2.8% on the Nasdaq technology index and 7.8% on the Dow Jones. In the Euro area increases were between 6.3% on the Ibex 35 and 10.9% on the Mib 30, and in Japan, the Nikkei gained 6.3% and the Topix rose by 8.3%. In most cases, volatility indicators remained at moderate levels. On the other hand, the increase in inflation expectations, mainly in the United States, led to a substantial rebound in debt yields in that economy (the 10-year sovereign bond rose 83 basis points [bp], +1.75%), which was transferred, with less intensity, to similar assets in other economies.
- The latest activity data for the Spanish economy show a 10.8% drop in GDP in 2020, which is greater than the decline experienced by the Euro area as a whole (6.8%), mainly because the product composition in Spain has a higher weighting of activities that have been relatively more affected by the crisis. The crisis led to job losses of 622,600 last year, as well as an increase in the unemployment rate to 16.1% of the active population (13.8% in 2019). Likewise, the public deficit grew to 10.9% of GDP as a consequence of the rise in spending deriving from the pandemic, which is estimated at €45 billion, and public debt climbed to 120% of GDP. In this context, the most recent forecasts of the

¹ The closing date for this report is 31 March, except for certain specific information.

International Monetary Fund (IMF) for the Spanish economy envisage substantial growth of 6.4% this year (5 tenths of a point more than in its last forecast and 2 percentage points [pp] more than for the Euro area as a whole). This improvement would be due to the positive effects of the gradual lifting of lockdown measures, which were so detrimental to the Spanish economy in 2020, as well as the expectations generated by the European funds. It is also important to bear in mind that, having fallen more sharply in 2020, recovery rates tend to be higher as economic activity approaches pre-crisis levels. The uncertainty surrounding these forecasts remains high due to factors whose evolution is difficult to predict: the development of the COVID-19 pandemic itself, the effectiveness of the policies and economic aid implemented and, finally, the adjustment capacity of economic activity to new consumption patterns and certain existing vulnerabilities, such as high public debt or the potential increase in financial difficulties affecting some companies.

- The Spanish equity markets, which made large gains in the final months of 2020, recouping a substantial large part of the losses they have previously incurred, began 2021 with fresh increases, fuelled by the outlook for economic recovery and the beneficial effects of the vaccination programmes. In this environment (which is still marked by high uncertainty) the Ibex 35 ended the quarter with a rise of 6.3%, slightly lower than the gains marked by other large international indices, with moderate levels of volatility and stable liquidity, and with a noteworthy fall in trading volumes. Equity issues were close to €3 billion in the first quarter of the year, with transactions carried out under the scrip dividend format growing in popularity as they allow companies to keep part of the funds on their balance sheets. No initial public offerings (IPOs) have been registered so far this year, although several are expected in the coming months, especially from companies in the renewable energy sector. On the other hand, two public offerings, corresponding to Opdenergy Holding and Grupo Ecoener, have recently been approved.
- In the Spanish bond markets, the decline in asset returns observed most of last year as a result of the expansionary measures adopted by the European Central Bank (ECB) ended in the first few months of 2021, in line with the performance of the yields of these assets in the international debt markets. Despite the slight increases, interest rates remain very low and are negative for a broad set of assets (the 10-year sovereign bond yield ended the quarter at 0.34%). Likewise, debt issues of Spanish issuers registered with the CNMV in the first quarter of 2021 increased by 13.3% year-on-year, to €23.5 billion, while issues made abroad decreased, although their amount was significant (more than €19 billion in just two months).
- In 2020, the investment fund industry remained practically stable in terms of assets, showing a slight increase of 0.1%, to €279.7 billion (€306.6 billion including the assets of open-ended collective investment schemes, SICAVs). The 10.5% decrease in asset value in the first quarter, 90% of which owed to the reduction in the value of the portfolio, was offset by the subsequent increase (11.8%) accumulated in the rest of the year. The liquidity conditions of the portfolios of these institutions remained satisfactory. In contrast, the assets of foreign collective investment schemes (CISs) marketed in Spain continued to

expand, reaching close to €200 billion at the end of the year, representing 39% of the total assets of CISs marketed in the country. In the first months of the year, the growth in assets and the number of unitholders in these institutions seen in the last quarters of 2020 continued. This marks a change in the trend, boosted by the strong increase in household savings, which for the time being are being channelled into more conservative and liquid financial assets.

- In the area of investment services, credit institutions continued to account for most of the fees charged for different types of services (close to 90% of the total). Investment firms (IFs) saw substantial growth in pre-tax profits in 2020 (80%), although this performance was due to a small number of entities; in particular one that was affected by Brexit to which part of the business carried out by its parent in the United Kingdom was transferred. The number of broker-dealers and brokers closing the year in losses remained the same as in 2019 (32 out of a total of 95), but their aggregate amount dropped significantly. Solvency in the sector remained satisfactory, although a significant decrease was observed in the margins of broker-dealers. For some years, this sector has marked a trend in which the weight of entities related to commercial banks is decreasing slightly and that of entities that can be considered independent, and whose business model is diversified among the different investment services, is increasing.
- This report contains four monographic exhibits:
 - The first describes the initial effects of Brexit on the European financial markets, especially in relation to the transfer of trading from infrastructures based in the United Kingdom to other infrastructures in the European Union (EU).
 - The second looks at movements in the credit ratings of debt assets issued by Spanish issuers in 2020 in order to assess the impact of the COVID-19 crisis.
 - The third exhibit discusses the public consultation opened by the CNMV in relation to the future Circular on the advertising of crypto-assets.
 - Lastly, the fourth exhibit addresses the obligation of entities to observe the requirements established in Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector, applicable since 10 March.

2 Macro-financial environment

2.1 International economic and financial performance

The Coronavirus pandemic marked economic performance in 2020, leading to a contraction in world GDP of $3.3\%^2$ in the year, a long way below the growth of 2.8% seen in 2019. All regions went into recession and the fall in activity was most notable in the second quarter, when the effects of the serious economic and productive closures caused by lockdowns and distancing measures became more visible. In the following quarters of the year, the drop in GDP was milder in most economies, although none registered positive growth except for China, where the virus had spread earlier and hence the recovery of its economy was also earlier.



Source: Refinitiv Datastream. Year-on-year GDP rates are shown for each quarter in all economies except China, where growth rates accumulated in the year are represented in year-on-year terms.

The United States posted a milder decline in activity than the European economies. In the United States, the fall in GDP was less severe than in European countries, as the lockdown measures were less restrictive and there were fewer closures. However, GDP went from growth of 2.2% in 2019 to a fall of 3.5% in 2020. In the Euro area, the drop was 6.8% in the year, although notable differences were observed between European countries, with falls that ranged from 10.8% in the case of Spain to 3.7% in the Netherlands (in 2019 the GDP of these economies grew by 2% and 1.6%, respectively). In Italy, as in Spain, the spread of the Coronavirus was initially more rapid, as were the lockdown measures implemented, which translated into a drop in GDP of 8.9% in 2020 (+ 0.3% in 2019). In France, the decline was 8.2% (9.7 points less than the previous year) and in Germany it was milder (GDP down 5.3% in 2020). The United Kingdom also showed one of the largest falls in activity, from growth of 1.4% in 2019 to a contraction of 9.8% in 2020, as the uncertainty caused by COVID-19 exacerbated the uncertainty caused by Brexit.

The Coronavirus pandemic marked economic performance in 2020, leading to a contraction of world GDP of 3.3% in the year as a whole (vs. the growth of 2.8% seen in 2019).

² World Economic Outlook, published by the IMF on 6 April.

The crisis caused by the spread of the Coronavirus caused the main central banks to adopt urgent monetary policy measures last year. In their last meetings of March of this year, the majority of the monetary authorities maintained the stimuli that they had been applying with no significant changes. Thus, the Federal Reserve did not alter its official interest rate, which remained in the range of 0.00-0.25%, and undertook not to raise it until labour market conditions reach its dual objective of full employment and an inflation rate that moderately exceeds 2%. It also kept its asset purchase programme unchanged (US\$120 billion in treasury bills and mortgage-backed assets).

Similarly, at its meeting of 11 March 2021, the ECB did not make changes to its official interest rates, keeping the rates for main refinancing transactions, the marginal credit facility and marginal deposit facility unchanged at 0%, 0.25% and -0.50%, respectively. Neither did it change the limits of its pandemic emergency purchasing programme³ (PEPP), although an increase in pace of purchases⁴ was announced in order to prevent the increase in sovereign bond yields from giving rise to harsher funding conditions.

The Bank of England did not change the tone of its monetary policy either, keeping its official interest rate at 0.1% and the amount of its asset purchase programme at GBP 895 billion. Lastly, the Bank of Japan, at its last meeting in March, made certain adjustments to its monetary policy,⁵ although the official interest rate remains unchanged at -0.10% (since 2016).

Short term interest rates marked somewhat different trends in most of the regions observed during the first quarter of 2021. 3-month rates fell 4 bp in the United States, following the downward path that began in 2019, albeit with a more moderate decline than in the first quarter of 2020 (-46 bp). In the Euro area, interest rates saw few significant changes during the first quarter of the year (increase of 1 bp), as in Japan. Meanwhile, the United Kingdom posted small increases in short term rates, which stood at 0.09% at the end of the first quarter (6 bp more than at the beginning of the year).

Interest rates on long term public debt marked a similar performance in the first quarter of 2021, with increases in most advanced economies, driven by the increase in interest rates on US debt.

At its meeting on 16/17 March, the Federal Reserve did not lower its official interest rate, which remains in the range of 0.00-0.25%.

The ECB resolved to keep its official interest rate unchanged, but announced an increase in the pace of purchases.

The Bank of England did not change its monetary policy, while the Bank of Japan has made certain adjustments.

Short term interest rates followed different trends: with slight falls in the United States, increases in the United Kingdom and hardly any changes in the Euro area and Japan.

Interest rates on long term public debt marked a similar performance in the first quarter of 2021, with increases in most advanced economies, especially in the United States.

³ The PEPP has been endowed with €1.85 trillion after its extension at the December ECB meeting, with a completion date of March 2022 and the roll-over of the programme bond maturities until, at least, the end of 2023.

⁴ In the first half of March, the ECB confirmed an increase in weekly purchases of debt in secondary markets during the second quarter of the year as part of the framework of its PEPP programme. Likewise, the President stated that "inflation will probably reach 2% by the end of the year".

⁵ It slightly widened the range of 10-year bond yields (from 0.2% to 0.25%, above and below the target level, which remains around zero) and eliminated its annual fund purchase target of publicly traded and Japanese real estate investment funds (J-REITs) (set at JPY 6 trillion and JPY 90 billion, respectively, although these amounts doubled after COVID-19).



Source: Refinitiv Datastream. Data to 31 March.

In the United States, the yield on the 10-year sovereign bond increased 83 bp in the first quarter of the year (to 1.75%), mainly due to higher growth and inflation expectations prompted by progress made on the vaccination programme and the approval of a strong economic stimulus package. In the Euro area countries, the increase in interest rates on public debt was smaller, ranging between 14 bp and 40 bp in Italy and Belgium, respectively. The yield on the German sovereign bond remained negative (-0.30%), as did the yield on public debt in the Netherlands (-0.24%), Finland (-0.11%), Austria (-0.07%) and France (-0.05%), and was very close to zero in Ireland (0.07%). In the peripheral Euro area countries, the increases in long term sovereign debt yields were less pronounced than in the rest of the European countries (between 14 bp and 28 bp). Thus, at the end of March these yields stood at 0.87% in Greece, 0.66% in Italy, 0.34% in Spain and 0.23% in Portugal. In the United Kingdom, on the other hand, the increase in the interest rate on the 10-year bond was more significant, standing at 0.85% in March (65 bp more than at the end of 2020).

Sovereign credit risk premiums (assessed through 5-year CDS contracts) of advanced economies decreased slightly during the first quarter of 2021, maintaining the downward path observed after the highs recorded in the same quarter of the previous year as a result of the uncertainty caused by the spread of COVID-19. In general, the greatest decreases were observed in peripheral Euro area countries, especially in Italy, where after some tightening of premiums caused by political instability, there was a decrease of 23 bp in the quarter as a whole (to 75 bp). In Greece, the risk premium decreased by 25 bp in the quarter, 10 bp in Spain and 7 bp in Portugal (to 77 bp, 34 bp and 30 bp, respectively).

In the United States, the 10-year sovereign bond yield increased 83 bp, well above the rises observed in the Euro area (between 14 bp and 40 bp).

Sovereign credit risk premiums decreased throughout the first quarter of 2021, especially in the peripheral Euro area countries.

10-year sovereign bond market indicators



Liquidity¹

Volatility²

FIGURE3 3



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

1 1-month average of the daily bid/ask spread of 10-year sovereign bond yields.

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



Source: Refinitiv Datastream. Data to 31 March.

Similarly, credit risk premiums declined in most bond segments, somewhat more sharply in the United States than in the Euro area, especially on bonds with lower credit ratings (high yield). Credit risk premiums in the private fixed income markets of advanced economies decreased in most segments with respect to the values recorded at the end of 2020, continuing the trend observed after the rallies in March last year. These declines were somewhat sharper in the United States compared to the Euro area, especially in assets with lower credit ratings (see Figure 5). In the United States, the risk premium on high yield debt decreased by 90 bp in the first quarter of the year, to 317 bp; the premium on BBB debt rose by 35 bp, to 87 bp, and that on AAA debt by 2 bp, to 39 bp. In the Euro area, the decline in corporate debt credit risk premiums was 39 bp in the high yield segment, to 405 bp; 16 bp in the BBB segment, to 108 bp, and there were no changes in the AAA tranche, standing at 54 bp.



Source: Refinitiv Datastream and own calculations. Data to 31 March. 1 In the Euro area in relation to German sovereign debt.

Gross long term debt issues in international markets during the first quarter of the year (half-yearly data) registered a slight increase compared to the first half of 2020, reaching US\$8.3 trillion (5.8% more than in the same period of the previous year). This increase was due to the rebound in financial and public sector issues, which increased by 13.4% and 11%, respectively. In contrast, gross issues in the non-financial sector decreased by 15.5%. By region, the increase in debt issues in the United States and Japan stand out, with issues in Europe down 12%.

Gross sovereign debt issues as a whole increased by 11%, driven by rises in the United States and Japan.

Gross debt issues in international markets registered a slight

quarter of the year, highlighting

the increase in issues made by

companies in the financial and

public sectors.

increase of 5.8% in the first

Gross sovereign debt issues increased by 11% as a whole compared to the first half of 2020, to US\$5.5 billion, with an uneven performance between regions. Thus, in the United States and Japan there were rises of 41.6% and 33.3% respectively (US\$3.1 trillion and US\$693 billion). In Europe, however, these issues fell by 22.1%.

International gross fixed income issues



Financial institutions





Source: Dealogic. Half-yearly data. Data for the first haft of 2020 are to 31 March, but are shown as their half-yearly equivalent for purposes of comparison.

Gross debt issues made by private sectors performed unevenly between sectors compared to the first half of 2020, with an increase of 13.4% in the financial sector and a decrease of 15.5% in the non-financial sector. In the former, the increase was fuelled mainly by Europe (29.4%) and the United States (23.3%). Similarly, the drop in debt issues in the non-financial sphere was determined by movements in these two areas (-24.3% in the United States and -16.6% in Europe).

The main equity indices strengthened during the first months of 2021, after a year marked by episodes of sharp falls followed by rallies that, in some markets, failed to offset the initial losses. Equity markets showed a positive performance in this period due to several factors that sparked an improvement in economic expectations, including the progress in the vaccination programme, the resolution of several sources of uncertainty, such as Brexit, or the approval of a large economic stimulus programme in the United States. The gains observed on the main indices were accompanied by lower volatility indicators.

Private sector issues performed differently according to subsectors, with increases in the financial sector and decreases in the non-financial sector.

The main equity indices rose during the first three months of 2021 in a less volatile environment. Index gains ranged between 2.8% and 10.9% in advanced economies.

Most emerging equity markets made gains in the first quarter of the year. In contrast to 2020, when the US indices showed were notably stronger than the others (which even lost value), the increases experienced by equity indices in the first quarter of 2021 moved in similar ranges in all advanced economic areas (see Table 1). US stock market indices reported rises in the range of 2.8% for the Nasdaq technology index and 7.8% for the Dow Jones (5.8% for the S&P500). Similarly, increases were observed in stock market indices in the Euro area ranged between 6.3% for the Ibex 35 and 10.9% for the Mib 30. The UK FTSE100 index increased by 3.9%, as did the Japanese indices: 6.3% for the Nikkei and 8.3% for the Topix.

The performance of stock market indices of emerging economies was more irregular in the first quarter of the year, although as a whole, according to the MSCI emerging markets index, there was an increase of 3.6% compared to December 2020. The Asian indices registered rallies that ranged between 4.2% and 11.5% (in Hong Kong and Taiwan, respectively), except in China, where the Shanghai Composite index fell slightly (0.9%) on expectations of a potential withdrawal of stimulus measures, Malaysia and the Philippines, whose main indices dropped 3.3% and 9.8%, respectively. Among the Eastern European economies, the gains made by the Romanian and Bulgarian indices stood out (14.1% and 12.2%, respectively). In Latin America, several indices marked falls, such as the Argentine Merval (6.3%) and the Brazilian Bovespa (2.0%), while the Chilean, Mexican and Peruvian bourses rose throughout the quarter (17.5%, 7.2% and 2.6%, respectively).

Performance of the main stock market indices¹

TABLE 1

%								
	2017	2018	2019	2020	II 20	III 20	IV 20	l 21
World								
MSCI World	20.1	-10.4	25.2	14.1	18.8	7.5	13.6	4.5
Euro area								
Eurostoxx 50	6.5	-14.3	24.8	-5.1	16.0	-1.3	11.2	10.3
Euronext 100	10.6	-11.2	24.9	-3.6	13.8	-1.8	15.1	8.3
Dax 30	12.5	-18.3	25.5	3.5	23.9	3.7	7.5	9.4
Cac 40	9.3	-11.0	26.4	-7.1	12.3	-2.7	15.6	9.3
Mib 30	13.6	-16.1	28.3	-5.4	13.6	-1.9	16.9	10.9
lbex 35	7.4	-15.0	11.8	-15.5	6.6	-7.1	20.2	6.3
United Kingdom								
FTSE100	7.6	-12.5	12.1	-14.3	8.8	-4.9	10.1	3.9
United States								
Dow Jones	25.1	-5.6	22.3	7.2	17.8	7.6	10.2	7.8
S&P 500	19.4	-6.2	28.9	16.3	20.0	8.5	11.7	5.8
Nasdaq Composite	28.2	-3.9	35.2	43.6	30.6	11.0	15.4	2.8
Japan								
Nikkei 225	19.1	-12.1	18.2	16.0	17.8	4.0	18.4	6.3
Tanin								

Source: Refinitiv Datastream.

1 In local currency Data to 31 March.

The implied volatility measures of the most significant stock market indices decreased compared to the fourth quarter of 2020 and remained on average between 17% and 21% during the first quarter of 2021, with the exception of the Nasdaq, which experienced outbreaks of volatility throughout the first three months of the year. Although implied volatility indicators spiked at certain times between January and March, they fell with respect to the figures seen in 2020 (between 24% and 49%), but remained above the levels observed in 2019 (between 12% and 16%). Global implied volatility indicators decreased during the first quarter of the year compared to the values recorded in 2020.



1 State Street indicator.



Source: Dealogic. Accumulated data for 12 months to 31 March.

The volume of equity issues increased significantly in the first quarter of 2021, especially in the United States.

In 2020, Spanish GDP dropped by 10.8% due to the COVID-19 crisis, a larger decrease than that of the Euro area as a whole, which was 6.8%...

The contribution of domestic demand to the drop in GDP was 8.8 pp, while that of the foreign sector was 2.0 pp. The volume of issues of equity instruments increased significantly during the first quarter of 2021 and stood at close to US\$465 billion (compared to US\$141 billion issued in the same period in 2020). Thus, equity issues grew in all regions, especially in the United States, where they were four times higher than in the first quarter of 2020, accumulating half of the equity issues made in that country by March last year. The increase was also large in other areas, with issues of equity instruments of around US\$80.7 billion In Europe, US\$6.9 billion in Japan and US\$87.2 billion in China (US\$28.4 billion, US\$2.9 billion and US\$35.4 billion in the first quarter of 2020, respectively). By sector, issues made by companies in the non-bank financial sector grew substantially (multiplied by five with respect to the first quarter of 2020) as well as issues made by the banking sector (multiplied by four). The most significant increases in absolute terms were concentrated in the industrial sector, where equity issues increased by almost US\$205 billion compared to the first quarter of the previous year. The increase in utilities companies was less pronounced (29.2%).

2.2 Domestic economic and financial performance

The COVID-19 crisis, with the familiar lockdown measures and closure of activity, caused Spanish GDP to contract by 10.8% in 2020. The largest drop was registered in the second quarter of the year (21.6% year-on-year) and later on the gradual opening of the economy led to smaller setbacks (-8.6% and -8.9% in the third and fourth quarters, year-on-year). These figures were among the worst in the Euro area, which registered an overall contraction of 6.8% in the year. Reasons for this worse relative performance include the impact of the crisis on sectors such as tourism and related segments, which generate a great deal of value for the Spanish economy, and a business network that is mainly composed of small and medium-sized enterprises, which, in addition to being affected by the restrictions imposed by the crisis (especially retail companies) generally have more difficulties than larger companies in dealing with such serious and long-lasting crises.

Of the total drop in GDP in 2020 (10.8%), 8.8 pp was due to the contribution of domestic demand and 2 pp to the foreign sector. In relation to the components of domestic demand, there was a strong decline in both private consumption and gross fixed capital formation (-12.4% and -11.4%, compared to growth of 0.9% and 2.7%, respectively, in 2019). In contrast, public consumption increased by 3.8%, the highest figure since 2009. In the foreign sector, both exports and imports decreased in the year: the former by 20.1% and the latter by 15.8% (in 2019 both grew – by 2.3% and 0.7%, respectively).

Spain: Main macroeconomic variables

Annual % change

					IMF	1
	2017	2018	2019	2020	2021	2022
GDP	3.0	2.4	2.0	-10.8	6.4	4.7
Private consumption	3.0	1.8	0.9	-12.4	6.0	3.3
Public consumption	1.0	2.6	2.3	3.8	3.9	0.4
Gross fixed capital formation, of which:	6.8	6.1	2.7	-11.4	8.9	7.5
Construction	6.7	9.3	1.7	-14.0	n/a	n/a
Capital goods and others	9.2	5.5	4.5	-13.1	n/a	n/a
Exports	5.5	2.3	2.3	-20.1	n/a	n/a
Imports	6.8	4.2	0.7	-15.8	n/a	n/a
Foreign sector (contribution to growth, pp)	-0.2	-0.5	0.6	-2.0	0.8	0.9
Employment ²	2.9	2.6	2.3	-7.5	n/a	n/a
Unemployment rate	17.2	15.3	14.1	16.1	16.8	15.8
Consumer Price Index ³	2.0	1.7	0.8	-0.3	1.0	1.3
Current account balance (% GDP)	3.0	2.6	2.8	1.4	1.0	1.9
Public administrations balance ⁴ (% of GDP)	-3.1	-2.5	-2.9	-11.0	-9.0	-5.8
Public debt (% of GDP)	98.6	97.4	95.5	120	118.4	117.3
Net international investment position (% of GDP)	68.0	61.7	58.7	60.3	n/a	n/a

Source: Refinitiv Datastream, IMF, Bank of Spain and INE.

1 IMF forecast released 6 April 2021.

2 In terms of full-time equivalent jobs.

3 The European Commission forecasts are from the harmonised consumer price index.

Includes the public aid to credit institutions in 2017, 2018, 2019 and 2020 for an amount of 0.04%, 0.01%, 0.00% and 0.88% of GDP, respectively. The increase registered in 2020 corresponds to the reclassification of the SAREB under public administrations, required by Eurostat, whose figures are computed in this section.
n/a: [data] not available.

On the supply side, significant slowdowns were observed in most sectors, except for the primary sector, financial and insurance activities, and public administration, health and education activities, that in 2020 reported increases in added value of 5.4%, 3.3% and 1.4%, respectively (-2.2%, 0% and 1.2% in 2019). The greatest decreases were seen in the arts and recreational activities sector (-24.9%) and trade, transport and hospitality (-24.4%), which were seriously affected by the restrictions on movement. Construction (-14.5%), services (-11.1%) and industry (-9.6%) also performed badly.

The inflation rate remained negative for much of 2020, reaching a minimum rate of -0.9% in May. Inflation started 2021 at positive levels and, despite several fluctuations, is holding an upward trend (1.3% in March). In contrast, the core inflation rate (IPSEBENE), which excludes the most volatile elements of the index such as energy and fresh food, remained at positive levels in 2020 and was relatively stable until the middle of the year (at around 1.0%), to subsequently fall progressively to stand at 0.1% in December. It also fluctuated In January 2021, reaching 0.3% in February. Inflation in the Euro area as a whole was higher than the rate in Spain throughout 2020 and the spread between the two ranged from -1.1 pp (July) to -0.3 pp (at the beginning and end of the year). In 2021, the spread widened further (-1.0 pp in February). On the supply side, significant slowdowns were observed in most sectors, particularly art and recreational activities and trade, transport and hospitality.

The inflation rate remained negative for a good part of the previous year and while there were some fluctuations, it appears to have resumed an upward trend. The spread with the Euro area was -1.0 pp at the end of February.

Harmonised CPI: Spain compared to the Euro area (annual % change) FIGURE 9



Source: Refinitiv Datastream. Data to February for the Euro area and to March for Spain.

In line with the decline in activity, there was a sharp drop in employment, which averaged 7.5% in 2020,⁶ and an increase in the unemployment rate, from 13.8% at the end of 2019 to 16.1% at the end of 2020 (15.5% annual average). The latest unemployment data for March show a certain improvement, since the number of people unemployed fell by 59,149 (-1.5%) compared to February, rising above the threshold of 4 million unemployed (3,949,640). It should also be noted that workers affected by temporary lay-off measures (ERTEs) are not included in these figures as they are considered to be employed.⁷ At the end of 2020 there were a total of 755,613 people covered by these measures, compared to 3.39 million workers in April. These figures have remained relatively stable since September and at the end of March 2021, the number of people covered by temporary lay-off measures lay-off measures was 743,628.

The crisis also manifested in a substantial deterioration of public sector finances, impacted by the strong growth in spending and a decline in revenue. Expenses related to COVID-19 were close to €45 billion. Thus, the public deficit closed the year at 11.0% of GDP,⁸ well above the figure of 2.9% seen in 2019. The central government bore most of the cost of the pandemic, due to the larger transfers made to the autonomous regions and the social security system, posting a deficit of 7.5% of GDP (1.3% at year-end 2019). The social security deficit also stood out at 2.7% of GDP (1.3% in 2019). The autonomous regions, on the other hand, performed better compared to 2019, registering a small deficit of 0.21% (0.6% in the previous year), as they received the highest funding ever received from the State. Local authorities showed a slight surplus (0.26%). As a consequence of the higher deficit, public debt stood at 120% of GDP at the end of 2020, compared to 95.5% in 2019.

The banking sector has also been affected by the crisis, as the sharp slowdown in activity could lead to a future increase in delinquency rates, which has not yet materialised (see Figure 10). To date, the crisis has caused a sharp increase in losses due

The crisis led to a sharp drop in employment (7.5% in 2020) and an increase in the unemployment rate to 16.1%.

...as well as an increase in the deficit of public administrations to 11% of GDP at the end of 2020 (10.1% if financial aid is discounted) and public debt to 120%.

The crisis led to a significant impairment of bank assets, with the sector recording losses in 2020. However, delinquencies remain at low levels.

⁶ Data from the Labour Force Survey (EPA) indicate that 622,600 jobs were destroyed in 2020.

⁷ According to Eurostat and International Labour Organization (ILO) methodology.

⁸ The deficit would be reduced to 10.1% if the amount of financial aid deriving from the reclassification of the SAREB indicated by Eurostat is excluded.

to the impairment of financial and other assets, especially in the second quarter of last year which, together with the progressive fall in net interest income, gave rise to accumulated losses of more than \in_3 billion in 2020 (profits of $\in_{13.53}$ billion in 2019). The low interest rate environment may impede the recovery of net interest income, although it also favours the containment of non-performing loans. Furthermore, this sector has access to Eurosystem funding on very favourable terms.



Source: Bank of Spain and INE. Unemployment rate data up to June and delinquency ratio up to July.

1 Of the active population.

* Transfers of Group 1 entities took place in December 2012 (€36.70 billion) and Group 2 entities in February 2013 (€14.01 billion).

The size of the banking sector, in terms of the aggregate volume of assets, increased for the second year in a row to stand at ≤ 2.82 trillion at the end of 2020 (≤ 2.61 trillion in 2019). On the liability side, the increase in deposits of Spanish residents stands out, which grew from ≤ 1.58 trillion in 2019 to ≤ 1.82 trillion in 2020,9 and Eurosystem financing, which went from ≤ 129.67 billion in 2019 to ≤ 259.12 billion in 2020. The increase in deposits can be explained at least partially by precautionary savings in a scenario of high uncertainty. In regard to banking sector assets, the rise in bank financing extended to companies and households stands out, at 3.1% in 2020 as a whole. This increase is due exclusively to the rise in financing extended to non-financial companies in the context of this crisis, which was 6.1% (2% in 2019). In contrast, financing to households fell 0.6% (compared to a slight increase of 0.2% in 2019). In the case of financing to non-financial companies, the increase in loans (with a significant use of public guarantees) and financing through the acquisition of debt securities both stood out.

The latest data on the financial position of households reveal an increase in both the savings rate and the debt ratio in 2020, which contrasts with the decline in gross household income (-3.3%). The savings rate rose from 6.3% of gross disposable

The composition of banking institutions' balance sheets (which increased in 2020) reflected a rise in resident deposits (under liabilities) and an increase in bank financing extended to non-financial companies (under assets).

The household savings rate increased sharply in 2020 as gross disposable income decreased.

⁹ This figure includes deposits from the credit system, public administrations and other resident sectors (non-financial companies and households).

income (GDI) at the end of 2019 to 14.7% in 2020 due, as indicated above, to precautionary savings in a crisis context marked by a high level of uncertainty, as well as the effects of lockdown measures, which have prevented certain consumption decisions. Despite this trend, the savings rate of Spanish households remains lower than the average for the Euro area as a whole, which also increased, albeit to a lesser extent, to stand at 19.6% of GDP. The household debt ratio grew slightly from 100.3% of GDP at the end of 2019 to 102.3% in 2020, after 10 years of uninterrupted declines. In relative terms, there was also an increase in the net wealth of households, which went from 929% of GDP in 2019 to 967% in 2020.

Household net financial investment rose to 6.9% of GDP in 2020 (the highest since 2006) compared to 3.0% in 2019, largely due to the accumulation of savings. By asset class, investment in means of payment remained the most significant (9.2% of GDP), with higher amounts than in previous years, and some divestment of time deposits and fixed income securities was observed (2.5% of GDP). Households also invested in investment fund units, continuing a trend that began in 2012, despite the negative market performance in the first half of the year (0.9% of GDP; 0.5% in 2019).

Regarding the composition of the investment fund flows, it should be noted that during the most critical months of the pandemic (March and April) relatively high net redemptions were recorded, which were concentrated mainly in the fixed income category and to a lesser extent in guaranteed equity funds and passive management funds. In particular, net redemptions in fixed income funds were close to ≤ 1.5 billion in the first quarter (≤ 2.7 billion in the month of March alone). However, net inflows of funds in the following quarters were significant and net subscriptions in this category were high for the year as a whole (≤ 3.88 million). For investment funds as a whole, net subscriptions for the year were positive (≤ 631 million), but much lower than in previous years (around ≤ 2.5 billion in 2019 and ≤ 7.9 billion in 2018).¹⁰



Source: Bank of Spain, Financial Accounts. Cumulative data for four quarters.

10 See Section 4.1 for further details.

Household net financial investment rose in 2020 and the more liquid assets continued to prevail over fixed income and equities.

Investment in investment funds decreased significantly in the past year due to the high volume of redemptions in March.

2.3 Outlook

The latest forecasts published in April by the IMF point to a stronger recovery in world activity than expected a few months ago, driven mostly by the United States and China. Thus, world GDP growth is forecast at 6.0% in 2021 and 4.4% in 2022 (compared to 5.5% and 4.2% expected in January, respectively). The stimuli approved by governments and supranational organisations, including the new fiscal package in the US or the EU recovery fund, in addition to the progress made in the vaccination programme, have prompted an upward revision of these forecasts.

By economic area, advanced economies are expected to grow by 5.1% in 2021 (0.8 pp more than in January) and 3.6% in 2022. The forecast for emerging markets is somewhat better, 6.7% in 2021 (0.4 pp more than in January) and 5.0% in 2022. Among the advanced economies, the best forecasts for this year are for the United States and Spain (6.4% in both cases); the former driven by the approval of a major fiscal stimulus package. Among the emerging economies, the forecasts for India and China for this year stand out (12.5% and 8.4%, respectively), with smaller advances expected in other emerging regions (4.4% in Eastern Europe and 4.6% in Latin America).

The uncertainty surrounding these forecasts remains high due to factors whose evolution is difficult to predict: the development of the COVID-19 pandemic itself, the effectiveness of the economic policies implemented and, finally, the adjustment capacity of the economies to new consumption patterns and certain vulnerabilities. There are downside risks with respect to this growth scenario that derive above all from a prolongation of the pandemic, which would be highly detrimental to the survival of a significant number of companies. However, there is also upside potential that could materialise if the duration of the pandemic is shortened and a part of the high level of savings of some agents is used to boost consumption.

Gross Domestic Product

Annual % change IMF¹ 2017 2018 2019 2020 2021 2022 Global 6.0 (0.5) 4.4 (0.2) 3.7 3.6 2.8 -3.3 **United States** 2.2 2.9 2.2 -3.5 6.4 (1.3) 3.5 (1.0) Euro area 2.4 1.9 1.3 -6.6 4.4 (0.2) 3.8 (0.2) Germany 3.6 (0.1) 3.4 (0.3) 2.5 1.5 0.6 -4.9 France 2.3 1.8 1.5 -8.2 5.8 (0.3) 4.2 (0.1) 4.2 (1.2) Italy 1.5 0.8 0.3 3.6 (0.0) -8.9 6.4 (0.5) 4.7 (0.0) Spain 3.0 2.4 2.0 -11.0 United Kingdom 5.1 (0.1) 1.7 1.3 1.4 -9.9 5.3 (0.8) Japan 1.7 0.3 0.7 -4.8 3.3 (0.2) 2.5 (0.1) 4.7 4.5 **Emerging markets** 3.7 -2.2 6.7 (0.4) 5.0 (0.0)

Source: IMF.

1 In parentheses, the variation compared to the last published forecast (IMF forecasts published in April 2021 with respect to January 2021).

The latest IMF forecasts suggest a greater than expected recovery for world GDP this year of 6.0%...

...5.1% for advanced economies and 6.7% for emerging economies.

The uncertainty surrounding these forecasts is high due, above all, to the evolution of the pandemic, although there is both downside risk and upside potential.

TABLE 3

The Spanish economy, which registered a very high drop in activity in 2020, has one of the highest expected recovery rates in 2021.

The most significant risks for the Spanish economy include risks related to the possibility of company bankruptcies in the coming months and to the financial vulnerabilities that the increase in public debt may bring with it.

Since May 2020, when it reached a level of 0.64 (high risk), the stress indicator gradually decreased to stand at 0.25 at the beginning of April, which implies a low risk level. As mentioned above, according to the IMF, the Spanish economy will register GDP growth of 6.4% this year (improving the forecast made in January by 0.5 pp) and 4.7% in 2022 (unchanged with respect to the previous forecast). The fact that Spain is included among the economies with the highest expected growth is due to the positive effects of the gradual lifting of lockdown measures, which were so detrimental to the Spanish economy in 2020, as well as the expectations generated by the European funds. It is also important to bear in mind that after the sharp falls in 2020, recovery rates also tend to be higher as economic activity approaches precrisis levels.

The risks affecting the global economy also affect Spain, although there are some factors that are particularly significant for the Spanish economy. In the first place, the evolution of the pandemic is key to the recovery of activity in Spain, which has a strong service-oriented structure with a predominance of small-sized companies. In fact, there is a significant risk of company bankruptcies in the coming months, especially among smaller enterprises as they are more vulnerable in such a severe crisis situation. This risk would negatively affect both the country's business network and the labour market. Another key vulnerability for the economy stems from the notable increase in public indebtedness as a consequence of the crisis and hence the need to guarantee the sustainability of public finances. On a positive note, the positive effect expected from European funds on the Spanish economy stands out in the medium and long term, as well as the possibility that the increase in consumption will be greater than expected if the evolution of the pandemic allows spending decisions that were deferred in 2020 to materialise.

3 Domestic market performance

The Spanish financial market stress indicator¹¹ has gradually decreased after hitting its third highest historical value due to the crisis generated by COVID-19 and its impact on the different segments of the financial system. Thus, after reaching 0.64 at the beginning of May 2020, the stress indicator for the system as a whole progressively fell at the start of second wave of the pandemic, with a slight rebound at the end of October, to close 2020 at 0.36 (medium stress level). From then on, after a period of some stability, the downward trend became clear as a consequence of the recovery in company quoted prices, the notable decrease in volatility indicators and a slight fall in the correlation of the system, although the latter remains at higher

¹¹ 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 between 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 quarterly publication of the *Financial Stability Note*, and the CNMV's statistical series (market stress indicators), available at http://www.cnmv.es/portal/Publicaciones/PublicacionesGN.aspx?id=51. 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).

values than those registered before the Coronavirus crisis. Thus, at the beginning of April this indicator stood at 0.25,¹² a low stress level (see Figure 12).



Source: CNMV.

At the end of the year, the highest stress levels were recorded by the financial intermediaries, non-financial equity and exchange rates segments, all of which were affected by notable levels of volatility and, in the case of the first two, by the cumulative decline in quoted prices (despite the recovery in the last few weeks of the year). As of January, the stress levels in these segments began to decrease, especially in the case of financial intermediaries and equity markets, and since the beginning of March it has remained relatively stable at values of around 0.5 for the first and 0.35 for the second. In the fixed income markets, which benefited from the raft of measures adopted by the ECB – which cut short the upward trend of the main risk premiums – the stress level fell relatively quickly in the central months of 2020. Since then, apart from the occasional rebound, the stress level in this segment has been below 0.60. The decline was generalised in all segments, with the stress level of financial intermediaries in April at 0.5 and that of non-financial equities at 0.35.

¹² This indicator has a weekly frequency. The data presented in this report correspond to 9 April.

3.1 The stock markets

The Spanish equity markets started the first quarter with fresh gains, fuelled by the projected economic recovery and beneficial effects of the vaccination programmes.

In this context, the lbex 35 rose by 6.3% in the first quarter of the year, with a gain that was somewhat lower than the gains posted by other large international indices.

Almost all sectors made gains, although these were weaker in sectors and companies that had performed better in 2020. The gains made by banks, consumer service companies, engineering companies and oil companies stood out. The Spanish equity markets, which made large gains in the last quarter of 2020, recouping a substantial large part of the losses incurred in previous months, began the first quarter with fresh increases, fuelled by the outlook for economic recovery, the beneficial effects of the vaccination programmes and the release of new vaccines. Even so, progress slowed in the last sessions of the quarter due to fears of the consequences of delays in the vaccination schedule in Europe and outbreaks of the virus, forcing fresh restrictions to be established in several European regions over fears of a fourth wave of infection. This situation has delayed the expectations of economic recovery until the second half of this year.¹³

The main Spanish stock market index, the Ibex 35, which had ended 2020 with losses of 15.5%, began the first quarter of the year with an advance of 6.3%, a slightly lower appreciation than other European benchmark indices¹⁴ together with that of the UK FT100. The Ibex 35 stood at 8,580 points at the end of March, recovering more than 26% from the low of 6,785 points seen at the end of the same month in 2020, the lowest level recorded since the summer of 2012. The index gain was lower than the rises marked by small and mid caps (9.3% and 8.3%, respectively). Likewise, the indices that are representative of Latin American securities that trade in euros, the FTSE Latibex All-Share and FTSE Latibex Top, marked a modest performance (-2.1% and 1.3%, respectively) as a consequence of decline of the Brazilian stock market¹⁵ and the depreciation of its currency against the euro.¹⁶

Almost all the sectors ended the quarter with gains, although a weaker performance was observed in those sectors and companies that had shown a better performance in the previous year. In part, this performance can be explained by the rotation of some investment portfolios from defensive stocks, such as food and electricity companies, to cyclical and growth stocks that would benefit more from a recovery scenario, such as banks or companies in the services and hospitality industries. Rises were uneven between companies and sectors depending on their recovery outlook. The most significant increases (see Table 4) corresponded to financial services companies, mainly banks; consumer services companies, highlights of which included the good performance of the airline IAG; leisure, tourism and hospitality companies; in addition to producers of raw materials and engineering companies; as well as the main company in the oil sector (Repsol), which was boosted by the recovery in oil prices¹⁷ and its activity in the area of renewable energies.

¹³ The head of the ECB, Christine Lagarde, said the ECB "believes that 2021 will be the year of recovery, but we do not expect this to happen until the second half of 2021".

¹⁴ See Table 1 of this report for further details.

¹⁵ The main Brazilian stock market index, Bovespa, fell 2% in the first quarter of the year, while the Mexican BMV IPC index rose 7.2%.

¹⁶ In the first quarter of the year, the Brazilian real depreciated by 4% against the euro, while the Mexican peso appreciated by 1%.

¹⁷ The price of oil rose 22.5% in the first quarter, reaching around US\$63, its highest level since December 2019.

Performance of Spanish stock market indices and sectors

Indices	2018	2019	2020	I 20 ¹	II 20 ¹	III 20 ¹	IV 20 ¹	I 21 ¹
lbex 35	-15.0	11.8	-15.5	-28.9	6.6	-7.1	20.2	6.3
Madrid	-15.0	10.2	-15.4	-29.4	6.4	-7.4	21.7	6.2
Ibex Medium Cap	-13.7	8.4	-9.7	-31.0	7.8	0.5	20.8	8.3
Ibex Small Cap	-7.5	11.9	18.9	-24.6	17.5	7.8	24.7	9.3
FTSE Latibex All-Share	10.3	16.3	-22.0	-46.3	14.4	-7.3	36.9	-2.1
FTSE Latibex Top	14.8	15.3	-19.1	-43.3	14.6	-3.2	28.8	1.3
Sectors ²								
Financial and real estate services	-27.1	-27.1	-26.4	-40.7	1.0	-19.8	53.4	14.8
Banking	-29.0	-29.0	-27.5	-41.9	0.9	-20.6	55.7	15.0
Insurance	-12.8	-12.8	-23.6	-36.4	4.8	-8.7	25.5	13.6
Real estate and others	-26.1	-26.1	-16.0	-31.3	5.8	7.4	7.7	4.6
Oil and energy	6.1	6.1	5.0	-13.9	10.6	-1.8	12.2	-1.6
Oil	-4.5	-4.5	-40.8	-40.2	-6.6	-26.5	44.2	28.0
Electricity and gas	8.9	8.9	14.2	-7.7	12.9	1.0	8.5	-4.5
Basic mats., industry and construction	-8.6	-8.6	-2.5	-30.5	11.5	-1.5	27.8	5.0
Construction	-3.4	-3.4	-16.3	-29.2	11.3	-11.0	19.4	3.8
Manufacture and assembly of capital goods	-10.4	-10.4	50.7	-20.4	10.7	23.8	38.2	-0.1
Minerals, metals and metal products processing	-25.3	-25.3	-0.1	-38.7	13.8	3.5	38.3	17.9
Engineering and others	-21.3	-21.3	-6.1	-44.3	-20.9	1.3	37.8	11.2
Technology and telecommunications	-5.5	-5.5	-21.9	-30.3	11.0	-9.7	11.7	6.5
Telecommunications and others	-8.2	-8.2	-25.8	-23.8	13.3	-16.2	2.7	10.3
Electronics and software	-0.1	-0.1	-18.8	-40.1	6.6	1.9	24.8	1.7
Consumer goods	-16.7	-16.7	-15.3	-19.1	-0.3	-0.8	5.8	5.6
Textile, clothing and footwear	-23.1	-23.1	-17.3	-24.8	-0.4	0.9	9.4	7.9
Food and drink	-8.4	-8.4	10.6	-2.1	9.8	1.6	1.2	1.0
Pharmaceutical products and biotechnology	-6.4	-6.4	-18.3	-8.6	-3.6	-5.4	-2.7	1.5
Consumer services	-19.7	-19.7	-36.7	-50.2	8.8	-11.8	32.5	10.5
Motorways and car parks	39.5	-34.7	-27.8	-49.1	4.4	-17.7	65.0	11.3
Transport and distribution	32.3	-11.5	-38.8	-52.5	12.5	-12.4	30.9	10.3

Source: BME and Refinitiv Datastream.

1 Variation compared to the previous quarter.

2 Sectors belonging to the IGBM (Madrid Stock Exchange General Index). The information corresponding to the most representative subsectors is displayed within each sector.

The positive performance of the consumer goods sectors also stood out, thanks to the gains made by the leading company in the textile sector (Inditex), as well as that of the telecommunications and technology sectors. The leading textile company has been favoured by its ability to transform to a new, increasingly digital, business model, while the main telecommunications and technology companies (Telefónica and Amadeus) have been driven by the improved outlook for the Latin American economies and the tourism sector, respectively, in which a large part of their activity is concentrated. ...as well as consumer goods, telecommunications and technology companies. The weakest performance corresponded to companies in the energy sector and companies that manufacture industrial goods. The weakest performance corresponded to companies in the energy sector and electricity companies, in addition to manufacturers of industrial goods. The former, which had shown a positive performance throughout the previous year due to their defensive nature, deriving from their more stable revenues, have been affected by the rotation of portfolios from traditional energy companies to renewable energy companies and cyclical securities, while the latter reflect the stagnation in investment in capital goods.¹⁸ Pharmaceutical and food companies showed small gains (less than 2% in both sectors).

The increase in quoted prices together with the recovery in corporate earnings expected for the coming months led to a decrease in price-earnings ratio (PER) from 18.2 in December to 17.5 in March, remaining at high values above its historical average. The rise in quoted prices in the quarter, together with the slightly stronger recovery in corporate earnings expected in the coming months, meant that the price-earnings ratio per share declined a little in the first quarter of this year. The value of this ratio, which was subject to significant adjustments throughout 2020, may continue to show some variability in the coming months, as earnings estimates more precisely reflect the impact of the successive waves of contagion on business activity. The value of this ratio in the case of the Ibex 35 fell from 18.2 in mid-December – its highest value since 2002 – to 17.5 in March, close to the ratio of the European Eurostoxx 50 index. As shown in Figure 13, the PER ratios of the world's most significant stock market indices also showed a similar performance in the quarter, marking slight declines. With the exception of the Japanese Topix index, most ratios tended to be above their median values over the last decade.



Source: Refinitiv Datastream. Data to 15 March. The dashed lines represent the historical average of the indicator since 2000.

1 With forecast earnings for 12 months.

¹⁸ See Table 2.
The Ibex 35 volatility indicator, which had been normalising in the second half of 2020 after the strong rebound experienced in the first part of the year, continued to decline in the first three months of 2021, reaching a quarterly average of around 17%. Thus, although at moderate levels and lower than in recent quarters,¹⁹ the indicator is still just above the values of around 10% – its historical low – seen at the close of 2019 (see Figure 14). This performance is similar to the trend marked by other international indices such as the European Eurostoxx 50 (14.2% on average in the quarter) or the US Dow Jones (12.9% on average), although its average value is somewhat higher than these indices.

Volatility continued to moderate but still remains slightly higher than before the outbreak of the pandemic.



Source: Refinitiv Datastream and own calculations. The indicator is calculated as the annualised standard deviation of the daily price variations of the lbex 35 over 21 days. The vertical lines of the graph refer to the introduction of restrictions on short-selling dated 11 August 2011, their subsequent lifting on 16 February 2012 (for financial institutions), the new restrictions of 23 July 2012 and their lifting on 1 February 2013, as well as the two most recent bans: the first for one day (13 March 2020), which affected 69 entities, and the second, adopted a few days later and lifted on 18 May 2020, which affected all entities.

The liquidity conditions of the Ibex 35, estimated through the bid-ask spread, which had progressively improved since the second half of 2020 to reach values slightly higher than those seen at the beginning of the crisis, once again presented small additional improvements. Liquidity conditions have been favoured by the drop in volatility, but at the same time weighed down by the decrease in the volumes traded. The spread improved in the first quarter of the year, reaching an average of 0.081%, below the average of 0.111%, 0.086% and 0.084% of the three previous quarters and the historical average of the indicator (0.091%), although notably higher than the values observed in recent years, which were around 0.06% (see Figure 15).

Liquidity conditions assessed using the bid-ask spread continued to improve, but have not yet returned to pre-crisis levels, weighed down by the decline in volumes traded.

¹⁹ In the third and fourth quarters of 2020 it reached values of 22.2% and 24.3%, respectively.



Source: Refinitiv Datastream and own calculations. Information is presented on the lbex 35 bid-ask spread and last month's average. The vertical lines of the graph refer to the introduction of restrictions on short-selling dated 11 August 2011, their subsequent lifting on 16 February 2012 (for financial institutions), the new restrictions of 23 July 2012 and their lifting on 1 February 2013, as well as the two most recent bans: the first for one day (13 March 2020), which affected 69 entities, and the second, adopted a few days later and lifted on 18 May 2020, which affected all entities.

In this context of falling volatility and quoted price increases, trading in Spanish securities continued to decline in the first quarter of the year (-27.1% year-on-year). In this context of falling volatility and rises in quoted prices, trading of Spanish equities fell once again to stand at just over ≤ 178 billion in the first quarter of the year, 27.1% less than in the same period of the previous year. Thus, the downward trend in trading volumes of Spanish equities appears to be consolidating. Average daily trading in the continuous market in the first quarter was ≤ 1.46 billion (26.5% less year-on-year), below the average for the previous quarter (≤ 1.61 billion) and for 2020 as a whole (≤ 1.65 billion).



Source: CNMV. The vertical lines of the graph refer to the introduction of restrictions on short-selling dated 11 August 2011, their subsequent lifting on 16 February 2012 (for financial institutions), the new restrictions of 23 July 2012 and their lifting on 1 February 2013, as well as the two most recent bans: the first for one day (13 March 2020), which affected 69 entities, and the second, adopted a few days later and lifted on 18 May 2020, which affected all entities.

Regarding the distribution of trading in Spanish securities, just over ≤ 91 billion corresponded to the Spanish regulated market, while the remaining $c \leq 87$ billion corresponded to other trading venues and competing markets. Trading fell by around 27% year-on-year in the regulated market and by nine tenths of a point in competing venues, which put BME's market share at 51.8%.²⁰ Trading of Spanish securities carried out in trading venues and competing markets appears to have consolidated at above 45% of the total trading, without apparently having been affected by the transfer of its activity in most cases from London to Amsterdam as consequence of Brexit.

In relation to trading carried out through these competing venues, Cboe Global Markets (Cboe) market stood out once again in absolute value terms, which now operates from Amsterdam and reported a trading volume was close to €62.5 billion in the quarter, representing more than 68% of trades made abroad and almost 72% of trades made through BME. Among the other competing venues, both Turquoise and "others" slightly improved their market shares to the detriment of Cboe, to levels of 7% and 21%, respectively. These centres have progressively increased their trading levels, which now represent more than a fifth of the total market (see Table 5).

Trading through systematic internalisers, which is not subject to market rules, decreased significantly in the first quarter, accounting for a proportion of close to 8% of total trading of Spanish securities (total trading is defined as the sum of trading subject to non-discretionary market rules and trading carried out through systematic internalisers). This proportion represents around half, in relative terms, of the trading made under this format, which remained relatively stable at around 15% of the total in the past year.²¹

Equity issues carried out in domestic markets fell to ≤ 2.96 billion in the first quarter, of which ≤ 2.19 billion corresponded to capital increases with fund raising (see Table 6). Capital increases were largely capital increases with non-monetary considerations, while the remainder were carried out almost entirely under the scrip dividend method. The former totalled ≤ 2.08 billion, corresponding to one single transaction carried out as part of the Bankia – CaixaBank merger which resulted in the former being delisted from the market. Otherwise, in line with expectations, capital increases made under the scrip dividend format increased (six transactions for a total amount of ≤ 772 billion). Companies have been attracted by this format as a form of shareholder remuneration as it allows at least part of the funds earmarked for such remuneration to remain on the companies' balance sheets, strengthening them in times of economic uncertainty.

...decreasing both trading in the Spanish regulated market and in competing venues.

Cboe Global Markets holds onto its leadership position in the trading of Spanish shares abroad, with 68% of the total traded.

The proportion of trading carried out through systematic internalisers fell to 8% of the total, almost half its usual value.

Capital increases with fund raising decreased once again and were concentrated in capital increases with non-monetary contributions. Likewise, capital increases made under the scrip dividend format increased, as this format offers a more attractive option for shareholder remuneration.

²⁰ These calculations are based on total trading subject to market rules (lit and dark). The difference between lit and dark trading lies in the transparency requirements, which are lower in the second case. The volume of trading in Spanish shares through trading venues and competing markets has been obtained from Bloomberg, so BME's market share of total trading has been calculated internally. There are other indicators that indicate a lower fragmentation of trading in Spanish shares. See Liquidmetrix reports available at BME Renta Variable (bmerv.es).

²¹ Information on OTC trading is available every six months. The distribution of trading in Spanish shares in 2020 including these trades was approximately 33% for the Spanish regulated market, slightly less than 30% for the other competing venues, just over 25% for OTC trading, and also slightly more than 10% for systematic internalisers.

Trading in Spanish shares listed on Spanish stock exchanges¹

TABLE 5

	2017	2018	2019	2020	III 20	IV 20	l 21
Total	932,771.9	930,616.1	805,833.0	778,043.4	152,027.8	194,617.4	178,116.8
Admitted to SIBE	932,763.1	930,607.1	805,826.6	778,040.9	152,027.6	194,617.0	178,114.0
(electronic trading platform)							
BME	633,385.7	579,810.4	460,267.4	416,212.5	78,626.0	103,959.5	91,268.7
Cboe Equities ²	-	-	-	-	-	-	62,442.7
Chi-X	117,899.2	106,869.7	80,678.9	65,006.5	13,529.9	15,390.8	-
BATS	75,411.6	171,491.3	176,093.6	210,675.8	45,202.7	52,183.8	-
Turquoise	44,720.1	42,833.4	30,550.6	23,242.2	4,607.6	5,660.6	6,093.2
Other	61,346.5	29,552.2	58,236.1	62,903.8	10,061.4	17,422.3	18,309.5
Open outcry	8.1	8.2	6.2	2.5	0.2	0.5	2.8
Madrid	1.8	0.8	0.8	0.1	0.0	0.0	0.0
Bilbao	0.0	0.0	2.1	0.0	0.0	0.0	0.0
Barcelona	6.3	7.4	3.2	2.4	0.2	0.5	2.7
Valencia	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Secondary market	0.7	0.8	0.1	0.0	0.0	0.0	0.0
Pro memoria							
Trading of foreign equities through BME	6,908.0	3,517.1	3,480.5	4,236.0	1,041.4	941.4	1,056.9
BME MTF Equity ³	4,987.9	4,216.3	4,007.7	3,907.3	629.9	1,322.6	971.2
Latibex	130.8	151.6	136.6	79.4	16.4	9.3	11.2
ETF	4,464.1	3,027.6	1,718.0	2,543.4	431.3	621.6	400.5
Total BME trading	649,885.3	590,732.0	469,616.6	426,981.1	80,745.2	108,854.9	93,711.3
% Spanish equities traded through BME/total Spanish equities	68.3	62.6	57.4	53.9	52.1	53.9	51.8

Source: Bloomberg and CNMV.

1 This includes the trading of Spanish equities subject to market rules or MTF (lit plus dark). Spanish shares on Spanish stock exchanges are those with a Spanish ISIN that are admitted to trading on the regulated market of Bolsas y Mercados Españoles (BME), i.e., not including the Alternative Stock Market (MAB), currently BME MTF Equity. Foreign equities are those admitted to trading in 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 since January 2021 has moved to Amsterdam as a result of Brexit.

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

Likewise, in the first quarter of the year there were no initial public offerings of shares (IPOs), although several operations are expected in the coming months,²² mainly from companies in the renewable energy sector, some of which could be completed in the second quarter. In fact, two share offerings, by Opdenergy Hold-ing and Grupo Ecoener, have recently been approved. In addition, Kaixo Telecom (belonging to MásMóvil Ibercom, which was the object of a delisting takeover bid in 2020) has announced a voluntary bid for the entire capital of Euskaltel.

There have been no IPOs so far this year, but several transactions are expected in the coming months, mainly in the renewable energy sector.

TABLE 6

	2018	2019	2020	ll 19	III 20	IV 20	21
NUMBER OF ISSUERS ¹							
Total	46	33	38	8	8	14	10
Capital increases	45	33	38	8	8	14	10
Public offerings (for subscription of securities)	2	1	1	0	0	1	0
Initial public offerings (IPO)	1	0	0	0	0	0	0
NUMBER OF ISSUES ¹							
Total	81	52	38	8	8	14	10
Capital increases	80	52	38	8	8	14	10
Public offerings (for subscription of securities)	2	1	1	0	0	1	0
Initial public offerings ² (IPO)	1	0	0	0	0	0	0
CASH AMOUNT ¹ (millions of euros)							
Capital increases with fund raising	7,389.9	8,240.6	8,903.1	1,518.4	4,024.6	3,185.1	2,185.7
With pre-emptive rights	888.4	4,729.8	6,837.2	50.0	3,999.5	2,787.7	0.0
Without pre-emptive rights	200.1	10.0	150.1	0.0	0.0	150.1	0.0
Of which, increases	0.0	10.0	0.0	0.0	0.0	0.0	0.0
Accelerated book builds	1,999.1	500.0	750.0	750.0	0.0	0.0	0.0
Capital increases with non-monetary considerations ³	2,999.7	2,034.2	2,33.0	0.0	0.0	220.5	2,079.2
Capital increases via debt conversion	388.7	354.9	162.4	0.0	0.0	0.0	0.0
Other	913.9	611.8	770.3	718.4	25.1	26.8	106.5
Scrip issues ⁴	3,939.7	1,565.4	1,949.0	93.5	1,083.9	375.2	772.5
Of which, scrip dividends	3,915.2	1,564.1	1,949.0	93.5	1,083.9	375.2	772.5
Total capital increases	11,329.6	9,806.0	10,852.1	1,611.9	5,108.5	3,560.3	2,958.2
Initial public offerings	733.7	0.0	0.0	0.0	0.0	0.0	0.0
Pro memoria: Transactions on MAB ⁵							
Number of issuers	8	12	13	3	2	3	9
Number of issues	12	17	14	3	2	3	11
Cash amount (millions of euros)	164.5	298.3	238.0	9.9	36.0	174.3	83.2
Capital increases	164.5	298.3	238.0	9.9	36.0	174.3	83.2
Of which, IPOs	0.0	229.4	173.0	0.0	0.0	174.3	0.0
Public share offerings	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Capital increases and public offerings

Source: BME and CNMV.

1 Trades registered with the CNMV. Does not include data from MAB, ETF or Latibex.

2 Transactions linked to the exercise of green shoe options are separately accounted for.

3 Capital increases for non-monetary consideration have been 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 Trades not registered with the CNMV.

²² The CNMV estimates that six transactions of this type could take place in the coming months.

The impact of Brexit on European financial markets

EXHIBIT 1

On 31 December 2020, the United Kingdom left the European Union (Brexit) after the end of the transition period established in the exit agreement of 31 January 2020. From that moment on, the United Kingdom has had the status of a third country with respect to the legal framework of the Union. Previously, on 24 December 2020, the European Union (EU) and the United Kingdom reached a principle of commitment on the basis of the Trade and Cooperation Agreement to allow an orderly exit.

As part of the preparatory work, in September 2020, the European Commission adopted an equivalence decision for a limited time (18 months) for central counterparties (CCPs), and the European Securities and Markets Authority (ESMA) announced that the three UK CCPs would be recognised after the transition period: ICE Clear Europe Limited, LCH Limited and LME Clear Limited. In addition, on 25 November, the European Commission adopted a temporary equivalence decision (6 months) with respect to the United Kingdom's central securities depositories, specifically Euroclear UK and Ireland Limited (EUI), once the transition period has concluded. Regarding the situation of trading venues domiciled in the United Kingdom, in the absence of acknowledgement of equivalence by the European Commission, ESMA and the competent authorities have been closely monitoring trading trends in the different asset classes.

Royal Decree-Law 38/2020

Royal Decree-Law 38/2020, of 29 December, which implements measures to adapt the United Kingdom of Great Britain and Northern Ireland to the status of a third country after the end of the transition period provided for in the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union is to address the contingency of the no-deal Brexit in the Spanish legal system by regulating, among other issues, the provision of investment services (Article 13).

In accordance with this Royal Decree-Law, the authorisation or registration initially granted by the competent UK authority to an entity that provides services in Spain while domiciled in the United Kingdom will provisionally remain valid until 30 June 2021, in order to terminate or transfer contracts signed before 1 January 2021.

The CNMV created a new section on its website called "After Brexit: issues relating to the financial sector", with useful information for market participants and investors, such as a list of documents of interest on the possible impact and implications of Brexit and some interpretative criteria, in the form of questions and answers, on the provisions relating to the securities market and investment services.

These include clarifications on the issue of access to UK and EU trading venues, which, in short, establishes that Spanish legislation does not set any additional requirements for becoming a member of a trading venue in a third country. For the reverse case, access to Spanish trading venues by remote members of third countries, it has been clarified that there are also no additional requirements other than those applicable to EU residents.

Regarding direct electronic access (DEA), it is established that UK investors will be able to use DEA to Spanish trading venues without having to request authorisation as an investment firm. However, DEA providers must have the status of an investment firm under MiFID II.

Another very significant clarification was made on OTC transactions. The CNMV has specified that during the transition period market participants may continue to trade OTC in instruments that are not subject to trading obligations under MiFIR. In the case of OTC derivatives, it has also indicated that trades that are direct, involve non-essential modifications or are explicitly set down in pre-existing contracts may be continued. These clarifications are in line with those made by other competent European authorities in this matter and, with some exceptions, are a sign of the effort being made towards greater convergence in the application of MiFID II among the Member States.

Relocation of trading venues to the European Union

A large part of the relocations of UK institutions and trading venues have been to the Netherlands. Specifically, CBOE and Turquoise, two significant trading markets, have established their European headquarters in the Netherlands, while Aquis Exchange has set up a head office in France. Since the date of the United Kingdom's departure, no new authorisation requests for trading venues have been received, although one is currently being processed by the CNMV. In this sense, it is estimated that the preparatory work has been carried out with sufficient anticipation and foresight by UK institutions.

Application of the trading obligation for shares

The application of the share trading obligation, established in Article 23 of Regulation (EU) No. 600/2014 (MiFIR), has given rise to certain interpretation issues due to the liquidity fragmentation of European shares between the UK and EU markets. ESMA and the European authorities have opted to apply the obligation to trade in EU markets based on two factors: that this obligation exists in the event that the issuer's international securities code (ISIN) corresponds to a Member State, Iceland, Liechtenstein or Norway and, secondly, if the trades are made in euros. According to the data collected by ESMA, the number of equity issues with an ISIN code corresponding to a Member State traded on UK trading venues in pounds (GBP) does not exceed 50 and represents less than 1% of total trading in the EU.

Broadly speaking, trading in equities subject to European regulations has been carried out largely in the EU, mainly due to the transfer of trading to the aforementioned European venues, which have been established in the Netherlands and France. The volume associated with this migration corresponds to the ordinary volumes that had been seen in the UK platforms, naturally accounting for an average of between 25% and 30% of total trading, taking into account transactions carried out through trading venues. This migration does not seem to have affected the transparency of trading, that is, the division between transparent (lit) and non-transparent (dark) trading remains. The previous structure of the UK trading venues has been replicated in the new trading venues established in the EU. In line with the above, the volume of OTC equities trades in the EU reflects the effect of the increase in the volume reported to the newly created approved publication arrangements (APAs) in Europe.

In contrast, trading on the same issues has fallen substantially in the United Kingdom. The proportion of trades on instruments subject to trading obligations according to MiFIR taking place in the United Kingdom accounted for only 2.75% in January (compared to 25% previously), according to a study carried out by Liquidnet.¹

ESMA publishes annual liquidity calculations on equity instruments, which are used to implement the transparency regime. In March, the figures corresponding to the period ending on 31 December 2020 were published, which still include the trades made in the United Kingdom, given that during the reference period the United Kingdom was still a member of the EU. Information from this country will not be excluded until the following year 2022, when calculations will refer to 2021.

Application of the trading obligation for derivative instruments

Market participants have also requested clarifications from ESMA regarding the practical application of the trading obligation for derivative instruments, established in Article 28 of Regulation (EU) No. 600/2014 (MiFIR). Specifically, the categories of instruments subject to this obligation are certain subsets of instruments subject to clearing through a CCP in accordance with Regulation (EU) No. 648/2012 (EMIR).

As has occurred with respect to equity trading, new trading venues have been set up in the EU, such as those already mentioned above (Cboe Europe, Turquoise Europe and Aquis Exchange Europe), which have absorbed part of the trading that used to take place in the United Kingdom. In regard to interest rate derivatives on the euro and credit derivatives, a gradual increase in trading in the EU has been observed since the months before Brexit, without prejudice to the potential seasonal effects of derivatives trading, especially at the end of the year.

However, the same effect has not been extended to all instruments included in the scope of application of the obligation and today there are two scenarios: i) no clear increase has been observed in the EU with respect to certain instruments denominated in currencies other than the euro and ii), even in the pre-Brexit period there was an increase in trading by European and UK participants in US venues (Swap Execution Facilities, SEF), which are recognised by Europe and the United Kingdom.

¹ https://static1.squarespace.com/static/5bedbc974eddecbfbb0c217e/t/602c34fd4fcd5f707073e641/ 1613509887656/Liquidity+Landscape+-+One+month+post-Brexit.pdf

3.2 Fixed income markets

Debt markets, in which interest rates had declined progressively over much of 2020 pursuant to the ultra-expansive monetary policies implemented by central banks, started the year with slight increases in all sections of the curve.²³ These increases are partly explained by expectations of a possible rise in inflation caused by the strong growth in the money supply over recent years, as well as the impact of the public spending growth packages. As in the main European economies, the rates on Spanish public debt showed small increases in the quarter, which moved them away from the historical lows seen at the end of 2020, although levels remained very low. Likewise, private fixed income rates also experienced slight increases in some sections of the curve, which were somewhat more prominent in the case of corporate debt with the lowest credit ratings, although risk premiums remained at low levels as a result of the search for yield phenomenon. In this context, the yield on the Spanish 10-year sovereign bond rose by 29 bp in the quarter, while the Spanish risk premium remained unchanged at 63 bp, the same level at which the year began.

Interest rates on Spanish public debt FIGURE 17 1-year bills 5-year bonds 10-year bonds 5 4 3 2 0 Jan-15 Jan-16 Jan-17 Jan-18 Jan-19 Jan-20 Jan-21

Source: Refinitiv Datastream.

In the current environment of low interest rates and abundant liquidity fuelled by the ECB purchases, issues registered with the CNMV in the first quarter of the year showed a year-on-year increase of 13.3%, totalling over €23.5 billion. While issues made abroad decreased compared to the same period in 2020, in barely two months they reached an amount close to that registered with the CNMV in a full quarter. Companies, which had taken advantage of the favourable market conditions in 2020 to raise funds and finance themselves for longer terms and at a reduced cost, opted more for short term issues to cover their financing needs.

Fixed income issues registered with the CNMV increased by 13.3% in the first quarter of 2021. Issues made abroad fell but their amount was significant.

Debt markets, which had ended 2020 with rates at historic lows, started the year with slight increases due to expectations of a rise in inflation.

²³ See Section 2.1 for more details on the performance of long-term interest rates in other economies.

The yield on short term government debt increased slightly, although it remained negative (for the sixth year running)... The yields on short term private fixed income and public debt saw different performances in the first quarter, with small rises and some drops, respectively. Despite the small rises, short term government debt rates, for the sixth consecutive year, continued to show negative values for the entire segment of the curve, pursuant to the ECB's ultra-expansive monetary policy, which includes purchases of securities with a minimum residual maturity of 70 days. Thus, the secondary market yield on 3-, 6- and 12-month treasury bills was -0.54%, -0.54% and -0.50%, respectively, an increase of between 5 and 16 bp on the values seen in December (see Table 7).

Short term interest rates¹

0/4

TABLE 7

,.							
	Dec-18	Dec-19	Dec-20	Jun-20	Sep-20	Dec-20	Mar-21
Treasury bills							
3 months	-0.50	-0.58	-0.70	-0.48	-0.51	-0.70	-0.54
6 months	-0.41	-0.47	-0.59	-0.45	-0.46	-0.59	-0.54
12 months	-0.33	-0.48	-0.63	-0.45	-0.49	-0.63	-0.50
Corporate commercial paper ²							
3 months	0.24	0.20	0.49	0.36	0.39	0.49	0.14
6 months	0.19	0.52	0.55	0.52	0.69	0.55	0.51
12 months	0.07	0.71	1.44	0.71	1.02	1.44	0.72

Source: Refinitiv Datastream and CNMV.

1 Monthly average of daily data.

2 Issuance interest rates.

...while the yield on short term private debt showed slight declines.

In the case of yields on short term private fixed income, the behaviour was different with values that were lower than those of the previous quarter observed, in contrast to the trend seen in the past few quarters. In previous quarters, the performance of these yields was shaped by the high concentration of commercial paper issued in the Alternative Fixed Income Market²⁴ (MARF), where medium-sized companies could access the market and issue commercial paper under the guarantee programme rolled out by the Instituto de Crédito Oficial (ICO). However, they incurred substantially higher costs than large companies, which raised the average interest rates in the sample. In the last quarter, the issues made under this programme²⁵ decreased, so

²⁴ On 24 November 2020, the government approved an allocation of €50 million to guarantee companies in MARF that are complying with bankruptcy proceedings, up to date with payments and that have resolved their financial situation, although the whole agreement has not been executed. Likewise, an additional tranche of €250 million was released to guarantee commercial paper issued in MARF by companies that could not avail themselves of the first line of guarantees because their commercial paper programmes were in the process of being renewed. In 2020, €410.6 million were used to guarantee 66 issues made by 15 companies, which mobilised funds amounting to €597.2 million.

²⁵ Beneficiaries of issues of commercial paper through MARF guaranteed by the ICO guarantee programme included: El Corte Inglés, Finycar, Grupo Pikolin, Sacyr, Hotusa, Pryconsa, Nexus Energía, Tubacex and Renta Corporación. The guarantees will cover a maximum of 70% of the commercial paper issuance, which will have a maximum maturity of 24 months and be available until 30 September, with the following conditions for awarding them: i) having registered a commercial paper issue programme on the

the sample includes a greater number of issues made by large companies that benefit from lower issuance costs, as well as purchases of ECB debt in the primary market, as they fall in the range of eligible issuers.²⁶ Spanish market data show that in March the issuance yields on commercial paper in the primary market ranged from 0.15% for the 3-month instrument to 0.72% for 12-month paper, values that were substantially lower than at year-end 2020 (see Table 8).

Return on fixed income in the medium and long term¹

TABLE 8

%							
	Dec-18	Dec-19	Dec-20	Jun-20	Sep-20	Dec-20	Mar-2
Public fixed income							
3 year	-0.04	-0.29	-0.53	-0.28	-0.43	-0.53	-0.4
5 year	0.43	-0.06	-0.42	-0.11	-0.24	-0.42	-0.2
10 year	1.43	0.45	0.05	0.47	0.25	0.05	0.34
Private fixed income							
3 year	0.67	0.20	-0.20	0.19	0.12	-0.20	-0.08
5 year	0.55	0.23	-0.13	0.40	0.06	-0.13	-0.1
10 year	1.52	0.79	0.41	0.77	0.64	0.41	0.4

Source: Refinitiv Datastream, Reuters and CNMV.

1 Monthly average of daily data.

Yields on medium- and long-term debt followed a similar trend throughout the quarter, showing slight increases, which were concentrated mostly in the longer terms and in public debt. Despite the ECB purchasing programmes²⁷ being maintained, and even the announcement of the increase in their short term weekly amounts, investors' fears of a resurgence in inflation slightly raised the yield on public debt in all sections of the curve. Even so, the rate remained negative until the 7-year term. As shown in Table 8, the yield on 3, 5 and 10-year government debt in March stood at -0.41%, -0.25% and 0.34%, respectively, which is between 12 and 29 bp more than in December.

Private fixed income marked a similar performance, with slight increases in interest rates in most sections of the curve, despite which they also remained at around Public debt assets show slight increases in yields that are concentrated in the longer terms, with positive returns only after the 7-year term...

...and also on private fixed income assets, although returns are more varied in the second group, as not all issues are eligible for ECB purchases.

MARF before 23 April, ii) the company's registered office being located in Spain and iii) the funds obtained not being available for paying dividends.

²⁶ The short term debt the ECB can acquire under its PEPP programme may include commercial paper issued by Spanish companies such as Endesa, Iberdrola, Repsol, Telefónica, Red Eléctrica, Ferrovial, Naturgy, Abertis, Aena, ACS, Amadeus, Cellnex, Inmobiliaria Colonial and Viesgo. To be eligible, these assets must have a minimum credit rating of BBB- from Standard & Poor's, Fitch or DBRS, or Baa3 from Moody's.

²⁷ The PSPP (Public Sector Purchase Programme) and PEPP (Pandemic Emergency Purchase Programme) are currently in operation. Under the first, up until the end of February the ECB had acquired public debt for a net amount of €2,506.86 billion, of which €293.85 billion corresponded to Spanish securities; while up until the end of March, within the framework of the PEPP programme, it had acquired public debt for a net amount of €899.73 billion, of which €104.23 billion corresponded to Spanish securities. Therefore, the amount of Spanish public debt acquired by the ECB stood at €398.01 billion (38% of the outstanding balance of long-term government debt).

historical lows.²⁸ Most of the large corporate debt issuers continue to benefit from the ECB's debt purchase programmes, which include specific corporate debt purchases,²⁹ although not all issuers have issues that are part of the range of eligible assets.³⁰ At the end of March, yields on 3 and 5-year private debt remained negative at -0.08% and -0.15% respectively, while the yield on 10-year debt stood at 0.45%, implying a risk premium of between 10 and 33 bp compared to public debt.

The performance of the sovereign risk premium – like that of the risk premiums applied for large Spanish issuers – will continue to be shaped in the short term by the support provided by the ECB through debt purchases, although in the medium term it could be conditioned by economic recovery trends and the budgetary decisions taken by the government. The sovereign risk premium – measured as the difference in yield between the Spanish and the German 10-year sovereign bonds – started the year at 63 bp, and subsequently remained relatively stable throughout the quarter, to close the period unchanged. This indicator continues to benefit from the positive effect of the ECB's public debt purchases, as well as the outlook for economic recovery, thanks to the progress of the vaccination programmes. The risk premium measured through the CDS (credit default swap) of the Spanish sovereign bond – whose market is less liquid than the underlying market – ended the quarter at 34 bp, 10 bp less than at the end of 2020.

The risk premiums of the private subsectors of the economy performed unevenly, with further declines for the second consecutive quarter in premiums of financial institutions, while those of non-financial companies barely showed changes. As shown in the right hand panel of Figure 18, the average CDS of financial institutions stood at 67 bp at the end of March, 11 bp less than at the start of the year, but still above the 58 bp average risk premium of non-financial companies, which fell just 1 bp from its value at the close of 2020. In the case of financial institutions, the further decrease in risk premiums owes to the continuation of the support measures deployed by the ECB, which include specific programmes for the purchase of assets issued by banks, such as covered bonds and asset-backed securities,³¹ as well as rounds of financing and specific longer-term funding under very favourable conditions, but also to the improve outlook for economic recovery. The risk premiums of non-financial companies remained unchanged, given that while they also benefit from the positive effect of the ECB's purchases, their businesses have been impaired by crisis and the uncertainty about their future development.

The sovereign risk premium remains stable at 63 bp, the same level at which it started the year, supported by the ECB's debt purchases.

Risk premiums of private sector companies performed unevenly, with decreases for financial institutions and hardly any changes for non-financial companies.

²⁸ It should be taken into account that yields vary considerably in this debt category as the sample used to estimate interest rates is based on a wide range of assets with different levels of risk, covered bonds, investment grade rated bonds, high yield bonds and even debt with no credit rating.

²⁹ Up until the end of March, the Corporate Sector Purchase Programme (CSPP) accumulated a volume of purchases amounting to €266.80 billion, of which more than 21% was acquired in the primary market. In the same period, the ECB had accumulated corporate bonds for the amount of €27.06 billion and commercial paper for a value of €12.77 billion acquired under the PEPP.

³⁰ The ECB requires a minimum investment grade rating for purchases.

³¹ The ECB, through its covered bond purchase programme (CBPP3) and the asset backed securities purchasing programme (ABSPP), made up to the end of March for an amount of €289.61 billion and €28.72 billion, respectively, of which more than 36% and 57% were carried out in the primary market. At the same date, the ECB had accumulated covered bonds for the amount of €4.05 billion, acquired under the PEPP.

Risk premium of Spanish issuers



Source: Refinitiv Datastream and own calculations.

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

The degree of correlation between the prices of the different classes of financial assets, which had reached its highest level since 2016 in the first quarter of 2020, followed the downward trend seen in previous quarters, while remaining at values that are higher than those presented at the beginning of the previous year (see Figure 19). This additional decline was due to the different performance of debt and credit asset prices with respect to share prices: debt and credit asset prices remained relatively stable thanks to the support of the ECB, while equities posted substantial increases across the board as a consequence of the improved economic expectations.

The correlation between asset prices continued to decline, although it remained at levels higher than those seen at the beginning of the crisis. Debt and credit prices have been relatively stable, while equity prices show widespread increases.





The correlation indicator between asset classes includes pairs of correlations calculated using daily data in 1 three-month windows. The asset classes are sovereign debt, private fixed income of financial and nonfinancial entities and securities of the Ibex 35, financial companies, utilities and other sectors.

As from 7 June 2017, the CDS of the 5-year senior debt of Banco Popular has been excluded from the cal-2 culation of ROI on the asset class corresponding to financial fixed income.

Debt issues registered with the CNMV increased by 13.3% in the first quarter, while those made abroad decreased, although the amount of the latter was significant. As we have already seen, fixed income issues registered with the CNMV in the first quarter stood at ≤ 23.53 billion, 13.3% more the figure reported in the same period of the previous year, a volume that is lower than in the last quarter of 2020, but higher than the values seen of the first quarter in several previous years. Issues made abroad showed a year-on-year decrease but their amount was significant, reaching ≤ 19.14 billion in just two months.

Gross fixed income issues registered with the CNMV

TABLE 9

						2020	2021
	2017	2018	2019	2020	III	IV	¹
NOMINAL AMOUNT (millions of euros)	109,487	101,296	90,161	132,111	19,968	35,018	20,203
Covered bonds	29,824	26,575	22,933	22,960	6,750	7,508	6,250
Regional covered bonds	350	2,800	1,300	9,150	0	1,300	0
Non-convertible bonds and debentures	30,006	35,836	29,602	33,412	1,533	12,084	6,159
Convertible/exchangeable bonds and debentures	0	0	0	0	0	0	0
Asset-backed securities	29,415	18,145	18,741	36,281	4,909	9,681	3,066
Corporate commercial paper ²	17,911	15,089	15,085	22,292	5,275	4,446	4,728
Asset-backed	1,800	240	0	0	0	0	0
Other commercial paper	16,111	14,849	15,085	22,292	5,275	4,446	4,728
Other fixed income issues	981	0	1,500	6,266	1,500	0	0
Preferred shares	1,000	2,850	1,000	1,750	0	0	0
Pro memoria:							
Subordinated issues	6,505	4,923	3,214	14,312	459	2,088	861
Secured issues	0	0	0	0	0	0	0
						2020	2021
Issues carried out abroad by Spanish issuers	2017	2018	2019	2020	111	IV	¹
NOMINAL AMOUNT (millions of euros)	84,760	89,358	100,321	82,774	13,394	19,062	19,140
Long term	61,095	38,425	53,234	42,978	5,950	9,550	8,134
Preferred shares	5,844	2,000	3,070	1,850	350	0	0
Subordinated debentures	5,399	2,250	1,755	0	0	0	0
Bonds and debentures	49,852	34,175	48,409	41,128	5,600	9,550	8,134
Asset-backed securities	0	0	0	0	0	0	0
Short term	23,665	50,933	47,087	39,796	7,444	9,512	11,006
Corporate commercial paper	23,665	50,933	47,087	39,796	7,444	9,512	11,006
Asset-backed	0	0	0	0	0	0	0

						2020	2021	
	2017	2018	2019	2020	III	IV	l ³	
NOMINAL AMOUNT (millions of euros)	66,790	91,446	92,284	65,235	9,654	16,497	12,479	
Financial institutions	19,742	43,234	57,391	38,339	6,035	6,964	5,477	
Non-financial companies	47,585	48,212	34,893	26,896	3,619	9,553	7,002	

Source: CNMV and Bank of Spain.

1 Data as of 31 March.

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

3 Data as of 28 February.

In regard to the breakdown of the first quarter issues, both in absolute and relative terms, the highest growth was seen in issues of simple bonds and debentures (55.4%) and asset-backed securities (64.1%). One issue of internationalisation covered bonds amounting to &823 million also stood out. The increase in issues of bonds and debentures was due to two issues made by the Asset Management Company for Assets Arising From Bank Restructuring (SAREB) for an aggregate amount of &9.47 billion, compared to a single issue for amount of &4.06 billion registered in 2020. Meanwhile, the rise in issues of securitisation instruments remains associated with their use as collateral for obtaining funding in the ECB liquidity auctions.

Issues made on the MARF stood at ≤ 2.46 billion in the first quarter, an amount similar to the same quarter of 2020, with most of the figure corresponding to commercial paper (97%). The number of issuers stood at 45 (four more than in 2020), including companies such as El Corte Inglés, Tubacex or Sacyr.

Debt issues made by Spanish issuers abroad during the first two months of the year stood at €19.14 billion, the highest figure in the last three quarters. The decline compared to the same period of the previous year corresponded mainly to long term debt issues, which fell by 27%, while short term debt saw a smaller drop (-6%). It would appear that large issuers covered most of the long-term financing needs in 2020 and are opting mostly to issue short term notes. Debt issues of subsidiaries of Spanish companies abroad stood at €12.48 billion (data to February), 32% less than in 2020. Of this amount, 56% corresponded to non-financial companies and the rest to financial institutions.

In regard to the activity registered in Spanish trading venues, the significant decrease in activity of the Electronic Debt Trading System (SEND) stands out. Although marking an improvement compared to the last quarter of 2020, trading fell by more than half year-on-year, standing at ≤ 21.5 billion in the first quarter. 63% of this amount corresponded to Spanish public debt and 37% to foreign debt. Trading on the two organised trading facilities (OTFs) authorised by the CNMV reached ≤ 159.35 billion in the first quarter, 8.6% more than in the same period of the previous year, of which almost ≤ 123 billion (77% of the total) corresponded to Spanish public debt and almost all of the rest to foreign public debt.

The most significant increases occurred in issues of asset-backed securities and simple bonds.

Issues made on the MARF reached €2.46 billion, most of which corresponded to commercial paper.

Issues made abroad picked up, with activity concentrated in short term issues.

Trading in Spanish venues decreased significantly in SEND, but increased in the OTFs.

Changes in credit ratings of Spanish debt issues since the onset of the COVID-19 crisis

The Coronavirus crisis has significantly dampened economic activity, raising doubts about the solvency of the companies hardest hit and, hence, their credit risk. The CNMV has prepared quarterly reports to analyse the credit ratings of Spanish debt assets since the onset of the crisis and their subsequent evolution. The first of these reports¹ also compared these ratings with those of a sample of private issuers from other European countries. If an increase in credit risk were to occur, it could be reflected in downgrades of the ratings of the different companies and, if significant, would have damaging effects on many of the market agents and could ultimately have negative implications for financial stability.

EXHIBIT 2

Among other things there could be significant asset sales, downward price spirals, various contagion phenomena among entities, higher financing costs, etc.

The analysis of Spanish debt² was carried out on the outstanding fixed income issues at the end of each quarter of 2020. As shown in Table E2.1, there was an increase in the outstanding balance of rated debt between March and June, going from \leq 1,685.26 billion to \leq 1,777.15 billion, in response to liquidity needs in the context of the crisis and as companies took advantage of the low interest rates. Thereafter, the variations were much less pronounced.

The analysis shows that the Spanish fixed income issues analysed were mostly in the investment grade category (rating of BBB or higher), as these represented on average 96.5% of the total number of rated issues. This percentage remained fairly stable during the year, although in the last quarter it decreased slightly to 96.3%. This decrease was almost entirely due to the reduction in securities with A and AA ratings, due to the repayment of central government debt in the first case and that of monetary and non-monetary financial institutions in the second.

A-rated debt has the highest outstanding balance (70.5% on average for the year), since it encompasses government debt issues. From March to June there was a slight increase in the weight of BBB debt, from 8.8% to 9.3%, where it remained until the end of the year. Therefore, although most of Spanish debt remains of high quality, there has been a slight shift within this group towards assets with lower credit quality.

BBB issues have been closely monitored and, within this group, those that while still investment grade are a notch above high yield (BBB- for Fitch and S&P or Baa3 for Moody´s). As shown in Table E2.1, the amount of the BBB- debt increased from March to June from €54.75 billion to €78.68 billion (almost €24 billion more), mainly due to the downgrades in the bond ratings of the Community of Madrid, as well as different issues of monetary financial institutions and non-financial companies. Subsequently, the variations in the outstanding balance of BBB- rated debt were much less marked: between June and September there was an increase of slightly more than €2.8 billion and between September and December there was a decrease of a similar amount (€2.84 billion), as a result of the large volume of repayments and the slower pace of BBB- rated issues (there were no downgrades in credit ratings at this level).

Outstanding balance of rated Spanish fixed income securities

	31 March	30 June	30 September	31 December
Rating	1,685,262	1,777,151	1,795,335	1,769,732
AAA	12,179	11,685	11,145	9,353
AA	276,236	292,270	290,104	281,901
A	1,189,536	1,248,205	1,264,816	1,248,997
BBB	148,936	164,487	167,247	163,751
BB	35,107	36,240	35,990	39,849
В	11,383	11,691	12,819	12,660
ссс	4,897	4,988	5,081	5,063
сс	3,011	3,129	3,107	3,082
с	2,338	2,229	2,807	2,863
D	1,637	2,227	2,220	2,213
Pro memoria				
BBB	148,936	164,487	167,247	163,751
BBB+	28,245	40,088	37,664	37,454
BBB	65,942	45,720	48,097	47,652
BBB-	54,749	78,679	81,486	78,646
No rating data	92,994	93,148	90,947	114,035

Source: Bank of Spain, Bloomberg and CNMV. Nominal data in millions of euros.

The increase in the balance of BBB- rated debt between March and June meant that from March onwards the size of this debt was greater than the debt of high yield issues. Although this difference narrowed slightly in the last quarter of the year, it is important to bear in mind that based on this performance, in the event of a mass downgrade of credit ratings, the high yield debt market might not be able to absorb the downgraded BBB- rated debt without difficulty. However, this could be less relevant if the benchmark debt market is considered on a European scale and not strictly domestic, as in a larger market the downgrades of ratings of Spanish assets would have less of an impact.

In regard to the proportion of high yield debt, it should be noted that after remaining stable for most of the year (around 3.5% of the total outstanding debt), this debt increased slightly to 3.7% in the last quarter of 2020 due to the issues of new assets with a BB (high yield) rating, as there were no downgrades of asset ratings to this category. These issues were mostly made by non-financial companies (80.5%).

In conclusion, although in the first months of the crisis the analysis identifies a certain increase in downgrades of Spanish debt ratings of certain issuers and sectors, it cannot be deduced that these are either significant or generalised. This is reflected in the stability of the high percentage of high-quality debt (investment grade), although there has been a shift within this category towards the lowest rating grades. Therefore, there has been no notable deterioration in the credit quality of Spanish issuers in the context of the crisis, although it should be taken into account that this measure does not consider the performance of many

TABLE E2.1

smaller companies (which do not have a credit rating) and that they may have been significantly impacted by the slowdown in economic activity.

- 1 See Cambón Murcia, M.I. and Gordillo Santos, J.A. (2020). "Changes in credit ratings of Spanish debt assets since the onset of the COVID-19 crisis". *CNMV Bulletin*, Quarter III, pp. 83-109. Available at: https://www.cnmv.es/DocPortal/Publicaciones/Boletin/Boletin_3_En_2020en.pdf
- 2 For the purposes of the study, Spanish debt is considered to be debt issued by an issuer of Spanish nationality or an entity that belongs to a group whose parent company is Spanish, even if the issues are made abroad.

4 Market agents

4.1 Investment vehicles

Financial CIS

Investment funds

Investment fund assets, which had grown substantially in 2019, remained practically stable in 2020, standing at €279.67 billion at the year-end, just 0.1% more than at the end of the previous year. After a first quarter in which the effects of the pandemic were noted in this sector, both in the behaviour of investors³² and the performance of the fund portfolio, in April the recovery of the markets, especially the equity markets, and a slight uptick in investor confidence led investment funds to gradually gain ground. Thus, in the last quarter of the year alone, assets increased by around €12.5 billion (4.7% more than at the end of September): 85% of this amount was due to portfolio asset gains in these vehicles and the remaining 15% to net subscriptions made by unitholders.

Despite the prolonged context of low interest rates, which has caused some investors to opt for equity funds in their search for returns, others, that are more risk-averse and influenced by uncertainty brought by the crisis and the unfavourable market performance in the first quarter of 2020, opted for safer formulas, in principle, such as fixed income. For the year as a whole, the category that attracted the highest volume of net subscriptions was fixed income funds, with a total of €3.88 billion, followed by the international equity category, with €2.53 billion. It is worth mentioning that the fixed income category received the greatest number of subscriptions by far between April and December (€5.35 billion), having also registered the largest number of redemptions during the worst moments of the crisis in March. Mixed funds also saw positive net subscriptions, of €1.19 billion for mixed equity funds and €522 million for mixed fixed income funds. Meanwhile, the largest redemptions (in net terms) corresponded to guaranteed equity funds, with an outflow of €2.17 billion, and euro equity funds, with €1.97 billion (see Table 10).

The assets of the investment funds remained stable in 2020, recovering in the last three quarters the amount lost in the first as a result of the crisis deriving from the pandemic.

Some unitholders opted for equity funds in their search for higher returns, while others preferred much less risky options, such as fixed income funds, conditioned by the uncertainty and the unfavourable performance of the equity markets due to the pandemic.

³² As mentioned in previous reports, in March alone, net redemptions were around €5.5 billion, and were especially high in fixed income funds.

The performance of the fund portfolio in 2020 was slightly positive, 0.8%, with sharp differences between the first three months and the rest of the year, as described above. Thus, as shown in Statistical Annex 3.11, in the first quarter the return was -9.3%, while in the following nine months this figure stood at 11.1%. The same trend was observed in all fund categories, in other words, a negative return in the first quarter and a positive return in the next three, although the figures differed widely between, with the most extreme values seen in categories with a higher weight of equity in their portfolios. Thus, equity funds marked the worst performance in the first quarter (-28.5% for euro equity and -23.1% for international equity) and also the best performance in the rest of the year, with portfolio gains of 27.6% and 33.7%, respectively (16.6% and 11.9% in the fourth quarter alone). This meant that for the year as a whole, euro equity funds offered the lowest return of all the different categories (-8.8%) and international equity funds the highest (2.8%).

In all categories of funds, portfolio performance was negative in the first quarter and positive in the next three as a whole, with a more extreme values posted by funds with a greater weight of equities.

Net subscriptions of IFs

Millions of euros

TABLE 10

					202	0	
	2018	2019	2020	I	11	ш	IN
Total investment funds	7,907.5	2,429.7	631.3	-2,084.5	132.1	659.8	1,923.8
Fixed income ¹	-2,657.9	11,004.4	3,876.7	-1,470.9	1,359.5	2,301.5	1,686.7
Mixed fixed income ²	-1,861.8	-1,850.1	521.6	2,007.7	-444.4	-1,169.3	127.8
Mixed equity ³	3,062.8	3,212.3	1,193.7	276.0	17.8	819.2	80.8
Euro equity ⁴	1,777.5	-3,541.8	-1,973.2	-822.0	-372.8	-459.3	-319.1
International equity ⁵	3,789.2	3,900.9	2,525.4	1,738.1	-402.6	113.2	1,076.7
Guaranteed fixed income	-406.9	-282.6	-605.9	-261.4	0.9	-99.5	-246.0
Guaranteed equity ⁶	-465.8	-1,841.0	-2,171.0	-1,287.4	-213.1	-325.8	-344.8
Global funds	9,153.7	-2,420.0	-1,352.6	-446.2	-208.9	-581.1	-116.4
Passive management ⁷	-2,762.0	-3,010.1	-41.0	-1,099.0	723.3	84.4	250.4
Absolute return	-1,737.2	-2,742.2	-1,342.4	-719.4	-327.2	-23.5	-272.3

Source: CNMV.

- 1 Until I-2019 it includes the following categories (CNMV Circular 3/2011): euro fixed income, global fixed income, money market and short term money market. From II-2019 onwards it includes the following categories (Circular 1/2019): short term public debt constant net asset value MMF, short term low volatility net asset value MMF, short term variable net asset value MMF, standard variable net asset value MMF, euro fixed income and short term euro fixed income.
- 2 It includes euro mixed fixed income and global mixed fixed income.
- 3 It includes euro mixed equity and global mixed equity.
- 4 It includes: euro equity.
- 5 It includes: international equity.
- 6 It includes: guaranteed equity and partial guarantee.
- 7 Until I-2019 it includes passively managed CIS (CNMV Circular 3/2011). From II-2019 onwards it includes the following categories (Circular 1/2019): passively managed CIS, CIS that replicate an index and CIS with a specific non-guaranteed target return.

The number of funds continued to decline in 2020, especially guaranteed equities funds and passive management funds.

The number of unitholders stood at 12.7 million at the end of the year, with the advance in fixed income funds and international equities standing out, which were also those that attracted the highest subscriptions.

In the first two months of 2021, the expansionary trend marked by investment funds continued.

The percentage of illiquid assets in funds' private fixed income portfolios fell 4 pp during 2020, standing at 4.8% of the fixed income portfolio, with a notable decrease in reduced liquidity assets in the financial fixed income portfolio rated below AA. The supply of funds from management companies continued to decline in 2020, with a reduction in the number of vehicles greater than that experienced in recent years (80 in 2020 compared to 22 in 2019). Thus, there were 1,515 funds at the end of 2020, with 151 deregistrations and 71 registrations during the year. Guaranteed equity funds saw the largest fall, in line with the trend marked in recent years, with 22 fewer vehicles, followed by the passive management funds, which lost 15 funds. In contrast, international equity funds, which had increased in 2019 (with 27 more funds), grew further in 2020 with 13 institutions.

Despite the stability in terms of assets, the number of unitholders grew by 7.8% during 2020, with an increase of 3.5% in the last quarter alone, closing the year at a total of 12.7 million unitholders.³³ In line with the data on net subscriptions, the fixed income and international equity fund categories saw the greatest increases in 2020, with nearly half a million more unitholders in the former and just under 400,000 in the latter. In contrast, guaranteed equity funds, euro equity funds and absolute return funds posted a small drop in the number of unitholders (72,000, 69,000 and 59,000 fewer, respectively).

According to the provisional data for the months of January and February 2021, funds continued to perform in the same way as at the end of 2020, since assets grew by 2%, while the number of unitholders was up by 3.8%, to exceed 13 million. The number of vehicles decreased by five, to 1,510, with 17 deregistrations and 12 registrations.

Despite the turbulence at the end of the first quarter, the liquidity conditions of the private fixed income portfolio of investment funds improved throughout 2020, with a weight of assets with reduced liquidity of 4.8%, a percentage which has been gradually decreasing, with fluctuations, since the highs reached in 2010, when these assets came to represent more than 30% of the fixed income portfolio. Thus, during the year, the weight of these assets fell almost 4 pp: from 8.7% at the end of 2019 to 4.8% of this portfolio. As of 31 December 2020, the total volume of assets considered to be of reduced liquidity was €2.87 billion, representing 1.03% of total investment fund assets.³⁴ Table 12 shows that the decrease in illiquid assets occurred in all categories of fixed income assets, highlighting the reduction in financial fixed income with a rating of less than AA, which saw an annual reduction of €858 million to €986 million at the end of the year. In general terms, the improvement in liquidity was a consequence of the large number of assets with a residual life of less than one year.

³³ It should be noted that the same unitholder is counted for each contract held in different funds, so that the registered increase could be sometimes due to diversification by the same investor into a greater number of funds.

³⁴ These results are compatible with the half-yearly analyses made by the CNMV of the liquidity conditions of the total portfolio of investment funds within the framework of the stress tests carried out on these institutions. The analyses performed in 2020 concluded that for the funds analysed (funds that have certain restrictions on redemptions, such as guaranteed funds, and those with a majority investment in other investment funds are excluded) the level of liquidity measured according to the HQLA (high quality liquid assets) approach, showed few variations throughout 2020, placing the percentage of liquid assets, according to this criterion, at 48% of the total portfolio. For more information, see the exhibit "Stress test for mutual funds" in the last report of the *Non-bank financial intermediation in Spain* series.

Investment funds. Key figures*

TABLE 11

					202	0	
	2018	2019	2020	1	II	III	IV
Total investment funds (number)	1,725	1,710	1,643	1,697	1,692	1,654	1,643
Fixed income ¹	279	281	276	283	283	276	276
Mixed fixed income ²	168	173	174	173	175	170	174
Mixed equity ³	184	185	186	187	186	183	186
Euro equity ⁴	113	113	104	112	110	108	104
International equity ⁵	236	263	276	272	275	279	276
Guaranteed fixed income	67	66	55	66	63	57	55
Guaranteed equity ⁶	163	155	133	147	145	136	133
Global funds	242	255	247	254	247	250	247
Passive management ⁷	172	133	118	119	125	117	118
Absolute return	99	84	72	82	81	76	72
Assets (millions of euros)							
Total investment funds	259,095.0	279,377.4	279,668.0	250,126.3	263,619.4	267,084.6	279,668.0
Fixed income ¹	66,889.3	78,583.2	81,015.9	73,475.8	76,179.4	78,775.6	81,015.9
Mixed fixed income ²	40,471.0	40,819.9	43,200.4	41,312.7	42,581.8	41,957.1	43,200.4
Mixed equity ³	23,256.0	28,775.8	30,432.7	25,829.7	27,511.7	29,019.2	30,432.7
Euro equity ⁴	12,177.7	10,145.1	7,091.1	6,618.2	7,027.7	6,399.0	7,091.1
International equity ⁵	24,404.9	34,078.9	37,722.5	27,636.0	31,757.0	32,763.6	37,722.5
Guaranteed fixed income	4,887.4	4,809.3	4,177.0	4,505.2	4,517.4	4,397.6	4,177.0
Guaranteed equity ⁶	14,556.0	13,229.1	11,037.1	11,684.0	11,626.5	11,328.0	11,037.1
Global funds	42,137.2	43,041.9	40,918.0	37,120.7	39,071.8	39,057.4	40,918.0
Passive management ⁷	16,138.6	14,073.8	14,014.3	11,708.7	13,054.6	13,223.8	14,014.3
Absolute return	14,172.5	11,818.3	10,057.4	10,233.0	10,289.6	10,161.5	10,057.4
Unitholders							
Total investment funds	11,217,569	11,739,183	12,659,943	11,751,437	11,944,057	12,237,441	12,659,943
Fixed income ¹	2,709,547	3,668,324	4,135,294	3,660,775	3,793,867	4,002,906	4,135,294
Mixed fixed income ²	1,188,157	1,087,881	1,203,280	1,203,900	1,204,871	1,184,715	1,203,280
Mixed equity ³	624,290	707,159	745,112	707,919	715,404	737,674	745,112
Euro equity ⁴	831,115	598,901	530,107	532,060	500,778	487,843	530,107
International equity ⁵	2,225,366	2,655,123	3,043,542	2,732,902	2,775,877	2,914,093	3,043,542
Guaranteed fixed income	165,913	154,980	135,320	148,317	145,787	141,812	135,320
Guaranteed equity ⁶	494,660	428,470	356,439	391,235	383,372	368,979	356,439
Global funds	1,501,730	1,359,915	1,409,599	1,355,885	1,376,316	1,355,646	1,409,599
Passive management ⁷	543,192	429,428	511,251	396,398	435,035	438,709	511,251
Absolute return	930,641	646,042	587,040	619,085	609,793	602,106	587,040
Return ⁸ (%)							
Total investment funds	-4.89	7.12	0.78	-9.30	5.56	1.08	4.14
Fixed income ¹	-1.44	1.38	0.62	-2.43	1.82	0.60	0.68
Mixed fixed income ²	-4.27	4.75	-0.03	-6.97	3.96	0.90	2.45
Mixed equity ³	-6.45	9.25	0.59	-11.06	6.54	1.71	4.38
Euro equity ⁴	-13.01	14.27	-8.75	-28.48	11.94	-2.25	16.61
International equity ⁵	-12.34	22.18	2.83	-23.11	16.43	2.62	11.93
Guaranteed fixed income	0.09	3.98	1.68	-0.94	1.20	0.83	0.59
Guaranteed equity ⁶	-1.33	3.62	0.70	-1.86	1.35	0.43	0.81
Global funds	-5.69	8.45	-0.31	-12.00	6.15	1.46	5.19
Passive management ⁷	-3.16	7.45	0.44	-9.29	5.54	0.10	4.81
Absolute return	-4.81	3.94	0.94	-7.50	4.66	1.42	2.80

Source: CNMV. * Information on funds that have submitted confidential statements (does not therefore include funds in the process of dissolution or liquidation).

1 Until I-2019 it includes the following categories (CNMV Circular 3/2011): euro fixed income, global fixed income, money market and short-term money market. From II-2019 onwards it includes the following categories (Circular 1/2019): short term public debt constant net asset value MMF, short term low volatility net asset value MMF, short term variable net asset value MMF, standard variable net asset value MMF, euro fixed income and short term euro fixed income.

- 2 It includes euro mixed fixed income and global mixed fixed income.
- 3 It includes euro mixed equity and global mixed equity.
- 4 It includes: euro equity.
- 5 It includes: international equity.
- 6 It includes: guaranteed equity and partial guarantee.
- 7 Until I-2019 it includes passively managed CIS (CNMV Circular 3/2011). From II-2019 onwards it includes the following categories (Circular 1/2019): passively managed CIS, CIS that replicate an index and CIS with a specific non-guaranteed target return.
- 8 Annual return for 2018, 2019 and 2020. Quarterly return not annualised for quarterly data.

Estimated liquidity of IF assets

	REDUCED LIQUIDITY INVESTMENTS ¹						
_	Mill	ions of eu	ros	% of of	ne		
Asset type	Jun-20	Sep-20	Dec-20	Jun-20	Sep-20	Dec-20	
Financial fixed income with AAA/AA rating	6	6	8	0.6	0.8	1.0	
Financial fixed income with a rating below AA	1,178	1,066	986	4.3	3.7	3.3	
Non-financial fixed income	1,146	1,083	1,078	4.5	4.1	3.9	
Securitisations (asset-backed securities)	455	410	398	63.6	62.0	56.8	
AAA securitisations	140	127	128	83.9	82.4	86.3	
Other securitisations	315	282	270	57.4	55.8	49.0	
Total	3,240	2,975	2,867	5.8	5.2	4.8	
%/IF assets	1.23	1.11	1.03	_	_	-	

Source: CNMV.

1 Reduced liquidity assets are considered to be private sector fixed income assets with a maturity greater than one year for which there is no representative number of intermediaries willing to buy and sell them with a normal market spread.

Open-ended collective investment schemes (SICAVs)

In line with the trend seen in the past five years, the number of SICAVs registered with the CNMV fell significantly in 2020, as there were 143 deregistrations and only one registration, so at the end of the year there were 2,427 registered vehicles. More than half of the deregisrations were the result of wind down processes, while almost 30% were due to takeover by other vehicles, mostly investment funds.³⁵ The decrease in the number of entities was also reflected in the number of shareholders, which dropped by 9.6% to 360,452. Almost all SICAVs were listed on the BME MTF Equity market (formerly MAB).

The assets of these CISs also decreased, by 6.4%, from ≤ 28.79 billion at the end of 2019 to ≤ 26.94 billion at the end of 2020. This variation was the consequence of both the decrease in the value of the assets on the portfolios of these vehicles, especially their equity portfolios, and the repurchase of shares by shareholders. Average assets per SICAV experienced a slight decrease of $\leq 100,000$, to ≤ 11.1 million at the end of the year.

In the first two months of 2021, the main indicators for SICAVs remained in line with the figures seen in the final months of 2020: stable assets and decreases in the number of vehicles and investors. Thus, between January and February, assets rose slightly by 0.9%, while the number of vehicles registered with the CNMV decreased by 27, to 2,400, and the number of shareholders fell by 1.8% to 354,026.

The number of SICAVs registered with the CNMV declined further in 2020, with 143 deregistrations and only one registration, to stand at 2,427...

...which caused, together with the depreciation of their portfolio, a 6.4% drop in the assets of these institutions.

In the first two months of 2021, SICAV assets remained stable, but the number of entities and shareholders continued to decline.

³⁵ The rest of the deregistrations, around 20%, were the consequence of transformation into another type of entity, mostly limited companies, or to a withdrawal of their authorisation.

Hedge funds

Hedge funds, which comprise two types of vehicles depending on whether they invest in assets directly (hedge funds) or through other hedge funds (funds of hedge funds), have a very low weight in CIS in Spain, representing less than 1% of total assets, despite the significant growth experienced in recent years.

The aggregate assets of these institutions grew significantly in 2020 (+4.9% to \in 3.57 billion), which was particularly noteworthy given the difficult economic environment. Funds of hedge funds saw an increase of 15.4%, to \in 652.8 million, while hedge funds marked a much smaller rise of 2.8% to \in 2,912.6 million.

Portfolio performance was in line with market trends, with negative returns in the first quarter of 2020 and positive returns in the whole of the remaining nine months. It should be noted that the performance of funds of hedge funds in the first three months (-3.5%) was less negative than the performance of other collective investment vehicles, which allowed them to close the year with a return of 3.71%. Hedge funds, meanwhile, recorded an annual return of 1.8%

The total number of these vehicles registered with the CNMV at year-end 2020 was 76, seven more than at the end of 2019. As shown in Statistical Annex 3.12, there was only an increase in hedge funds, which went from 62 to 69, with 11 registrations and 4 deregistrations during the year. Funds of hedge funds saw no movements, as in 2019, with the same seven funds as in 2018. Six of these were funds (three of which were in the process of being wound down). In the first two months of this year there have been three registrations: two hedge funds and one, after two years without movements, to a fund of hedge funds.

The total number of unitholders and shareholders of these institutions showed a trend similar to equities, rising by 4.0%, so that at the end of December there were a total of 10,819. This increase was due to hedge funds, which registered an increase of 5.5%, to 7,961, thanks mainly to the seven registrations (in net terms) made during the year. In the case of funds of hedge funds, the number of unitholders remained practically unchanged, ending 2020 at 2,858.

Foreign CISs marketed in Spain

The volume of foreign CISs marketed in Spain has increased steadily and at a strong pace in recent years, from ≤ 18 billion at the end of 2008 to ≤ 199.42 billion in December 2020. The increase registered in 2020 was ≤ 20.58 billion, 11.5% more than in 2018.³⁶ As shown in Figure 20, this strong growth rate has meant that the weight of foreign CISs in total CIS traded in Spain has increased significantly in the last 5 years, standing at 39% in 2020.

Hedge funds, which continue to have a very low weight in collective investment in Spain...

...saw an increase in assets of 4.9% in 2020, which was higher in the case of funds of hedge funds.

The portfolio returns of these institutions was positive for the year as a whole, largely thanks to the relatively small declines seen in the first quarter.

The number of unitholders and shareholders grew by 4.0%, with the increase in hedge funds standing out, thanks to the registrations made during the year.

The number of vehicles increased by seven, ending the year at 76. This rise corresponded exclusively to hedge funds.

The assets of foreign CISs continued to grow in 2020, reaching €200 billion at the end of the year, which represents 39% of the total assets of CISs marketed in Spain.

³⁶ It should be noted that following the entry into force of CNMV Circular 2/2017, of 25 October, which establishes the obligation for all foreign CIS marketers to submit to the CNMV as much information possible about the products marketed in Spain, the information received prior to 31 December 2017 may not be fully comparable with that received as of that date.

The number of foreign CISs registered with the CNMV increased by 15 in 2020, to a total of 1,048 vehicles (407 funds and 641 companies). In line with the trend marked by assets, the number of foreign CISs registered with the CNMV increased by 15 entities in 2020 (9 in 2019), so at the end of the year there were a total of 1,048 vehicles of this type (407 funds and 641 companies). As in previous years, most of the registrations corresponded to vehicles from Luxembourg (+10, to reach 472).



Source: CNMV.

Outlook

The outlook is positive for the collective investment industry, which has successfully overcome the worst moments of the crisis, due to the increase in savings of agents.

The provision of investment services can be carried out by various types of entities, mainly credit institutions, which receive almost 90% of the income generated by this business. The performance of the collective investment industry in 2020 and the first months of 2021 seems to indicate that the most complicated moments deriving from the Coronavirus crisis have been left behind. Management companies were able to address the increase in redemptions without notable incidents and the CNMV paid special attention to the valuation of assets and the analysis of the liquidity conditions of the fund portfolios and the proper use of the liquidity management tools. In the medium term, this sector may be boosted by the notable increase in savings of agents, which may increase investment in different types of financial assets (although for the time being this increase in savings is materialising mainly in the more liquid assets, such as cash or deposits). If the positive evolution of the pandemic and a less uncertain environment are confirmed, the increase in subscriptions to these assets may continue, although it remembered that some unitholders, who are suffering more financial restrictions, may unwind their positions.

4.2 Provision of investment services

Credit institutions are by far the largest providers of investment services in Spain and account for the bulk of fee income in the different types of services (close to 90% of the total). Broker-dealers and brokers, however, still hold a relatively significant weight, especially in the area of order processing and execution, although they also offer a wide range of services (see Table 13). In addition to these entities, financial advisory firms (EAF) and portfolio management companies (SGC) provide specialised investment services.

Fees received for investment services. 2020

Millions of euros

		Credit		
	Broker-dealers	institutions		
	and brokers ¹	(CI) ²	Total	% Cl/total
Total Investment services	464	3,714	4,179	88.9
Placement and underwriting	7	355	362	97.9
Order processing and execution	276	605	882	68.7
Portfolio management	28	530	558	95.0
Investment advice	40	643	683	94.2
Marketing of CISs	113	1,581	1,694	93.3
Total ancillary services	227	1,023	1,250	81.9
Administration and custody	40	651	691	94.2
Other ancillary services	187	372	558	66.6

Source: CNMV and Bank of Spain.

1 Includes portfolio management companies.

2 Includes branches of EC credit institutions.

Credit institutions

At the end of 2020, a total of 111 Spanish credit institutions (banks, savings banks and credit cooperatives) were registered with the CNMV to provide investment services, one fewer than in 2019.³⁷ The number of foreign credit institutions providing investment services in Spain at the end of the year stood at 487, 11 more than the previous year. 432 of the registered foreign credit institutions operated under the freedom to provide services regime and 55 through branches. Almost all of these institutions were from other Member States of the European Union (482 institutions).

Table 14 shows the income obtained by credit institutions from the provision of securities services and the marketing of investment funds and other non-bank financial products. As seen in the table, the aggregate amount of fees received for the provision of securities services and marketing of CISs increased by 8.5% in 2020, to €4.74 billion. The provision of investment services implied fees of €2.13 billion for credit institutions, 15.5% more than in 2019. The income obtained by the different investment services saw double-digit growth in all headings. As regards fees for ancillary services related to investment services, credit institutions received €1.02 billion, which represents an increase of 10.9% compared to 2019.

The number of Spanish credit institutions registered with the CNMV was 111 at the end of 2020, one less than in 2019, while the number of foreign entities willing to provide investment services increased by 11 to stand at 487.

In 2020, credit institutions received €4.74 billion from the provision of securities services and the marketing of CISs, 8.5% more than in 2019.

³⁷ Of the 111 institutions, 101 were considered to be actively providing investment services.

Income of credit institutions¹ from the provision of securities services and marketing of non-bank financial products

TABLE 14

Millions of euros	s of euro	ros
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					% of total
	2017	2018	2019	2020	CI fees ¹
For investment services	1,759	1,735	1,847	2,133	14.0
Placement and underwriting	283	217	296	355	2.3
Order processing and execution	571	510	498	605	4.0
Discretionary portfolio management	389	414	479	530	3.5
Investment advice	516	595	573	643	4.2
For ancillary services	890	965	923	1,023	6.7
Administration and custody	653	667	650	651	4.3
Financial reports and research	148	184	148	206	1.4
Other ancillary services	89	115	125	166	1.1
Marketing of non-bank financial products	3,739	4,222	4,084	4,010	26.4
Collective investment schemes	1,821	1,688	1,597	1,581	10.4
Pension funds	498	892	927	972	6.4
Insurance	1,330	1,507	1,437	1,377	9.1
Other	90	135	123	80	0.5
Total	6,387	6,922	6,854	7,166	47.2
Pro memoria:					
For securities services and marketing of CISs	4,469	4,388	4,367	4,738	31.2
Total fee income	14,295	14,928	15,134	15,190	100.0

Source: CNMV and Bank of Spain. In 2017, the confidential statements that credit institutions submit to the Bank of Spain were modified as a result of adaptation to the preparation criteria, terminology, definitions and formats of the FINREP (FINancial REPorting) statements of the European Union.

1 Includes branches of EC credit institutions.

Broker-dealers and brokers

In 2020, broker-dealers provided more investment services compared to previous years. This growth was due to a company that belongs to a foreign credit institution (Credit Suisse) significantly increasing its activity. Due to Brexit, this institution decided to transfer part of its activity carried out in the United Kingdom to Spain, which is based on the processing and execution of client orders on derivatives. With the exception of this company, all others saw a reduction in activity.³⁸ Brokers recorded an increase in activity.

As shown in Figure 21, broker-dealers and brokers obtained profit before tax of €136.5 million in 2020, an increase of 80.1% on the previous year. This increase was due to the increase in profits of broker-dealers (98.0%), since brokers saw a fall in earnings (-25.7%) as expenses outstripping revenue growth.

The combined profits of these entities was \in 136.5 million in 2020, 80% more than in 2019.

In 2020, the activity of brokerdealers and brokers increased, albeit with a great deal of unevenness, especially among broker-dealers.

³⁸ The fees received by broker-dealers in 2020 stood at €522 million (€345 million excluding Credit Suisse), compared to €425 million in 2019 (€364 million excluding Credit Suisse).



Source: CNMV.

1 Except EAFs and SGCs.

At the end of 2020, a total of 95 broker-dealers and brokers were registered with the CNMV, the same number as at the end of 2019. This stability in the number of institutions, coupled with the increase registered last year, could be taken as a positive signal for the sector, especially in the context of uncertainty caused by the COVID-19 pandemic. It can be observed that banking groups are continuing to integrate their broker-dealers and brokers into the parent, which is leading to deregistrations. However, these are being offset by the registrations of independent institutions linked to non-banking entities. In 2020, eight new firms were registered and eight were deregistered.

Most entities that provided services in the European Union did so under the freedom to provide services regime, specifically 55 (six more than in 2019) and, and only four maintained branches in other countries (two fewer than in 2019). The number of foreign entities that provide investment services in Spain grew further in 2020, both under the freedom to provide services regime, which increased from 3,020 to 3,062, and through branches, from 65 to 66.³⁹

As shown in Table 15, broker-dealers experienced a significant increase in revenue compared with the previous year. All the items contributed to this rise, except for the interest margin and net exchange differences. In particular, there were notable increases in gains on financial investments (229.7%) and other operating income and expense (218.7%). The rise in net fees was 11.2%, although the performance of its different components was uneven. Fees from order processing and execution remained the largest sources of revenue from the provision of services to third parties, marking a strong rise of 54.5% in 2020.

At the end of 2020, a total of 95 broker-dealers and brokers were registered with the CNMV, the same number as at the end of 2019, following 8 registrations and 8 deregistrations.

The provision of cross-border securities services continued to be carried out mainly under the freedom to provide services regime, with very few branches being maintained.

The profit and loss accounts of broker-dealers in 2020 show a strong increase in income, in part due to the performance a few entities.

³⁹ This increase was achieved despite the notable decline in the number of UK-based entities, from 33 to 26, that can be attributed to Brexit.

Aggregate profit and loss account (Dec-20)

Thousands of euros

	Broker-dealers			Brokers		
	Dec-19	Dec-20	% change	Dec-19	Dec-20	% change
1. Net interest income	38,125	35,957	-5.7	1,251	932	-25.5
2. Net fees	279,650	310,868	11.2	130,293	143,162	9.9
2.1. Fees received	427,813	525,812	22.9	150,842	165,094	9.4
2.1.1. Order processing and execution	164,606	254,307	54.5	23,194	22,035	-5.0
2.1.2. Issuance placement and underwriting	8,849	5,279	-40.3	580	2,157	271.9
2.1.3. Deposit and book-entry of securities	42,643	39,260	-7.9	879	754	-14.2
2.1.4. Portfolio management	15,102	13,128	-13.1	14,890	14,554	-2.3
2.1.5. Investment advice	23,400	5,813	-75.2	14,183	33,990	139.7
2.1.6. Search and placement of block trades	1,302	1,960	50.5	0	0	-
2.1.7. Market credit transactions	0	0	-	0	0	-
2.1.8. Marketing of CISs	53,506	50,985	-4.7	62,866	62,134	-1.2
2.1.9. Other	118,406	155,080	31.0	34,251	29,469	-14.0
2.2. Fees paid	148,163	214,944	45.1	20,549	21,932	6.7
3. Gains/(losses) on financial investments	29,452	97,113	229.7	910	-5,562	-
4. Net exchange differences	117	-981	-	75	-596	-
5. Other operating income and expense	28,949	92,259	218.7	1,119	-372	-
GROSS MARGIN	376,293	535,216	42.2	133,648	137,564	2.9
6. Operating expenses	316,406	396,091	25.2	120,787	132,069	9.3
7. Depreciation, amortisation and other charges	3,265	14,665	349.2	3,542	2,130	-39.9
8. Net losses due to impairment of financial assets	644	-533	-	35	26	-25.7
OPERATING PROFIT(LOSS)	55,978	124,993	123.3	9,284	3,339	-64.0
9. Other gains and losses	9,033	3,736	-58.6	1,159	4,417	281.1
PROFIT BEFORE TAX	65,011	128,729	98.0	10,443	7,756	-25.7
10. Income tax expense	10,483	25,801	146.1	4,280	4,920	15.0
PROFIT/(LOSS) FROM CONTINUING OPERATIONS	54,528	102,928	88.8	6,163	2,836	-54.0
11. Profit/(loss) from discontinued operations	0	0	-	0	0	-
NET PROFIT(LOSS) FOR THE YEAR	54,528	102,928	88.8	6,163	2,836	-54.0

Source: CNMV.

Broker-dealers' operating expenses also increased, in line with rise in activity in the sector. The two expense subheadings also grew: personnel expenses increased by 16.8%, while general expenses were up by 42.9%. Expenses for depreciation, amortisation and other charges also rose considerably (+349.2%), although their amount was still lower than other expense items. The fact that expenses as a whole increased at a lower rate than the gross margin (42.2%) led to a robust rise in operating profits (+123.3%), which went from €56 million in 2019 to €124.9 million in 2020. Profit before tax grew by 98.0% to €128.7 million, almost double the amount shown in 2019.

Aggregate profit before tax of brokers fell by 25.7% in 2020 to \bigcirc 7.7 million. The decline in earnings was due to the higher costs, which grew faster than the increase in income. Net fees rose by 9.9% on the previous year. In gross terms (fees received), the increase in investment advice stood out, up by almost \bigcirc 20 million (139.7%). Income growth from issuance placement and underwriting (271.9%) was also robust, although its amount is small in relation to that of other services. However, fees received from other items all decreased. The most notable falls corresponded to "Other" (-14.0%) and to order processing and execution (-5.0%). The rest of the fee categories did not show large variations: fees from marketing of CISs fell by 1.2% and portfolio management fees by 2.3%.

The increase in brokers' fee income was reflected in a small rise in fees paid to third parties (6.7%). Furthermore, the positive performance of fee income contrasted with the large losses on financial investments of an entity that had to be intervened by the CNMV. Therefore, growth in the aggregate gross margin decreased to 2.9%, standing at €137.6 million. Operating expenses rose by 9.3%, due to the significant growth in personnel expenses (14.0%), since general expenses es were largely unchanged (0.5%). The combination of revenue growth that was lower than the rise in expenses brought net operating profit to €3.3 million, which was 64.0% less than in 2019.

The sector ROE climbed robustly during the year from 9.2% to 18.7%, due mainly to the increase in the profitability of broker-dealers (from 8.9% in 2019 to 19.7% in 2020). On the other hand, the ROE of brokers was much more stable (12.1% in 2019 and 12.5% in 2020), as observed in the left-hand panel of Figure 22. The number of institutions in losses remained at 32: 12 broker-dealers (one less than in 2019) and 20 brokers (one more than in 2019), although the amount of the losses fell significantly (from €41.25 million in 2019 to €27.67 million in 2020).

The expenses of these entities also increased but at a lower rate than income, prompting a strong increase in profit before tax (to \in 128 million, double the amount seen in 2019).

Brokers posted a drop in aggregate profit before tax of 25.7%, to \in 7.7 million, as while income increased (net fees +9.9%)...

... expenses were even higher.

The sector's return on equity doubled in 2020, standing at 18.7%, mainly due to brokerdealers. The number of institutions in losses remained at 32, although the amount of these losses decreased significantly.

ROE before tax of IFs and number of loss-making institutions



Source: CNMV.

1 ROE calculated with profit before taxes.

The sector as a whole continued to exhibit relatively high solvency levels in 2020: at the end of the year the capital surplus was 2.8 times the capital requirement. However, this figure was considerably lower compared to the figure at the end of 2019 (4.9 times). In absolute terms, this buffer is too small to be significant. As is usual, the margin was generally larger in broker dealers than in brokers. While the capital surplus for broker-dealers was around 2.8 x, it remained at 2.0 x for brokers (see Figure 23). Only one company closed the year with a capital deficit (no brokers).





Source: CNMV.

Financial advisory firms

The number of financial advisory firms remained stable at 140 in 2020, after eight registrations and eight deregistrations. Two of the deregistrations were related to the transformation of the entity into a broker. Total assets under advisory services of these entities stood at €12.05 billion in 2020 (€732 million corresponded to independent advice), which represents a decrease of 44.3% compared to 2019. This performance may be due to the increased competition from credit institutions in the area of investment advice. As shown in Table 16, the assets under advisory

Solvency levels in the sector remained high in 2020, although the capital surplus of brokerdealers fell significantly.

Financial advisory firms, which remained at 140, continued to lose market share in the investment advisory segment, with retail clients gaining weight. services of both retail and non-retail clients decreased, although the decrease in the latter was much greater (60.6% compared to 18.2%). This trend, which has been in place for several years now, implies that financial advisory firms continue to lose market share in the investment advice segment and also that their business model is shifting towards one in which the retail segment is more prominent.

Finally, the combined profit of these types of entities fell notably from $\in 8.2$ million in 2019 to $\in 5.1$ million in 2020. This decrease was a reflection of the lower fee income received from customers and, to a lesser extent, from rebates and other fees from other entities. Specifically, fees charged directly to customers went from $\notin 46.1$ million in 2019 to $\notin 37$ million in 2020.

Main figures of financial advisory firms

Thousands of euros						
				% change		
	2018	2019	2020	20/19		
NUMBER OF FIRMS	158	140	140	0.0		
ASSETS UNDER ADVISORY SERVICES ¹	31,658,460	21,627,677	12,049,182	-44.3		
Retail clients	10,281,573	8,313,608	6,797,540	-18.2		
Professional clients and other	21,376,887	13,314,069	5,251,642	-60.6		
NUMBER OF CLIENTS ¹	6,524	6,437	7,262	12.8		
Retail clients	5,997	6,005	6,861	14.3		
Professional clients	436	414	388	-6.3		
Other	91	18	13	-27.8		
FEE INCOME	62,168	56,963	45,293	-20.5		
Fees received	61,079	56,029	44,656	-20.3		
From clients	50,247	46,112	36,971	-19.8		
From other entities	10,832	9,917	7,685	-22.5		
Other income	1,088	934	637	-31.8		
EQUITY	33,572	32,089	30,607	-4.6		
Share capital	6,894	5,770	5,454	-5.5		
Reserves and carry-overs	15,386	17,260	19,111	10.7		
Profit/(loss) for the year	10,626	8,172	5,118	-37.4		
Other own funds	666	888	923	3.9		

Source: CNMV.

1 Data at market value at the end of the period.

A complementary view of the entities that provide investment services

Information on the provision of investment services in Spain from a broad point of view (i.e. including the activity of CIS management even though it is not strictly an investment service from a legal point of view) is usually presented in accordance with the type of entity performing the activity in question: credit institution, investment firm or CIS management company. However, a less formal approach, that is in line with the entities' business model and their link to commercial banks, makes it recommendable to delineate more accurately what part of the business related to

An alternative analysis of the entities that provide investment services according to their business model and not their legal form reveals that...

The combined profit decreased from €8.2 million to €5.1 million, mainly due to the drop in income from fees received from customers.

TABLE 16

providing investment services is performed by banks that may be defined as commercial banks, i.e. whose income mainly comes from providing typical bank services (deposits, loans etc.), and what part is performed by entities that may be considered to be specialised in providing investment services. This last group of entities would be formed by independent investment firms and CIS management companies (that is, not subsidiaries of commercial banking groups) and by banks specialised in the provision of investment services. The latter includes entities such as Allfunds, Banco Inversis, Cecabank and Renta 4.

...67% of the income related to this activity is received by traditional commercial banks or entities that belong to their groups. As shown in Figure 24, 67% of the business related to providing investment services in Spain (including the management of CIS and measured through the fees received for these activities) was performed by traditional commercial banks or by entities that belong to their groups in 2020, while the rest was performed by financial entities that are specialised in providing investment services and without links to commercial banking. This percentage is somewhat lower than that estimated in 2019 (68%) and follows the downward trend observed since 2017.

FIGURE 24

Share of financial institutions related to commercial banking¹ of total income derived from the provision of investment services²



Source: CNMV.

1 This group of entities includes commercial banks (understood to be those that are not specialised in the provision of financial services) and the investment firms and CIS management companies that belong to them.

2 Includes CIS management activity, although this is not an investment service from a legal point of view.

Outlook

There is a great degree of uncertainty surrounding the evolution of this sector, as is the case with other participants in financial markets. It is possible that the current crisis will give rise to a fresh restructuring of the sector, accentuating some of the trends that have been observed for many years and that are reflected in: i) a high level of competition between banks and investment firms in the provision of investment services and, ii) within the investment firm segment, a growing weight of independent entities, as well as the consolidation of their change in business model, whereby their main traditional activity, intermediation in the securities markets, tends to have less and less weight, while marketing and management activities and advisory services to third parties are becoming increasingly important.

The crisis may accentuate some trends observed in the past and maintain a high degree of competition in the sector.

CNMV public consultation on the future Circular on advertising of crypto-assets

On 5 April 2020, the CNMV opened a public consultation prior to the preparation of a Circular that will delimit the scope of application, as well as the powers of the CNMV, in regard to the supervision and control of the advertising of cryptoassets. The CNMV has made use of the authorisation conferred by Article 240 *bis* of the Securities Market Act¹ (LMV), a new precept included in this Law through the Second Final Provision of Royal Decree-Law 5/2021, of 12 March,² in order to strengthen investor protection. Through this legislative amendment, the CNMV has applied its power, through a Circular, to subject the advertising of crypto-assets, or other assets and instruments presented as investment objects, to administrative control, with comparable advertising regulations, even if they are not activities or products provided for in the LMV. This Circular will also define the objective and subjective scope of supervision of the advertising of these assets, as well as the control mechanisms and procedures that will be applied.

The applicable regulation³ establishes, in general terms, the obligation to carry out a public consultation prior to the drafting of the text of the legally binding rules and regulations. In this case, in which the CNMV is directly empowered by law to draw up a Circular to regulate the advertising of crypto-assets, public consultation is mandatory as it involves the exercise of regulatory *per saltum* powers. The deadline for responding to the consultation, which ended on 16 April, was short due to the urgency of the regulation, as reflected in the fact that the approval of the reform of Article 240 *bis* of the LMV was carried out through Royal Decree-Law.

The consultation seeks to obtain the opinion of those especially affected by the future standard and of the most representative organisations on the following points:

- The problems to be solved through the initiative.
- The need and appropriateness of its approval.
- The objectives of the regulation.
- Possible alternative and non-regulatory solutions.

In relation to the **problems that the initiative is intended to solve**, it should be noted that crypto-assets, understood to be digital representations of value or rights that can be transferred and stored electronically using distributed ledger technology or similar, are increasing in the financial system, and there is still no specific regulatory framework at the European level. The technologies that support them are transforming financial services and enabling far-reaching innovations. However, today crypto-currencies and crypto-assets are being offered with growing frequency as an object of investment, both to specialist investors and to the general public. In this regard, the CNMV and the Bank of Spain published a joint statement⁴ on 9 February 2021, building on another statement from 2018, in which they warned about the risks that these new type of assets pose for participants in the financial system and in particular for small investors. The statement highlighted the complexity, volatility and potential lack of liquidity of these investments.

In this respect, the main issues that require regulatory action lies in the possibility that the advertising of crypto-assets, when they are offered as an investment, does not include objective information about the product and its risks. In recent months it has been observed that advertising of these products to retail customers has been carried out through a wide and growing variety of media, with differencing intensity. Investors acquiring these products must be aware of the risks they entail and that their investment could lead in some cases to significant losses due to price variations, episodes of sudden illiquidity or even to a total loss of the investment due to cyber-attacks or custody errors.

The **need and appropriateness** of this regulation is evidenced, as mentioned above, by the amendment of the LMV, carried out through Royal Decree-Law.

Regarding the **objectives of the regulation**, the purpose of the draft Circular will be to develop the rules, principles and criteria to which the advertising of crypto-assets must be subject, in particular, to delimit the objective and subjective scope of application, specify, in this case, advertising that must be submitted to prior administrative authorisation and set the tools and procedures that will be used to effectively supervise the advertising of crypto-assets. It is important to note that this Circular will not contain any rules governing the products themselves, nor on their suppliers or characteristics, which will not be subject to regulation or supervision, but relate exclusively to the requirements that the advertising aimed at offering these assets as a potential investment must adhere to.

Finally, with regard to **possible alternative and non-regulatory solutions**, the option of not drawing up a specific regulation for this issue but using criteria or indications of good practices instead has been ruled out, since Article 240 *bis* requires implementation by means of a Circular. To draw up the Circular, the CNMV is considering various alternatives that affect its scope of application and the types of administrative control. The public consultation includes six sets of questions about the possible alternatives posed:

Scope of application: In order to define the objective scope of application, the CNMV is assessing the possibility of setting it for advertising activities aimed at potential investors residing in Spain who are offered or informed about crypto-assets. Likewise, it will probably be necessary to exempt some professional activities from this objective scope (white papers, professional investment analysis and recommendations or offers to professionals), unique non-fungible assets or those that are exclusively a means of payment. Regarding the subjective scope of application, the CNMV is considering the mandatory inclusion of service providers of crypto-assets, which would be defined in the Circular, regardless of their country of origin, and the advertising companies that act on their behalf.

Types of administrative control: In regard to the types of administrative control, the CNMV is considering the possibility of requiring prior administrative authorisation in the case of mass advertising campaigns aimed at the general public that are carried out through the media, physical supports or certain virtual channels. Another option applicable to this type of campaign would be to establish of a prior communication regime. Other advertising actions would be subject to subsequent supervisory control of the CNMV, which may request the termination or rectification of the advertising activity according to the terms established in the Circular. The different measures are due to reasons of efficiency and agility, at the same time ensuring prior supervision in cases of mass advertising.

All advertising campaigns would be subject to the objectives of clarity and content set down in the Circular. Thus, advertising must be clear, balanced, impartial and not misleading. This is particularly important for information on returns, especially when referring to historical returns, and information on costs. It is also envisaged that advertising campaigns will be required to include warnings about the risks of investing in crypto-assets, in summarised form in each advertising communication and more extensively in other ancillary documents.

Lastly, the regulation must also include a system for the supervision of advertising by the CNMV, which will detail the procedures and deadlines for collecting information from the entities subject to the regulation, requesting the termination or rectification of the campaign, and applying sanctions when necessary. For this purpose, the entities in question must have information and documentation relating to the advertising campaigns in progress and those carried out in the past year. Given the potential impact of advertising campaigns, in the event of a request for termination or rectification, the deadlines for acting or collecting information should be limited and, in principle, should not exceed three days. This period may vary depending on the content or the advertising piece in question.

At the end of the public consultation period, 22 comments were received. All these comments, except those which the sender expressly requested that they not be made public, are available on the CNMV website. The CNMV is analysing the responses received and will shortly publish a draft text of the Circular that will be submitted to a public hearing.

4 https://www.cnmv.es/Portal/verDoc.axd?t={52286f9f-c592-4418-9559-b75bf97115d2}

¹ Royal Legislative Decree 4/2015, of 23 October, which approves the recast text of the Spanish Securities Market Act (LMV)

² Royal Decree-Law 5/2021, of 12 March, on extraordinary measures to support business solvency in response to the COVID-19 pandemic.

³ Article 133 of Law 39/2015, of 1 October, on the Common Administrative Procedure of Public Administrations, in relation to Article 26 of Government Law 50/1997, of 27 November.

4.3 CIS management companies

Both the number of CIS management companies registered with the CNMV and the assets managed by these entities remained stable in 2020. At the end of 2020, a total of 123 CIS management companies had been registered with the CNMV, the same figure as in the previous year, after two registrations and two deregistrations carried out during the year. The assets managed by these companies stood at just under €311 billion at the end of the year, which represents a contraction of 0.4% in relation to 2019. As in previous years, around 90% of these assets corresponded to Spanish investment funds, followed by foreign CISs, with 4.9% of the total. The sector remained highly concentrated in 2020: the three largest management companies held a combined share of 43.5% of total assets, almost 2 pp more than in 2019.



Source: CNMV.

Although there were very few movements in the assets managed by these companies, their aggregate profit before tax shrank by 6.2% compared with 2019, to \bigcirc 909.6 million (see Figure 25). This decline was due to the fall in net fees, to \bigcirc 1.52 billion (2.6% less). The drop in fees was due to the sharper decrease in fees received (-2.3%) compared to those paid (-2.0%). The performance of fees received was mainly fuelled by CIS management fees, which are by far the most significant, since they represent around 87% of the total fees received by management companies (88% in 2019). These fees dropped by 3.5% in 2020, to \bigcirc 2.55 billion. Their amount represented 0.82% of assets, slightly below the figure of 0.84% seen at year-end 2019, possibly due to the restructuring of investment fund assets into categories such as fixed income, which, in general, have lower fees than other categories. As a result of the fall in profits and the increase in capital, there was a decrease in the aggregate return on equity (ROE) from 120.6% at the end of 2019 to 87.2% in 2020. In turn, the number of loss-making companies increased from 21 to 28, although the volume of these losses saw a slight decrease, from \bigcirc 7.8 million to \bigcirc 7.6 million.

Profit before tax decreased by 6.2% as a consequence of the decrease in fees received for the management CIS (-3.5%). These fees, which represent almost 90% of fees received, stood at \in 2.55 billion (0.82% of total assets).
CIS management companies: Assets under management, income from CIS management fees and average fee ratio

TABLE 17

Millions of euros

	Assets under management	Income from CIS management fees	Average CIS management fees (%)	Fee ratio ¹ (%)
2012	152,959	1,416	0.93	64.6
2013	189,433	1,588	0.84	62.0
2014	232,232	2,004	0.85	61.8
2015	258,201	2,442	0.95	63.7
2016	272,906	2,347	0.86	61.7
2017	299,974	2,647	0.88	58.7
2018	290,364	2,649	0.91	51.2
2019	312,235	2,638	0.84	49.8
2020	310,901	2,546	0.82	49.7

Source: CNMV.

1 Ratio of fees paid for the marketing of funds and income from CIS management fees.

4.4 Other intermediaries: Venture capital firms and crowdfunding platforms

Venture capital firms

Despite the crisis caused by the pandemic, in 2020, private equity and venture capital activity followed the upward trend of the previous years, in terms of both vehicles and management companies. The number of firms registered with the CNMV increased by 101 (88 investment vehicles and 13 management companies), with 130 registrations and 29 deregistrations.

Traditional venture capital firms⁴⁰ saw 77 registrations and 16 deregistrations, for a total of 235 venture capital funds and 184 venture capital firms at the end of the year. In the case of SME venture capital firms, there were four registrations and two deregistrations, for a total of 31 vehicles (13 funds and 18 companies) as of 31 December 2020. 12 European venture capital funds (EuVECA) and one European social entrepreneurship fund (EuSEF) were also registered, which, together with the first deregistrations of two of these vehicles, meant that at the end of the year there were a total of 31 and four firms of these types.⁴¹

In 2020, the number of venture capital firms continued to grow at a strong pace, with 88 investment vehicles and 13 management companies more than in 2019.

This increase was generalised among the different types of entities, affecting both traditional venture capital firms and other relatively recent categories.

⁴⁰ Traditional entities are understood to be those that existed before the entry into force of Law 22/2014, of 12 November.

⁴¹ EuVECA and the EuSEF (FCRE and FESE respectively in Spanish) are entities regulated under Regulation (EU) No. 345/2013 of the European Parliament and of the Council, of 17 April 2013, on European venture capital funds and Regulation (EU) No. 346/2013 of the European Parliament and of the Council, of 17 April 2013, on European social entrepreneurship funds.

Closed-ended collective investment entities, which enjoy high flexibility in their investment policy, also experienced a significant increase in registered vehicles. As in the previous year, closed-ended collective investment schemes were also buoyant 2020, with 18 registrations and only three deregistrations. Thus, as of 31 December, there were a total of 61 vehicles of this type, of which 33 were funds and 28 were companies. It should be mentioned that this type of collective investment scheme enjoys high flexibility both in its investment policy and in terms of compliance with investment ratios, which are more restrictive in the case of venture capital firms.

Movements in the venture capital firms register in 2020

TABLE 18

	Situation at 31/12/2019	Registrations	Deregistrations	Situation at 31/12/2020
Firms				
Venture capital funds	210	33	8	235
SME venture capital funds	10	4	1	13
European venture capital funds (EuVECA)	20	12	1	31
European social entrepreneurship funds (EUSEF)	5	1	2	4
Venture capital companies	148	44	8	184
SME venture capital companies	19	0	1	18
Total venture capital firms	412	94	21	485
Closed-ended collective investment funds	20	14	1	33
Closed-ended collective investment companies	26	4	2	28
Total closed-ended collective investment undertakings	46	18	3	61
Closed-ended investment scheme management companies	106	18	5	119

Source: CNMV.

The data corresponding to 2020 provided by the Spanish Association of Capital, Growth and Investment (ASCRI) reflect a new record number of transactions in 2020, with a total of 765. However, the notable decrease in megadeals (transactions worth over ≤ 100 million) sparked a fall in investment volumes of close to 30%, to ≤ 5.56 billion. Middle market transactions (investments of between ≤ 100 million), on the other hand, were numerous (79), and represented an investment of ≤ 1.95 billion.

In terms of the project development phase, the venture capital segment (seed and start-up phases) reported the largest number of transactions, with a total of 624, which represented an investment volume of ϵ_{750} million. 135 of total transactions were carried out by international funds (44 more than in 2019), with an investment volume of ϵ_{459} million, and many of them were part of large joint venture transactions with Spanish funds.

According to preliminary data from ASCRI, the number of transactions in the venture capital sector reached an all-time high in 2020, at 765. However, the total investment volume decreased by 30% due to the decrease in the number of megadeals.

Investment in venture capital accounted for more than 80% of the transactions, with an investment volume of €750 million. The ICO initiative, through FOND-ICO Global, was especially relevant in 2020. First, in the middle of the year an increase of ≤ 2.5 billion in the amount available for investment was approved, so that over the next five years there will be a total of ≤ 4.5 billion. Second, the 12th call was held, with the selection of 11 funds in which FOND-ICO Global will invest ≤ 202 million, and the 13th call was launched, the largest ever, both in terms of the amount, ≤ 430 million, and the number of funds in which it will invest, which may be as many as 16.

Crowdfunding platforms

In 2020, the number of registered crowdfunding platforms continued to decline, following several years of intense activity after the publication of Law 5/2015.⁴² Thus, throughout the year, two new platforms were registered (four in 2019) and there were three deregistrations, so at the end of the year there were a total of 27 on the CNMV Register. No applications for registration were submitted (eight were received in 2019) and one project was withdrawn.

Of the 27 platforms registered at the end of December, ten were for securities vehicles, eight were for loans and nine were mixed. Of the total, eight were real estate (one loan, four securities vehicles and three mixed), the same as in 2019, and two platforms were still controlled by foreign companies.

Number of registered crowdfunding platforms					TABLE 19		
Platform type	2015	2016	2017	2018	2019	2020	Total ¹
Securities	1	4	3	3	2	0	10
Loans	0	8	1	1	0	1	8
Mixed	0	0	4	1	2	1	9
TOTAL	1	12	8	5	4	2	27

Source: CNMV.

1 The sum of the different years does not coincide with the accumulated total as a consequence of the two deregistrations made in 2019 (one crowdfunding platform for securities and another for loans) and of the three deregistrations in 2020 (one platform for securities, one for loans and another mixed).

In 2020, an increase in public investment of €2.5 billion was approved through the FOND-ICO Global fund.

For the first time since its creation in 2015, the number of crowdfunding platforms was reduced, to 27, following 2 registrations and 3 deregistrations.

Of all the crowdfunding platforms, 10 were for securities vehicles, 8 were for loans, and 9 were mixed.

⁴² Many of the applications made in 2015 and 2016 related to platforms that were already operating as such and which, as a consequence of the new regulation, had to adapt to the legislative requirements in order to be able to continue their business.

Application of Regulation 2019/2088 on sustainability-related disclosures in the financial services sector

EXHIBIT 4

On 10 March 2021, Regulation (EU) 2019/2088 of the European Parliament and of the Council, of 27 November 2019, on sustainability-related disclosures in the financial services sector entered into force (the Regulation). This Regulation establishes harmonised standards of transparency to be applied by participants in financial markets. Within the scope of the CNMV, it affects CIS management companies, management companies of closed-ended collective investment entities, entities that provide discretionary portfolio management services and financial advisers (entities that provide investment advice).

These standards refer to information on the integration of sustainability risks, transparency in the event of adverse sustainability impacts and information on the sustainability of financial products. The transparency obligations imposed by the Regulation affect the information that participants shall publish on their websites, pre-contractual information (in the case of CISs and venture capital firms, the prospectus) and the annual reports.

The transparency obligations can be summarised as follows:

- Information about policies on the integration of sustainability risks in the investment decision-making process: to be published on websites (Article 3) and in pre-contractual information (Article 6).
- Statement on policies on adverse impacts of investment decisions or advice on sustainability factors: to be published on websites (Article 4) and in pre-contractual information (Article 7).
- Transparency on remuneration policies in relation to the integration of sustainability risk on websites (Article 5).
- Information on the promotion of environmental or social characteristics of a product (provided that the companies in which it is invested observe good governance practices): to be included on websites (Article 10), in precontractual information (Article 8) and in the information corresponding periodic information, annual reports in the case of CISs or alternative investment funds (Article 11).
- Information on products aimed at sustainable investments: to be included on websites (Article 10), in pre-contractual information (Article 9) and in the corresponding periodic information, annual report in the case of CISs or AIFs (Article 11).

With the exceptions set forth in Article 7 and Article 20 (entry into force and application), which postpones the obligation for periodic information to 1 January 2022, the Regulation shall be applicable from 10 March 2021.

For the purpose of specifying the details of the presentation and content of this information, Article 4 (transparency of adverse sustainability impacts on websites),

Articles 8 and 9 (pre-contractual information) and Article 10 (information on website) provide that the European Supervisory Authorities (ESAs), in other words, the European Securities and Markets Authority (ESMA) in the case of securities, the European Banking Authority (EBA) for banks and the European Authority for Insurance and Retirement Pensions (EIOPA) in the area of insurance and pension funds, should-prepare draft regulatory technical standards, which have not yet been approved. Despite the absence of these standards and other regulatory developments, the European Commission has ratified the obligation to comply, as of 10 March of this year, with the obligations relating to information on sustainability risk and the main adverse aspects, as well as with the principles established in Articles 8 and 9, since their application is not conditioned to the prior implementation of technical standards. On 4 February, the ESAs published the draft regulatory technical standards, stating that they have proposed that they be applied from 1 January 2022. They also announced that they planned to issue a communication before the date of application of the Regulation to ensure its consistent application and monitoring.

Without prejudice to the content of the communication the ESAs may publish, on 18 February, the CNMV issued a statement¹ encouraging institutions to use the time remaining before the application of the technical standards to prepare properly. Likewise, during the period in which the Regulation is applied in which the technical standards are not enforceable, it indicated that institutions may voluntarily use the drafts of these standards submitted by the ESAs to the European Commission as a reference.

Therefore, entities must include on their websites and in their corresponding pre-contractual documentation information on the policy for integrating sustainability risks into the decision-making process and on the adverse effects of their decisions on sustainability factors (in the second case, and with regard to precontractual information at product level, the deadline is only applicable if adverse incidents are not taken into account, otherwise the obligation is postponed until 30 December 2022 at the latest).

Likewise, CISs or portfolios under management that, in accordance with the provisions of Articles 8 and 9, promote environmental or social characteristics (as long as the companies in which they invest observe good governance practices), or have sustainable investments as their objective, must include, as of 10 March 2021, the information provided for in the Regulation on their websites and in their contractual documentation.

The CNMV has conveyed to the institutions subject to the Regulation the importance of proper transparency in the information on sustainability in the financial services sector and correct compliance with the obligations and principles established in the Regulations. Further, with a view to the implementation of the Regulation, it intends to:

- Seek harmonised application at European level, for which purpose it will adhere to the guidelines established by the ESAs and in particular ESMA.

- Disseminate criteria to the sector on the implementation of the Regulation in the absence of the technical standards, through the publication of a Q&A document on the consultations received and its supervisory experience.
- Apply the principle of proportionality in the supervision of compliance with the regulations by the institutions required to do so.
- Take into account, both in regard to the registration of amendments in CIS prospectuses and supervision tasks, the uncertainty that has surrounded the date of entry into force of the obligations established in the Regulation.

In the particular case of updating the prospectuses of investment funds to adapt them to the requirements of Articles 6 and 7 of the Regulation (sustainability risk and adverse events), the CNMV has developed a simplified procedure to allow the agile incorporation of information in registered prospectuses.²

In regard to the obligations imposed by Articles 8 and 9 of the Regulation, management companies must review the prospectuses of the funds registered as socially sustainable investments and assess whether the information included in the prospectus complies with the regulatory requirements. In this sense, taking into account the aforementioned circumstances, the CNMV considers that in general and without prejudice to the review that each management company must carry out, the information contained in the prospectuses of these funds, in accordance with the criteria applied up until that time, could be considered sufficient to comply with the regulatory requirements. Notwithstanding, management companies that wish to do so may voluntarily adapt the content of the prospectuses of these CISs, in accordance with the draft regulatory technical standards submitted by the ESAs to the European Commission. Management companies that decide to update these prospectuses must also follow the simplified procedure referred to above.

The CNMV considers the credibility of the information regarding sustainable investment and awareness of sustainability risks to be essential, therefore it urges the institutions involved to equip themselves with adequate means and procedures to properly comply with the new regulations in this area. Likewise, to more easily meet the objectives pursued by the Regulation, the CNMV has offered to collaborate with the sectors involved to resolve any doubts that may arise and coordinate its application.

2 http://www.cnmv.es/portal/Gpage.aspx?id=ProcFolletoIIC

¹ https://www.cnmv.es/portal/verDoc.axd?t=%7B177791b4-e6e9-4c05-bbc2-d4550bcddfc4%7D

II Reports and analysis

Analysis of leverage in Spanish alternative investment funds

Gema Pedrón Fernández (*)

(*) Gema Pedrón Fernández is a member of the CNMV's Department of Research and Statistics of the General Directorate of Strategic Policy and International Affairs.

Executive summary

Article 25 of the Alternative Investment Fund Managers Directive (AIFMD) establishes the obligation for national competent authorities (NCAs) to periodically monitor the levels of leverage used by alternative investment funds (AIFs) to assess its possible effect on financial stability; in other words, its relevance as a potential source of systemic risk.

On 17 December 2020, the European Securities and Markets Authority (ESMA) approved guidelines for the harmonised application of this article, which establish common criteria and indicators that must be observed by the different national authorities to monitor the levels of leverage used by AIFs under their jurisdiction, in order to identify the funds which may pose a higher level of systemic risk and for which limits will be set in a coordinated manner at European level.

These guidelines are currently being transposed into the legal systems of the different countries and the first assessment based on these rules is expected to take place on 31 December 2021. In this context, the CNMV has carried out preliminary analysis of the levels of leverage used in Spanish alternative investment funds, applying the criteria established in the aforementioned guidelines. This article presents the most significant findings of the analysis which was performed using data as of 31 December 2019.

Investment funds that are considered to be *alternative investment funds* are all collective investment funds and undertakings that are not subject to the UCITS Directive. They encompass four different categories of Spanish collective investment schemes (CIS):

Those informally known as quasi-UCITS. These include investment funds (IFs) and investment companies (SICAVs) that meet practically all UCITS requirements,¹ but opt for benefiting from one or several of the exemptions set down in Article 72 of the Implementing Regulation of Law 35/2005, of 4 November, on Collective Investment Schemes (CISR).

This category accounts for the largest volume of total AIFs, with assets total ling \in 47.19 billion at December 2019.

¹ The UCITS (Undertakings for Collective Investment in Transferable Securities) are the institutions for collective investment in transferable securities harmonised at European level and regulated by Directive 2009/65/EC of the European Parliament and of the Council, of 13 July 2009. They are subject to criteria regarding eligible assets, diversification and liquidity rules, as well as limits on borrowing and leverage through derivatives.

- Hedge funds and funds of hedge funds. As of 31 December 2019, assets totalled €2.83 billion and €567 million respectively.
- Real estate CIS. Low volume of assets: €1.07 billion in total, of which €321 million correspond to funds in the process of being wound down.
- Private equity funds, and closed-ended collective investment undertakings. Assets of €13.08 billion and €715 million respectively in December 2019.

The ESMA guidelines establish a process to monitor the levels of leverage used by AIFs in two phases. In phase 1, leverage will be measured according to three basic categories: gross leverage, net leverage and financial leverage. The first two are measures of the leverage got through investments in derivatives and the third measures leverage as a consequence of financial debt. All AIFs showing high levels of leverage measured according to these three indicators will go on to phase 2, in which a more in-depth analysis will be performed to determine whether their leverage could transfer risk to the financial system through different channels: risk of fire sales, counterparty risk, risk of spill over to financial institutions and, lastly, risk of interruption in direct credit intermediation in the real economy.

According to Article 25 of the AIFMD Directive, competent authorities must analyse AIF leverage levels based on the data received through the reporting model² (AIF Template) included in the annex to the AIFMD Level 2 Regulation (Commission Delegated Regulation (EU) No 231/2013, of 19 December 2012). However, this analysis has been carried out using the data received through the CNMV's confidential reporting template, since it is considered that the AIF Template data are not yet of sufficient quality.

The main conclusions obtained from the analysis of the levels of leverage used by each type of AIF are as follows:

- Quasi-UCITS IFs and investment companies have an average gross leverage (obtained from the sum of the nominal amounts of their derivative contracts) amounting to 59.3% of assets. Four subgroups of quasi-UCITS can be distinguished:
 - i) The first and most numerous, which accounts for 84.5% of total net assets of quasi-UCITS (€39.48 billion), is subject to the 100% leverage limit applicable to UCITS. To comply with this limit, leverage is measured using the commitment methodology, which establishes rules for netting long and short positions. It is therefore a measure of net leverage.

The average gross leverage level for this subgroup is 59.5% of their total net assets, although average net leverage falls to 23.2%. This leverage is not evenly distributed: while 63% of the CIS in this group show net

² The AIFMD Directive requires information on leverage indicators to be submitted only for leveraged AIFs whose managers manage assets amounting over €100 million. Since information on the leverage of all AIFs is available in the CNMV statements, the analysis has been carried out on all undertakings regardless of their size. However, the systemic impact will depend on size and is an aspect that must be taken into account.

leverage of less than 25%, 7% have net leverage of more than 75%. This last group is basically made up of investment companies that invest in other CIS, where the leverage is therefore indirect. In these cases, the CNMV is informed of the estimated indirect leverage and, as most of the management companies make this estimate based on the maximum legal limit, reported leverage would be overestimated and it would be higher than the amount actually used. In any case, even among CISs with higher leverage levels within this group none have been identified that could transfer risk to the financial system. This finding is in line with expectations, given the limit on leverage for this subgroup of CIS.

- ii) The second subgroup, with total net assets of €4.54 billion. 5.5% of the total net assets of this group corresponds to IFs that declare that they do not carry out transactions with derivatives. Therefore, the leverage used by this group would be zero.
- iii) The third subgroup, with total net assets accounting for 9.5% of quasi-UCITS, comprises investment funds with a target return guaranteed by a third party. Spanish regulations allow these funds to exceed the general limits to which the UCITS are subject in their transactions with derivatives, in order to provide them with greater flexibility to structure their portfolios.

This subgroup uses average gross leverage of 90%. Some of the funds have gross leverage of over 100%. However, a calculation of their net leverage (this is not a requirement) adjusted for the delta of the contracted options, would cause this figure to decrease significantly. In any case, guaranteed funds have a moderate risk profile, since the guaranteed net asset value at maturity will be at least 75% of their initial value. On the one hand, this requirement limits the maximum level of market risk and, on the other, the use of a guarantor mitigates the counterparty risk.

iv) The last subgroup, with a very low weight (0.4% of quasi-UCITS total net assets), are CISs that establish their leverage limits in terms of maximum loss or value at risk (*VaR*); in other words, they could tolerate a maximum expected loss of 20% in one month at a confidence level of 99%. These CISs can carry out alternative management strategies with a broad use of derivatives. Even so, their average gross leverage stands at 84%, a moderate level considering the overestimation of the measure calculated in gross terms. This group of CISs is not required to calculate net leverage.

The third indicator analysed in phase 1, financial leverage, is also insignificant for quasi-UCITS, since they are subject to a maximum leverage limit of 10% of their assets, the same limit applicable to UCITS. Additionally, recourse to borrowing is only allowed on a temporary basis to meet liquidity needs. In practice, only 3.3% of quasi-UCITS had resorted to borrowing at 31 December 2019 and on average borrowing represented 2.6% of their assets.

Therefore, it can be concluded that quasi-UCITS in Spain use low levels of leverage through their derivatives transactions and practically no leverage through borrowing.

This is a consequence of the leverage limits that this group of CISs must observe, equivalent to the limits for UCITS, with the sole exception of guaranteed funds. Therefore, no funds are identified as having a leverage level that warrants a phase 2 analysis.

Hedge funds. Unlike UCITS and quasi-UCITS, hedge funds are not subject to any limits on maximum leverage through derivative instruments, while direct leverage through financial debt is limited to five times their assets. Hedge funds usually carry out investment strategies that are similar to those of hedge funds in other jurisdictions. Funds of hedge funds are CISs that invest at least 60% of their assets in other hedge funds.

Despite their flexible investment regime, in practice it has been observed that 55% of hedge funds and 51% of funds of hedge funds do not carry out derivatives transactions directly. Those that do present average gross leverage of 98% and 68% respectively and do not report their net leverage levels.

Only 4 hedge funds (no funds of hedge funds) have gross leverage of greater than 100%, with a maximum of 170%. These funds have been analysed in greater depth based on two ratios: the first, which indicates the counterparty risk borne by the funds, is calculated as the ratio of the amounts due to a fund from its derivatives counterparties to its total net assets. The second is calculated as the ratio of the gains (realised and unrealised) obtained by the fund throughout the year from its activity with derivative financial instruments to its total net assets. This additional analysis identified one small hedge fund with high counterparty risk. However, given its small size, it does not pose a threat of systemic risk.

With regard to financial leverage, only four hedge funds (no funds of hedge funds) have resorted to borrowing, with one of them reporting a maximum of 16% of assets.

From the analysis of hedge fund leverage, it can be concluded that, contrary to what could be expected, they take on very small amounts of leverage. To a certain extent, this could be because part of their leverage is not reflected in the information made available. This unknown leverage refers to the indirect leverage taken on through investment in other leveraged CISs. Hedge funds invest an average of 46% of their funds in other CISs, while funds of hedge funds must by law invest a minimum of 60% in other hedge funds.

- Real estate CISs. The real estate CIS sector is virtually insignificant in Spain, since all real estate investment funds are currently being wound down, with only two closed-ended real estate investment companies with combined net assets of less than €800 million still existing. In addition, Spanish regulations impose strict limits on leverage for these funds: commitments for real estate purchases cannot exceed 40% of their assets; premiums paid on call options (10% of assets) and in terms of financial leverage, mortgage backed loans may not represent more than 50% of their assets.

The combination of their small size, closed nature and the limits to which they are subject rules out Spanish real estate CISs as contributors to systemic risk.

Private equity funds and closed-ended collective investment undertakings. Private equity funds carry out virtually no transactions with derivative instruments. However, due to the characteristics of these entities, they could be considered to use a certain level of leverage when they take on future investment commitments in companies that form part of their investment scope. On average, these commitments represent 54% of assets, although if the uncalled committed capital is considered, this figure would drop to 18.2% of future assets.

In regard to financial leverage, 40% of the venture capital sector has taken out financial debt, which represents on average 17.4% of assets. The total volume of loans amounts to €896 million, split between bank loans (€486 million) and other loans (€410 million). Further, seven private equity funds have been extended participating loans for a total amount of €22.3 million.

Finally, there is very little information available on the activity of closed-ended collective investment undertakings and therefore the phase 1 indicators cannot be calculated. There were 43 entities with combined assets of $€_{715}$ million, only one of which had assets of more than $€_{100}$ million. This is a closed-ended capital company that invests in private equity funds.

In summary, it can be concluded that the four types of CIS that make up the AIF segment in Spain (quasi-UCITS, alternative investment CIS, real estate CIS and private equity funds) have low average leverage levels, and no individual CISs are identified whose size and level of leverage – measured using the basic measures established in phase 1 - are sufficiently large to potentially generate systemic risk. Consequently, none of them would be subject to the analysis of interactions with the rest of the financial system proposed by ESMA guidelines for phase 2.

1 Introduction

According to Article 25 of the AIFMD Directive, the competent authorities must analyse the leverage levels of AIFs managed by managers domiciled in their jurisdiction based on the data received through the reporting model (AIF Template) included in the annex to the AIFMD Level 2 Regulation. The submission of this information is relatively recent (the first batch referred to information as at 31 December 2017) and there are some quality issues, which has prompted ESMA to set up a working group that is currently developing different quality controls. For this reason, the CNMV resolved to perform this first analysis based on the information received from the confidential CNMV reporting template, information that has been submitted since 1990 for the majority of CISs and which forms the basis of the CIS off-site supervision work. One aspect of the framework established in the AIFMD that should be taken into account is that the entities subject to the directive are management companies, which must submit to the competent authority of the country in which they are domiciled information on all the AIFs under their management, be they in same jurisdiction or in other jurisdictions. NCAs are obliged, in accordance with Article 25 of the AIFMD, to monitor the levels of leverage used by all AIFs managed by management companies registered with the NCA, even if the AIFs are not registered.

However, the Spanish regulatory system requires information on CISs registered with the CNMV, be they UCITS or AIFs, to be submitted even if the corresponding management company is domiciled in another Member State. In contrast, no information is available on CISs managed by Spanish management companies when the CIS in question is domiciled abroad. Consequently, the latter have not been included in the analysis, although they would be included in the scope of application of Article 25. These CISs will be included in subsequent analyses, insofar as the quality of the information in the AIF Template allows.

The recently approved ESMA Guidelines on Article 25 of the AIFMD³ establish a two-phase analysis process. In phase 1, the leverage used by the AIF will be measured based on three basic categories: gross leverage (gross method), net leverage (commitment method) and financial leverage (direct borrowing in cash and securities). All AIFs showing high levels of leverage measured according to these three indicators will go on to phase 2, in which a more in-depth analysis will be made of their potential to generate systemic risk due to the transfer of risk to the financial system through different channels: risk of fire sales, counterparty risk, risk of spill over to financial institutions and, lastly, risk of interruption in direct credit intermediation in the real economy.

There are four categories of CISs in AIFs in Spain: quasi-UCITS, hedge fund CISs (hedge funds and funds of hedge funds), real estate CISs, and private equity funds and closed-ended collective investment undertakings. The following table shows specific weight of each of these categories in AIFs as a whole.

Alternative investment funds. December 2	TABLE 1	
	Total net asset (millions of euros)	Weight of total AIFs (%)
Quasi-UCITS	47,189	72.1
Hedge funds and funds of hedge funds	3,400	5.2
Real estate CISs	1,073	1.6
Private equity funds and closed-ended collective investment undertakings	13,796	21.1
Total	65,458	100.0

Source: CNMV.

This article presents the results of the two-phase process established in the ESMA guidelines carried out separately for each of the existing AIF categories in Spain.

³ https://www.esma.europa.eu/sites/default/files/library/esma34-32-552_final_report_guidelines_on_article_25_aifmd.pdf

2 Quasi-UCITS CISs

This is an informal name that refers to investment funds and investment companies that meet practically all the requirements of UCITS and are eligible for any the exemptions set down in Article 72 of the CISR.

2.1 Leverage indicators through derivatives: gross and net leverage

2.1.1 Gross leverage

This leverage indicator is calculated using the sum of the gross nominal amounts of all derivatives contracts, both long and short positions, expressed in absolute value.⁴ Adding the long and short positions unnetted means that the result often overestimates actual exposure.

In their yearly balance sheets, CISs report, in one of the *off-balance sheet items*, the total gross nominal value of all their derivatives contracts, without making any adjustments in case of options. The average gross leverage of the quasi-UCITS, according to these reported off-balance sheet figures, stood at 59.5% in December 2019. Considering that this is a gross measure that overestimates real leverage, the quasi-UCITS category can be considered to have low average leverage.

However, when analysing leverage, attention should be given not only to the average level, but also to how it is distributed among the different funds. Therefore, the quasi-UCITS have been grouped into five leverage intervals based on the individual leverage used: less than 25%, 25% to 50%, 50% to 75%, 75% to 100% and greater than 100%. The results obtained are shown in Figure 1. It can be observed that more than 50% of the quasi-UCITS (in terms of total net assets) take on a level of leverage lower than 25%, while around 20% take on gross leverage that represents between 75% and 100% of their net assets and another 20% of quasi-UCITS have gross leverage greater than 100% of their net assets.

⁴ The gross method is set out in Article 7 of Delegated Regulation (EU) No. 231/2013, implementing the AIFMD Directive. According to this definition, gross leverage corresponds to the sum of the exposure obtained from transactions with derivative financial instruments and the direct exposure through cash investments. Certain rules must be applied in this calculation: for example, liquidity (cash and cash equivalents) is excluded. In this analysis, the leverage generated from investment in derivatives has been considered in isolation, excluding the cash investments. It is assumed that all CISs have a similar cash exposure of close to 100% of assets. Therefore, the factor that brings the risk of leverage would be investment in derivative financial instruments. For this purpose, it should be noted that borrowing in cash to invest in securities is not permitted in the case of quasi-UCITS CISs.

Distribution of quasi-UCITS total net assets according to their gross leverage



FIGURE 1

Source: CNMV.

2.1.2 Net leverage (commitment method)⁵

The analysis of gross leverage – which, as we have already seen, overestimates the real leverage – should be supplemented by another measure that includes the netting of long and short positions on the same underlying and on correlated underlyings (hedging), according to a series of predetermined rules. European regulations contain a harmonised methodology for these purposes, the commitment approach, whose technical specifications are included in the guidelines of the Committee of European Securities Regulators (CESR).⁶ These guidelines allow exposure to be calculated alternatively using the *VaR* approach, i.e. the estimate of the maximum loss at a certain level of confidence and on a predetermined time horizon.

UCITS are subject to a maximum leverage limit of 100% of their net assets, measured in accordance with the commitment method set out in the aforementioned guidelines, in other words, the net leverage obtained through derivatives transactions cannot exceed 100% of its total net assets

As an exception to the general rule, the guidelines allow UCITS that follow a complex investment strategy, with an intensive use of derivatives, to be exempt from the obligation to calculate net exposure using the commitment method, and are able to choose to measure the risk using a *VaR* approach. This second group of UCITS must adhere to certain limits in terms of maximum expected loss: if they opt for *VaR* in absolute terms, the maximum loss in a period of one month will be 20%, at

⁵ The definition of the commitment method is included in Article 8 of Delegated Regulation (EU) No. 231/2013, AIFMD Level 2 Regulation. According to this definition, the sum of the exposure through cash and derivatives investments must be included in the calculation of total exposure. However, in this analysis only the second component has been taken into account, i.e. the exposure added by the investment in derivatives, and therefore the risk is assessed on this.

⁶ CESR (2010). CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS – CESR/10-788. Available at: https://www.esma.europa.eu/sites/default/files/library/2015/11/10_788.pdf

the 99% confidence level; alternatively, the relative VaR allows the UCITS to assume a maximum loss of 200% of the VaR of its benchmark index.

90.4% of quasi-UCITS adhere to the same leverage limits as UCITS; 84.5% apply the commitment method and consequently, their net leverage cannot exceed 100% of assets; 0.4% opt for *VaR* methodology in absolute terms, with a maximum expected loss of 20% in one month, at the 99% confidence level, and finally, 5.5% declare that they do not carry out transactions using derivatives instruments.

Only 9.6% of these quasi-UCITS can opt for exceeding the leverage limits set down in the UCITS Directive. Nonetheless, the risk corresponding to this group of CISs is very limited, since they are investment funds with a target return guaranteed for the CIS by a third party.

The following table shows how the total net assets of quasi-UCITS are distributed across the subgroups mentioned above, as well as the information available on their level of gross and net leverage.

Limits on derivatives transactions	Total net assets (euros)	Average gross leverage (%)	Average net leverage (%)
Do not invest in derivatives	2,609,773,543	0.0	0.0
Net leverage < 100%	39,890,237,314	59.3	23.2
Limits on VaR	146,734,850	83.0	Data not available
May exceed UCITS limits	4,542,621,904	90.3	Data not available
Total	47,189,367,611	59.5	-

Source: CNMV.

Ouasi-UCITS: leverage indicators

In regard to net leverage, the CNMV's reporting template for CIS do not require information on net leverage from funds that have opted either for the *VaR* method or for exceeding the leverage limits to UCITS.⁷

The first subgroup, which represents around 5% of the total, does not carry out transactions with derivative instruments and therefore the corresponding gross and net leverage are zero. The analysis of the other three subgroups discloses the following information:

i) Quasi-UCITS with net leverage (commitment method) < 100%

This subgroup is subject to a leverage limit in net terms (100%) measured according to the commitment method and is the largest in terms of total net assets, concentrating 84.5% of total quasi-UCITS. For this group, additional information is available on the level of net leverage according to the underlying: interest rates, equities, credit risk,

TABLE 2

⁷ For these groups of funds, an attempt was made to obtain the net leverage data from the AIF Template. However, as this information is currently unreliable, only gross leverage has been considered.

commodities, currency and other CISs. Net leverage is distributed as follows among the different underlying assets:

0	Distribution of	f net leve	rage by ur	derlying			TABLE 3
%	5						
	Interest rates	Equities	Currency	Credit risk	Commodities	CIS	Average net exposure
	1.7	5.1	0.2	0.04	0.04	16.0	23.2

Source: CNMV.

A reduced average net exposure to each of the risk factors is observed, which is barely significant in the commodities, credit risk and currency underlyings. The largest exposure is found in the CIS underlying: it should be taken into account that this underlying includes the estimation of indirect leverage (to any underlying) obtained as a result of the investment in other CISs that in turn invest in derivative financial instruments. In cases where the management companies do not know the effective level of leverage taken on by the CISs in which they invest and these are UCITS, they are permitted to estimate the indirect leverage by taking the maximum authorised leverage limit, i.e. 100% of the position in the CIS. In the case of investment in a hedge fund, a maximum leverage estimate of 400% is accepted. This could result in the reported leverage being higher than the real leverage.

Like gross leverage, net leverage is not evenly distributed among those quasi-UCITS that follow the commitment methodology, as reflected in Figure 2, where we observe that 63% of the net assets of these institutions is concentrated in CISs with net leverage of less than 25%. Only 7% of these CISs (in terms of net assets) have leverage of more than 75%.



Source: CNMV.

A specific analysis has been carried out focused on this last group of CISs with net leverage of over 75% of their net assets, with the aim of identifying potential candidates for the phase 2 analysis. 105 CISs are in this position: 9 IFs and 96 investment

companies.⁸ In 87 of the 105 CISs identified, the leverage level is mainly due to investment in other CISs. Therefore, the high levels can be explained by the overestimation of indirect leverage that, as already explained, occurs in these cases.

Of the 18 remaining CISs, the institution with the greatest net assets (\leq 360 million) is a guaranteed IF with net exposure to interest rates of 80%. The next three CISs have much smaller net assets than the first: with \leq 33, \leq 15 and \leq 11 million, respectively. All of them are investment companies with net exposure to equities of around 70%.

In the analysis of the CISs with the highest levels of leverage, none were identified with a high leverage risk, as would be expected given the 100% net leverage limit to which this first group of CISs is subject.

ii) Quasi-UCITS with leverage risk measured using the VaR method

Within this subgroup, subject to maximum leverage limits in terms of *VaR*, only two compartments of an IF, both with net asset values of less than ≤ 1 million, have gross leverage of over 100%. Their small sizes exempt them from being considered as potentially generating systemic risk

iii) Quasi-UCITS that exceed UCITS derivatives limits

This subgroup is made up of the CISs (IFs in all cases) that may exceed the 100% leverage limit, as well as the maximum counterparty risk limits, because they are guaranteed by a third party (unrelated to the derivatives counterparty) which commits to pay the fund, on maturity, the amount necessary so that the net asset value reaches the guaranteed value.

These funds usually invest in a fixed income portfolio that allows them to get at least 75% of their initial investment on maturity and they usually agree on an option that allows them to obtain the additional return linked to the performance of a security, a basket or an equity or fixed income index. Only in the event of a mismatch in the investment structure of the fund that prevents the guaranteed net asset value from being obtained on maturity will it be necessary for the guarantor to pay the fund the difference between the guaranteed value and the net asset value obtained by the fund.

Consequently, although these institutions are permitted to exceed the maximum limit of 100% of commitments and 10% of the maximum amount of the premiums on purchased options, they tend to have a low risk profile, since market risk is curbed by the obligation to guarantee at least 75% of the investment to maturity and counterparty risk is mitigated by the third party guarantee.

In any case, all funds reporting gross leverage of greater than 100% have been analysed. In all of them, adjusted for the delta of the contracted option, net leverage would decrease notably, so they would not exceed 100% in terms of net leverage.

⁸ At a general level, investment companies have a higher level of average leverage than IFs: 38% versus 10.4%.

2.2 Financial leverage

This indicator refers to the total borrowings made by the CIS (in cash and securities) with respect to its total net assets. Quasi-UCITS are subject to the same limitations on direct borrowings as UCITS. The UCITS Directive limits maximum leverage to 10% of net assets and institutions may only borrow to resolve temporary cash difficulties.

In any case, the level of financial debt incurred by quasi-UCITS has been analysed and found to be very low. Only 20 CISs, with total net assets of €1.57 billion (which represents 3.3% of total quasi-UCITS net assets), state in their balance sheets as of 31 December any amount under current or non-current borrowings. On the other hand, the average borrowings in this group stands at 2.6% of net assets. It can therefore be deduced that for quasi-UCITS the risk of leverage generated by financial debt is insignificant.

In conclusion, the analysis of the level of gross, net and financial leverage of quasi-UCITS CISs does not identify any CIS in this category whose leverage risk may have a significant effect on financial stability.

3 Hedge funds and funds of hedge funds

Hedge funds are not subject to any limits on maximum leverage through derivative instruments, while leverage through direct borrowing may be up to five times greater than their net assets. These CISs usually carry out investment strategies that are similar to those of hedge funds in other jurisdictions. As of 31 December 2019, their net assets totalled \in 2.83 billion.

Funds of hedge funds are CISs that invest mainly in other hedge funds. There were only seven funds of hedge funds registered with the CNMV at the close of 2019 and three of these were being wound down. The total net assets of funds of hedge funds were €567 million.

Funds of hedge funds must submit specific confidential reporting templates as set forth in CNMV Circular 1/2006, of 3 May, on hedge funds. Funds of hedge funds are obliged to submit the same information statements as IFs and open-ended collective investment schemes. None of these statements contain information on the level of net leverage, so the analysis in phase 1 is based on the levels of gross leverage and financial leverage.

3.1 Gross leverage

Despite the very flexible derivatives investment regime, 55% (in terms of net assets) of all hedge funds do not trade in derivatives and consequently report zero gross leverage. The remaining 45% presents average gross leverage of 98.3%.

51% of all funds of hedge funds do not declare derivatives transactions. The remaining 49% presents average gross leverage of 68%.

Hedge funds and funds of hedge funds: investment in derivatives and gross leverage

	Do not invest in derivatives	Invest in derivatives	Average gross leverage
Hedge funds	55	45	98
Funds of hedge funds	51	49	68

Source: CNMV.

%

To interpret the data set out above, it must be taken into account that indirect leverage is taken on as a result of investing in other CISs that, in turn, invest in derivatives. This indirect leverage is not reported in the confidential reporting template of hedge funds or funds of hedge funds, so it could not be included in our analysis.

Funds of hedge funds must invest at least 60% of their funds in other hedge funds and may have at most 10% of their funds invested in the same fund.

Hedge funds have a very flexible investment regime and are able to invest, among other assets, in other hedge funds without adhering to the diversification requirements for funds of hedge funds. The weight of their investments in other CISs is considerable, accounting on average for 46.2% of their net assets.

Only four hedge funds (with total net assets of \in 800 million) have gross leverage of over 100% of their net assets, with a maximum leverage of 170% being recorded, a moderate level given the usual strategies followed by hedge funds.⁹ Nonetheless, in the leverage risk analysis two additional indicators have been included for these institutions: one of these refers to the weight of the gains obtained in derivatives transactions throughout the year and the second to counterparty risk, both expressed as a percentage of their total net assets.

Of the four hedge funds analysed, only one shows high counterparty risk. However, its small size (net asset values of less than \in 10 million) exempts it from being considered as potentially generating systemic risk.

No fund of hedge funds uses gross leverage of greater than 100%. Only two institutions (out of a total of seven) reported leverage through derivatives, of 23% and 70% respectively. In both cases this is a moderate gross leverage figure.

3.2 Financial leverage

Only four hedge funds of the 65 existing (8.2%) of the total in terms of net asset values) reflect borrowing amounts on their balance sheets. This is an average of 3.3%, with a maximum leverage level of 16% of net assets.

⁹ According to the ESMA report on AIFs, as of 31 December 2019, the average gross leverage of hedge funds managed in the European Union was 6,450%, i.e. 65 times assets. Report available at: https://www. esma.europa.eu/sites/default/files/library/esma50-165-1734_asr_aif_2021.pdf.

No funds of hedge funds reported any debt on their balance sheets as of December 2019.

Therefore, it is concluded that the level of financial leverage taken on through direct borrowings is insignificant in the hedge fund sector.

4 Real estate CIS

Real estate CISs had a very low net assets as of 31 December 2019: ≤ 1.07 billion in total, of which ≤ 321 million corresponded to funds in the process of being wound down. The remaining ≤ 751 million corresponded to two real estate investment companies.

Since the main purpose of real estate CISs is to invest in real estate for leasing purposes, the leverage that they can take on comes from commitments to purchase real estate (legally limited to 40% of their net assets), as well as from the real estate purchase options (at most the premiums paid will represent 10% of their net assets). In terms of financial debt, real estate CISs may borrow to purchase real estate with a mortgage guarantee for a maximum of 50% of their net assets.

The analysis has only identified one real estate investment company that takes on real estate purchase commitments and these represent less than 5% of its net assets.

Given the limitations that Spanish regulations impose on the leverage of real estate CISs, it would be difficult for the levels incurred to contribute to generating systemic risk and even more so in the case of real estate investment companies due to their closed-ended nature.

5 Private equity funds and closed-ended investment undertakings

5.1 Private equity funds

As of 31 December 2019, the net assets of private equity funds in Spain, in their six formats (VCF, EuVECA, SME-VCF, EuSEF, VC firms, SME-VC firms),¹⁰ amounted to €13.08 billion split over 408 firms.

5.1.1 Gross leverage

Only four private equity funds have been identified that recognised on their balance sheets, or on off-balance sheet accounts, amounts in items related to transactions with derivative instruments. In three of them the figures are insignificant.

¹⁰ Venture Capital Funds (VCF), European Venture Capital Funds (EuVECA), SME Venture Capital Funds (SME-VCF), European Social Entrepreneurship Funds (EuSEF), Venture Capital Firms (VC firms) and SME Venture Capital Firms (SME-VCC).

Therefore, private equity funds carry out virtually no transactions with derivative instruments. However, due to the characteristics of these funds, they often use leverage due to future investment commitments in companies that form part of their investment scope. The amounts of the commitments to purchase securities in instalments have been analysed according to the amount reported in the balance sheet memorandum accounts. These amounts, at cash value, amounted to \bigcirc 7.02 billion for all private equity funds, which represents 54% of their total net assets. However, if the uncalled committed capital is considered (\bigcirc 25.55 billion), the weight represented by the investment commitments falls to 18.2% of total future net assets.

Attention must focus once again on funds with commitments that account for more than 100% of their net asset values (12 in this case). Given their small size and closed-ended nature, none of these firms is considered likely to generate systemic risk.

5.1.2 Financial leverage

In relation to financial leverage, the amounts of the participating loans obtained by private equity funds, and the rest of their borrowings, have been studied. Only seven private equity funds have been extended equity loans for a total amount of \notin 22.3 million, of which \notin 19.9 million are concentrated in three funds with net assets of \notin 12.9 million, which would represent an average of 154% of their net assets.

The rest of the loans granted to private equity funds amount to ≤ 896 million, split between bank loans (≤ 486 million) and other loans (≤ 410 million). 40% of private equity funds have taken out some type of loan, accounting for an average of 17.4% of their net assets.

Eight firms, with combined net assets of €183 million, have obtained loans whose amounts exceed 100% of their net assets. The loans obtained come mainly from non-bank entities (86.6%).

In summary, for private equity funds, leverage raised through derivatives is practically non-existent. Leverage from future investment commitments, as well as from their financial debt, is low in average terms. However, a small number of firms have been identified whose levels of debt and commitments with respect to their net assets could imply a certain degree of leverage risk. All of them are small in size, with no possibility of contributing to systemic risk.

5.2 Closed-ended investment undertakings

Finally, closed-ended investment undertakings provide very limited information. 40 of them, with total net assets of \leq 604 million, report only their net assets and three of these, with combined net assets of \leq 111 million, submit more comprehensive information that includes their balances. Transactions with derivatives are not recognised by any of these institutions. Consequently, with the available information, it is not possible to make an assessment of the level of leverage taken on.

6 Conclusions

This article presents the most significant results of the first analysis carried out by the CNMV of the level of leverage used by AIFs in Spain. The analysis, carried out with information as of 31 December 2019, shows that the four types of CIS that make up the AIF sector in Spain (quasi-UCITS, alternative investment CIS, real estate CIS and private equity funds) use low average levels of leverage. Even the category of hedge funds, which enjoys a very flexible investment and borrowing regime, makes moderate use of leverage through derivatives and barely has any financial debt. However, hedge funds use indirect leverage through investment in other CISs, which has not been assessed in this work.

This work has made it possible to identify a small number of CISs and private equity funds that incur a certain leverage risk, although their small size rules them out as candidates for the phase 2 analysis of interrelation with the financial system. In short, according to the data available (which is the basis of this analysis) it can be deduced that, for the time being, AIF leverage poses no significant risk for the stability of the Spanish financial system.

Status of the interest rate benchmark reform

María José Gómez Yubero Miguel Palomero Aguilar (*)

(*) The authors work for the CNMV's General Directorate of Strategic Policy and International Affairs. The opinions contained in this article are the sole responsibility of its authors and do not necessarily reflect those of the CNMV.

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Abbreviations used

€STR	Euro Short Term Rate
AMERIBOR	American Interbank Offered Rate
ARRC	Alternative Reference Rates Committee
BCBS	Basel Committee on Banking Supervision
ECB	European Central Bank
BMR	Benchmark Regulation – Regulation (EU) 2016/1011 of the
	European Parliament and of the Council on indices used as
	benchmarks in financial instruments and financial con-
	tracts or to measure the performance of investment funds
ССР	Central counterparty
CDS	Credit Default Swap
CHF	Swiss franc
CNMV	Comisión Nacional del Mercado de Valores (Spanish Na-
	tional Securities Market Commission)
EMIR	Regulation (EU) No. 648/2012 of the European Parliament
	and of the Council, of 4 July, on OTC derivatives, central
	counterparties and trade repositories
EMMI	European Money Markets Institute
Eonia	Euro OverNight Index Average
ESMA	European Securities and Markets Authority
EU	European Union
EUR	Euro
Euribor	Euro Interbank Offer Rate
FASB	Financial Accounting Standards Board
FCA	Financial Conduct Authority
FIBOR	Frankfurt InterBank Offered Rate
FSB	Financial Stability Board
FSMA	Financial Services and Markets Authority
G20	Group of 20
GBP	Pound sterling
IASB	International Accounting Standards Board
IBA	ICE Benchmark Administrator
IOSCO	International Organization of Securities Commissions
IRD	Interest Rate Derivative
IRS	Interest Rate Swap
ISDA	International Swaps and Derivatives Association
JPY	Japanese yen
Libor	London InterBank Offered Rate
MDF	Marginal deposit facility
MIBOR	Madrid InterBank Offered Rate
OIS	Overnight Indexed Swap
OTC derivatives	Over-the-Counter derivatives
PIBOR	Paris InterBank Offered Rate

Abbreviations used (continued)

RFR	Risk Free Rate	
SARON	Swiss Average Rate Overnight	
SOFR	Secured Overnight Financing Rate	
SONIA	Sterling Overnight Index Average	
TONAR	Tokyo Overnight Average Rate	
USA	United States	
USD	American dollar	

Summary

The interest rate benchmark reform remains a priority on the agenda of the G20 and the Financial Stability Board (FSB), due to the complexity that it entails and its importance for preserving the stability of the financial system.¹ The adaptation of existing benchmarks to the new regulatory framework and the greater use of alternative risk-free rates (RFRs) are both key to increasing the resilience of the markets that depend on these benchmarks.

Almost a decade after the G20 Heads of State and Government Summit held in Saint Petersburg and the publication of the IOSCO Principles for Financial Benchmarks,² which marked the beginning of the transition, the process has not yet been completed.

Although the process to upgrade Euribor is being successfully carried out in the Euro area, there is still long way to go in the Libor transition process, which requires a coordinated effort of raising awareness, preparedness and action from all participants, authorities, financial institutions and non-financial companies, markets and financial market infrastructures, and users of the benchmarks in general. As the FSB acknowledges in its recent progress report, failure to adequately prepare for the transition may hamper the effectiveness of financial contracts and jeopardise financial stability.

1 Introduction

In 2013, the financial authorities reacted to the crisis of confidence in the main benchmark interest rates, caused by the attempted manipulations and the drop in money market liquidity that followed the 2008 financial crisis, by putting forward one of the most far-reaching and complex reforms that the global financial system is currently facing.

This reform, put forward by the G20 and the FSB,³ aims to strengthen widely used indices, such as Libor, Eonia and Euribor, and include new benchmarks based on risk-free or near risk-free rates (RFRs) for use in suitable markets.

Since then, a greater deal of progress has been made towards strengthening the IBORs and developing RFRs, which has led to the appearance of new rates such as €STR and SOFR, in addition to the modification of existing benchmarks such as the

¹ The FSB Chairman's letter to the G20 members in February 2021 on the priorities of its work programme for 2021 recognises that this reform remains a priority. FSB (2021).

² IOSCO (2013).

³ FSB (2014).

SONIA. A significant effort has also been made to reduce dependency on IBORs and use RFRs, allowing the two to coexist in some jurisdictions.

This article analyses the status of the reforms that are affecting benchmarks worldwide, with a particular focus on the Euro area and the areas of influence of the Libor and presents the main challenges that lie ahead.

2 Importance of the IBOR indices

Interest rate benchmarks, also known as IBOR indices or IBORs (in reference to their interbank nature), reflect the cost of bank financing and are therefore used in a wide variety of financial contracts and transactions, making them a linchpin of the economy and the financial system. They are used for multiple purposes, such as pricing financial instruments, both spot prices (e.g. bonds and debentures) and derivatives, and contracts (loans and other types of services). They are also used for accounting purposes, in the valuation of balance sheet items and for risk management.

From the point of view of monetary policy, which is so important for the management of crises such as that experienced in 2008 or, more recently, the crisis generated by the COVID-19 pandemic, benchmark rates act as channels to transmit the decisions taken by central banks to achieve their objectives, which include price stability. They also provide the monetary authorities with information about potential liquidity tensions in the market that could cause financial instability. The fact that indices such as Euribor become articulating elements of monetary policy and inform the authorities about possible market inefficiencies is a reflection of how important it is that they work properly.

The best known and most widely used indices are Libor, which is calculated from London by the ICE Benchmark Administrator (IBA) in different terms and currencies and, in the Euro area, Eonia and Euribor, both calculated by the European Money Market Institute (EMMI), based in Brussels.

The volume of contracts and instruments linked to these benchmarks is estimated at around US\$400 billion in the case of Libor and the combined amount of those indexed to Eonia and Euribor stands at more than €200 billion.⁴ The total of these figures represents more than seven times the world's gross domestic product (GDP), according to statistics of the International Monetary Fund.⁵

⁴ Schrimpf and Sushko (2019).

⁵ IMF (2020).

Comparison of index volumes and world GDP

Amounts in billions of euros



Sources: International Monetary Fund (2020); Schrimpf and Sushko (2019) (see footnotes 4 and 5).

The scale of these data highlights the importance of the benchmarks not only for the financial system, but for the real economy as a whole. For example, in the Spanish mortgage market, Euribor is the most widely used benchmark for floating rate mort-gages. For decades, more than 90% of new mortgages have been linked to this benchmark. At present, although a large portion of new mortgages have fixed interest rates, more than 50% still use the Euribor benchmark according to the National Institute of Statistics (INE).⁶



Source: INE (2021). Annual mortgage statistics. National indicators. Percentage of mortgages arranged by interest rate, total properties.

3 Origin of the reforms

After the global financial crisis, unsecured money markets suffered a significant reduction in their activity.⁷ In this scenario, there were several attempts to manipulate the main indices, which at that time were not subject to regulation or public supervision and were calculated by non-regulated entities on the basis of estimates provided by a group of banks, which made them especially vulnerable to market abuse.

This led to a loss of confidence in the main benchmarks and prompted the G20 and the FSB to put forward their reform in 2014. This reform has a dual objective:⁸

- Strengthen the interbank rates (IBORs) given their systemic nature, making them less susceptible to manipulation and more representative of the economic reality they are trying to measure, anchoring them to a greater extent in market transactions and improving the governance and control processes relating to the contributions of the banks that make up the panel of contributors.
- Make alternative risk-free rates available and drive the transition to these new benchmarks in the appropriate markets and instruments, especially in derivatives markets, thereby reducing excessive concentration in IBORs.

Since then, notable progress has been made on both lines of action and as of 2016 work has also been carried out to make contracts more robust in order to address the risks deriving from the potential discontinuation of the IBORs. These reforms, which are being coordinated at international level by the FSB, have given rise to significant legal changes, to the revision of the governance, methodology and control of the interbank indices, and to the creation of new indices that are near risk-free whose implementation and development is progressing at a varying pace.⁹

4 Reforms at global level: Strengthening of IBORs and creating alternative benchmarks

Following the recommendation of the FSB regarding the identification, development and use of risk-free indices as an alternative to reduce excessive concentration in interbank indices, the large FSB jurisdictions set up working groups for this purpose, backed by the authorities, central banks and supervisors, and of which different representatives of the financial and, in some cases, non-financial industry are part.

⁷ Every two years the ECB publishes a study of the euro money market that contains an in-depth analysis of its performance in the Euro area. The latest study published at the end of 2019 confirms that since the crisis activity in the secured segments has continued to grow, while the unsecured segments have been reduced in size. ECB (2019c).

⁸ An analysis of the origin of the reforms and the content of the FSB recommendations, the IOSCO principles on which they are based and the European regulation they give rise to can be found in Gómez-Yubero (2016).

⁹ The latest progress report published by the FSB presents a complete picture of these developments by geographical area. FSB (2020c).
The scope and breadth of the reform requires the collaboration of both public and private institutions from different economic sectors. In addition to the composition of the working groups, holding public consultations on the proposals put forward and the involvement of authorities and sector associations have enabled the coordination of all agents to ensure the intended objectives are achieved.

The Annex provides a complete overview of the reforms undertaken at international level. In most jurisdictions, the coexistence of strengthened IBORs and new riskfree rates is the preferred option. This is the case of the Euro area, Australia, Canada, Japan or Switzerland, among others.

In contrast, the approach taken by the competent authorities for USD Libor and GBP Libor is that of a market based solely on risk-free rates.

However, the circumstances of these markets and the need to have term rates that incorporate future expectations and the credit risk component in IBORs¹⁰ is giving rise to the appearance of new interbank indices, such as the AMERIBOR¹¹ in the United States, the use of which may coexist with risk-free rates in certain market segments. Recent initiatives are also noteworthy, such as those of IBA and Refinitiv, which have launched forward reference rates at different terms calculated on the basis of the SONIA risk-free rate.¹²

Although the FSB Report of 2014 proposed a very ambitious schedule for the implementation of the reforms (it proposed the implementation of RFRs in mid-2016), the complexity of the reform has become apparent, and its implementation is taking much longer. Illustration 1 shows the current roadmap of reforms in the three most significant jurisdictions, the Euro area, the pound sterling and US dollar zones.

¹⁰ In Section 7.4 of this article an explanation of the components of these benchmarks is included.

¹¹ AMERIBOR is a new interest rate benchmark created by the American Financial Exchange. This index reflects the cost of financing of small, medium and regional banks in the United States. The Cboe market offers futures contracts indexed to AMERIBOR.

¹² Since 11 January 2021, the IBA has published ICE Term SONIA Reference Rates, which seek to measure the expected SONIA rate at 1, 3, 6 and 12 months. The calculation methodology is based on a waterfall approach that uses prices and volumes of interest rate derivatives linked to the SONIA. The Refinitiv Term SONIA rate is very similar.



Source: CNMV.

In the Euro area, Euribor has been adapted to Regulation (EU) 2016/1011 and the Working Group on Euro Risk Free Rates was created in 2017, supported by the ECB, the European Commission, ESMA and the Belgian FSMA, with the participation of industry members. Its mission is to identify risk-free rates that can be used as alternatives to current benchmarks, define plans for an orderly transition to the new indices, and strengthen the robustness of current and future contracts. In September 2018, this group recommended the adoption of €STR, an index published by the ECB since October 2019, as a risk-free rate for the Euro area, as a replacement for Eonia and as the basis for setting fallback rates in contracts linked to Euribor.

Similar groups have been formed in other jurisdictions, which have also recommended risk-free rates. In the United Kingdom, the Bank of England and the FCA created the Working Group on Sterling Risk-Free Reference Rates, with the participation of market representatives, with the objective of facilitating the transition from Libor to SONIA, an index published by the Bank of England, in the sterling markets.

In the United States, the Alternative Reference Rates Committee (ARRC) was created, also composed of market participants convened by the Federal Reserve Board and the Federal Reserve Bank of New York, to contribute to an efficient and orderly transition from Libor in US dollars (USD) to a more robust benchmark, its recommended rate, the SOFR, calculated and published by the Federal Reserve Bank of New York.

Table 1 shows the working groups created in the main jurisdictions, including the Euro area, the risk-free alternative rates they have recommended and their main characteristics.

RFR working groups in the main jurisdictions

	USA	United Kingdom	Euro area	Switzerland	Japan
Working group	Alternative Reference	Working Group	Working Group	National Working	Study Group
	Rates Committee	on Sterling Risk	on Euro Risk	Group on Swiss Franc	on Risk Free
	(ARRC)	Free Rates	Free Rates	Reference Rate	Reference Rates
Alternative rate	Secured Overnight	Sterling Overnight	Euro Short	Swiss Average Rate	Tokyo Overnight
	Finance Rate (SOFR)	Index Average (SONIA)	Term Rate (€STR)	Overnight (SARON)	Average Rate (TONAR)
Administrator	Federal Reserve	Bank of England	European Central Bank	SIX Swiss Exchange	Bank of Japan
	Bank of New York				
Term	1 day (overnight)	1 day (overnight)	1 day (overnight)	1 day (overnight)	1 day (overnight)
Counterparties	Financial institutions	Financial institutions	Financial institutions	Banks	Financial institutions
Instruments	Repos	Unsecured deposits	Unsecured deposits	Repos	Unsecured deposits

Source: Working Group on Euro Risk Free Rates (2020) and CNMV.

5 Driving the transition and eliminating barriers

Beyond the work of these groups, measures are also being taken by different organisations and institutions aimed at facilitating and promoting the transition and eliminating barriers that may hinder or discourage the implementation of the new benchmarks by market participants.

To deal with contracts that do not have adequate fallback provisions to address the disappearance of Libor, and which cannot be modified in the short period that remains until it is abolished at the end of 2021, the European Union, as well as the authorities of the United Kingdom and the United States, have rolled out regulatory projects to manage this situation.¹³

A fundamental aspect of the reform is the adaptation and reinforcement of contracts so that they incorporate adequate fallback provisions to cover the disappearance or discontinuation of the benchmarks. Special relevance in this area should be given to the work carried out by ISDA, commissioned by the FSB, for the adaptation of framework contracts for financial derivatives transactions.

ISDA has designed a supplement (*IBOR Fallbacks Supplement*) to its 2006 definitions (*2006 ISDA Definitions*) applicable to new contracts in order to include fallback provisions based on risk-free rates. It has also developed a voluntary protocol (*IBOR Fallbacks Protocol*) for counterparties that wish to adapt existing contracts to the new definitions. These documents were published in October 2020 and became effective on 25 January 2021 for the more than 13,800 entities that have adhered to this supplement so far.¹⁴

¹³ In Section 8 of this article different regulatory responses planned to minimise the risk related to this type of contract are described.

¹⁴ The ISDA website contains comprehensive information on the how the supplement and the protocol work, and also allows the number and identification of the financial institutions and non-financial companies that have adhered to date to be consulted. ISDA (2021).

Central counterparties are playing a key role in the transition by allowing transactions that are linked to the new risk-free rates to be cleared in a coordinated manner, remunerating collateral and adapting their discount curves to the new risk-free rates.¹⁵ To ensure the adaptation of the derivatives they cleared, clearing houses have generally adopted the clauses contained in the new ISDA supplement.¹⁶

In line with the BCBS and IOSCO recommendations, the European authorities have amended their regulations on over-the-counter derivatives, central counterparties and trade repositories (EMIR), to prevent contracts currently exempt from centralised clearing or bilateral collateralisation requirements from becoming subject to these standards as a result of the new benchmarks or through the inclusion of fallback provisions.

Additionally, work is being done on the treatment of the accounting consequences of the transition to alternative rates, which normally affect hedge accounting, the documentation, classification and measurement of instruments, and financial information. The bodies in charge of establishing accounting standards (both the IASB and the FASB) have initiated the adaptation of the corresponding standards to ease the transition and eliminate potential accounting barriers, which has led to the amendment of International Accounting Standard 39 (IAS 39) and International Financial Reporting Standards 7 and 9 (IFRS 7 and IFRS 9).

Lastly, it is worth mentioning that jurisdictions such as the United States and the United Kingdom are also considering regulatory projects to address the tax implications that the transition may entail.

The CNMV, as the competent authority in matters of Benchmarks in Spain, has launched several initiatives aimed at providing knowledge and helping the industry to adapt, such as the organisation of conferences and seminars, as well as the publication of various communications,¹⁷ aimed at both financial institutions and non-financial companies, on the advisability of monitoring the developments and actions of the working groups and the main advances in the benchmark reform process, the identification and evaluation of risks and possible impacts deriving from their exposure, the design of a global strategy to plan the execution of the corresponding measures and the need to have a suitable organisational structure to coordinate the design and implementation of the transition tasks.¹⁸

¹⁵ Since 27 July 2020, the main clearing houses in the European Union have swapped the Eonia discount curve for the €STR curve. LCH and CME Clear switched to SOFR in October 2020.

¹⁶ See, for example, the LCH publication (2019). Similar positions have been adopted by other clearing houses such as CME Group.

¹⁷ The communications of March 2018, July 2019 and January 2021 can be consulted on the CNMV website under "Benchmark indices", and the conferences and seminars organised by the CNMV can also be accessed: CNMV (2018), CNMV (2019) and CNMV (2021).

¹⁸ An analysis of the implications of the reform and preparedness of the industry can be found in Gómez-Yubero (2019).

Along the same lines, the ECB, in its role as banking supervisor under the Single Supervisory Mechanism, encourages banks to follow the good practices¹⁹ identified in its review of the preparations being made, adapting them according to the nature of their exposures.

6 Libor transition

In the area of influence of the pound sterling and the dollar, where Libor is the most widely used benchmark, authorities have chosen to promote the use of alternative risk-free rates (SONIA in the United Kingdom and SOFR in the United States) and the elimination of Libor despite the measures taken to strengthen it. The UK authorities consider that the sustainability of Libor is not guaranteed due to the diminishing liquidity of the money market that it aims to represent and the consequent reduction in the number of transactions that support its calculation.²⁰

In July 2017, the UK FCA announced its intention not to persuade or compel the Libor panel banks to continue contributing to its calculation as of 31 December 2021.²¹ Due to the widespread dependence of Libor on its five currencies around the world, this announcement led to the launch of actions by all FSB member authorities to promote the proper transition from Libor before that date.

On 5 March 2021, the FCA officially announced that Libor would no longer be published,²² after analysing the results of the public consultation carried out by the index administrator, IBA, in December 2020.²³ The index will be discontinued according to the following calendar:

Schedule for cessation of Libor		
As of 31 December 2021	EUR Libor: all maturities (1 day; 1 week; 1, 2, 3, 6 and 12 months) CHF Libor: all maturities (1 day; 1 week; 1, 2, 3, 6 and 12 months) JPY Libor: all maturities (1 day; 1 week; 1, 2, 3, 6 and 12 months) GBP Libor: all maturities (1 day; 1 week; 1, 2, 3, 6 and 12 months) USD Libor: 1 week and 2 months	
As of 30 June 2023	USD Libor: 1 day; 1, 3, 6 and 12 months	

Source: ICE Benchmark Administration (2020) and CNMV.

The global use of Libor in USD is possibly the most challenging element in this transition. The volume of contracts and financial instruments linked to Libor in US dollars is estimated to exceed USD 200 trillion, so the uncertainty surrounding their

¹⁹ ECB (2020c).

²⁰ This responds to changes in the market structure since the 2008 crisis, to new regulatory capital requirements and to the liquidity requirements of banks, as well as to changes in their appetite for risk for shortterm financing.

²¹ FCA (2017).

²² FCA (2021).

²³ ICE Benchmark Administration (2020).

sustainability poses a potential threat to the security and soundness of individual financial institutions and the financial system as a whole. The extension of the publication period of USD Libor for an additional 18 months (until June 2023), provided that the index continues to comply with the applicable regulations, including its representativeness, will allow most of the existing contracts linked to USD Libor to expire before the index disappears, significantly reducing the volume of contracts affected.²⁴

The competent authorities of the United Kingdom and the United States have issued communications on the cessation of Libor as of these dates, urging entities not to enter into new contracts that use the index as soon as possible and, in any case, before 31 December 2021.²⁵

These challenges need to be addressed jointly by financial institutions and nonfinancial companies, and by supervisory authorities to support an increasing use of risk-free rates and the consequent reduction of dependency on Libor from the end of 2021, through adequate preparation and a properly planned and gradual transition that avoids the damages that a sudden cessation of the index would cause in the flows of payments worldwide and markets operations.

In this regard, key progress has been made in recent months thanks to the commitment of the working groups outlined in Table 1. These groups have recommended the risk-free rates shown in Table 3, depending on their corresponding monetary area, to replace Libor once it has disappeared in the different currencies in which it is calculated.

Recommended RFRs to replace Libor		TABLE 3
	Recommended substitute rate	Replacement date
USD Libor	SOFR	December 2021 and June 2023
GBP Libor	SONIA	December 2021
CHF Libor	SARON	December 2021
JPY Libor	TONAR	December 2021
EUR Libor	€STR	December 2021

Source: CNMV.

The FSB has recommended adherence by all affected financial institutions and non-financial companies to the ISDA documents²⁶ to definitively boost the transition of derivatives in all Libor currencies. In its global transition roadmap,²⁷ the FSB also asks clearing houses and trading venues, and providers of cleared and traded

²⁴ According to the joint statement published by the Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation (2020).

²⁵ Despite the effects of the COVID-19 pandemic, this target will not be altered in the opinion of the UK and US authorities. FCA (2020).

²⁶ FSB (2020a).

²⁷ FSB (2020b).

products linked to Libor that the contracts comply with the clauses contained in the ISDA Supplement and Protocol.

Despite the significant progress made, there is still a long way to go. The FSB, in a report published in mid-2020 on the challenges still pending for the transition,²⁸ recommends that the supervisory authorities shore up measures to help financial institutions, their clients and non-financial companies to transition from Libor. These recommendations, applicable to all jurisdictions with exposures to Libor, are intended to promote awareness and the authorities' commitment to the reform, periodically monitoring the levels of exposures, maintaining permanent dialogue with the industry, increasing the intensity of supervisory actions, when the preparatory work of the individual institutions is not satisfactory, and putting forward solutions to remove barriers to the transition. This will be coordinated at international level by the FSB.

More recently, the FSB published a global transition roadmap, aimed at raising awareness of the steps that financial institutions and non-financial companies must take during the short period until the end of 2021 to successfully transition.

Summary of the FSB's proposed Libor transition plan TABLE 4				
Businesses should already have:	Identified and assessed all existing Libor exposures and approved a transition plan by the end of 2021 (and if not, should do so immediately)			
By the effective date (25 January 2021) of the ISDA → Protocol, companies should:	Have adhered to the ISDA Protocol.			
By the end of 2020 , companies should:	Be in a position to offer their clients loans that are not indexed to Libor.			
By mid-2021 , companies should:	Have established plans to modify existing contracts where possible and have adapted systems and processes to allow the use of alternative rates.			
By the end of 2021 , companies must:	Be prepared for the cessation of Libor.			

Source: FSB (2020b) and CNMV.

The CNMV statement of²⁹ January 2021 advises entities to take into account the FSB global transition roadmap and recommends Spanish financial institutions, non-financial companies and public administrations to consider adhering to the ISDA protocol and supplement³⁰ insofar as these documents help ensure that contracts are sufficiently robust to address the disappearance of Libor and, where appropriate, adaptation to the requirements set forth in Article 28.2 of Regulation (EU) 2016/1011.

²⁸ FSB and BCBS (2020).

²⁹ CNMV (2021).

³⁰ Other authorities have also recommended adherence to the ISDA documents: FSB (2020a) and Working Group on euro risk-free rates, ECB, ESMA, European Commission and FSMA (2020).

7 Situation in the Euro area

In the Euro area, the changes are found in the transition from Eonia to \in STR, the adaptation of Euribor to the BMR and in the provision of forward indices that can be used as an alternative in certain contracts.

Unlike the situation described in the previous section, the European authorities have opted for a multi-rate approach based on the continuity of the Euribor index and the creation of a risk-free rate, €STR, published by the ECB since October 2019, that will replace Eonia from January 2022.

In parallel, Euribor is being reformed to adapt to the new regulation. To this end, its methodology has been improved to better reflect the market situation and the governance and control environment surrounding its calculation has been strengthened, with the added value that both the administrator and the entities that provide the data for its calculation will be subject to supervision.

7.1 €STR, the Euro area risk-free index

The implementation of the new \notin STR index as a risk-free rate for the Euro area was recommended, in September 2018, by the working group on euro risk-free rates,³¹ which has also advised market participants to gradually replace Eonia with the \notin STR as the benchmark for their products and contracts as soon as possible and to make the necessary contractual and operational adjustments to do so.³²

This benchmark has been designed by the ECB to reflect the cost for banks of borrowing unsecured funds from other financial institutions within 1 day. It is a more robust and transparent index than Eonia, since it is based on individual transactions, executed under market conditions, reported daily by the 52 largest entities in the Euro area to the ECB³³ and with a broader scope, since it includes deposits carried out with financial institutions and not only with credit institutions. Table 5 shows the differences between Eonia and \in STR.

³¹ ECB (2018).

³² Working Group on Euro Risk Free Rates (2019a).

^{33 €}STR is calculated on a daily basis by the ECB from daily confidential statistical information on money market transactions collected by the ECB in accordance with the Regulation on Statistical Money Market Reports (Regulation (EU) No. 1333/2014).

Comparison of Eonia and €STR

	Eonia	€STR
Term	1 day (overnight)	1 day (overnight)
Calculation data	Transactions	Transactions
Instrument	Unsecured deposits	Unsecured deposits
Cost of liquidity	Borrowed	Taken
Counterparty	Banking	Financial institutions
Contributors panel	Unstable	Stable
Administrator	EMMI	ECE
Publication	T (7:00 p.m.)	T+1 (before 09:00 h)

Source: CNMV.

As shown in Figures 3 and 4, Eonia (before the methodological change mentioned in Section 7.2) and €STR are highly correlated, although €STR is supported by a much higher volume of transactions, corresponding to a greater number of entities that contribute, not voluntarily, but in compliance with ECB regulations, which makes it more robust and representative of the market.

The fact that Eonia exclusively considered interbank transactions, whose counterparties can access the monetary policy instruments offered by the ECB, meant that the benchmark had the marginal deposit facility (MDF) as a minimum value. This does not happen with €STR, because the counterparties, in addition to banks, are also other financial institutions that cannot access these facilities, which positions €STR at levels below the MDF. Also, the fact that €STR reflects the cost of borrowing explains why it is lower than the rates at which banks lend their funds.

Likewise, its calculation methodology (which discards rates in the 25th and 75th percentiles) gives it more limited volatility. Figure 3 shows the reaction of both rates to the decision of the ECB, adopted on 12 September 2019,³⁴ to reduce the remuneration of the MDF.



Source: ECB and EMMI.

34 ECB (2019d).

TABLE 5



Source: ECB and EMMI.

7.2 Transition from Eonia to €STR

Prior to the implementation of the new method for calculating Eonia recommended by the Euro area working group, in other words, €STR plus 8.5 basis points, the Eonia had been established by EMMI from 1999 based on the overnight transactions carried out between entities for a selection of European credit institutions, specifically 28 banks established in 13 States of the European Union.

The benchmark, which was considered crucial by the European Commission in 2017, is one of the most commonly used in the Euro area both for investment and hedging instruments and for collateralisation and risk management purposes (see Figure 1).

The interbank loan transactions used as a reference in the calculations saw daily volumes of \notin 48 billion in 2007 and 2008, however, in 2018 and 2019 they barely reached \notin 2.5 billion. Further, the transactions that could be considered for the purposes of the calculation were reported by a decreasing number of institutions that were geographically highly concentrated,³⁵ which meant a drop in the robustness and representativeness of the benchmark.

These circumstances resulted in EMMI not completing the process of adapting the index to the new European regulation on benchmarks and prompted the working group on RFR in the Euro area to recommend its progressive replacement by €STR over a period of two years in 2019. To facilitate the transition, the working group also recommended the reformulation of the Eonia calculation, as €STR plus a spread of 8.5 basis points, established by the ECB from the correlation observed between both indices.³⁶

The Eonia has been calculated and published using this new methodology since 2 October 2019 and, as shown in Illustration 1 on the global transition schedule, it will continue to be published until it is discontinued on 3 January 2022.

³⁵ ECB (2017).

³⁶ Although the ECB started to officially publish €STR as of 2 October 2019, it began to publish a pre €STR months before in order to help the adaptation of market participants. The spread was determined as the difference between Eonia and pre- €STR.

This two-year period during which the two rates will coexist has been considered sufficient for users to be able to replace or adapt their contracts and processes to the new reference and for the markets linked to €STR to attain a suitable level of development and liquidity.

Transition plan

To define an orderly transition plan, the Euro area RFR working group analysed the impact of the transition from different perspectives.³⁷ The result of this analysis is reflected in several reports with recommendations to market participants to facilitate the transition. In particular:

- How to address the legal implications for new and existing contracts. In summary:³⁸
 - Whenever feasible and appropriate, do not use Eonia on new contracts that expire after 31 December 2021.
 - Replace Eonia or incorporate robust fallback provisions into existing contracts that expire after December 2021.
 - Include robust fallback provisions in new Eonia-linked contracts that expire after December 2021.
- On the operational and valuation implications of the process and on risk management for banks, for asset management activity as well as for insurance companies.³⁹
- On the implications of the process for financial accounting.⁴⁰

To facilitate and promote the transition, central counterparties, in accordance with the recommendations of the working group, agreed on a date, 27 July 2020, to change the Eonia discount curve to the €STR curve. At the same time, these entities have permitted the clearing of transactions linked to €STR from 21 October 2019 in the case of LCH, from 18 November 2019 in Eurex and from 30 November 2019 in the case of BME Clearing.

The CNMV has carried out several measures to raise knowledge and help institutions to adapt. As a continuation of the communications issued in March 2018 and July 2019, market participants have recently been reminded once again of the advisability of progressively adopting €STR to avoid risks related to the disappearance of Eonia.⁴¹

³⁷ Two of the main reports are: ECB (2019b) and ECB (2020a).

³⁸ ECB (2019a).

³⁹ ECB (2019e).

⁴⁰ ECB (2019f).

⁴¹ CNMV (2018), CNMV (2019) and CNMV (2021).

Since the disappearance of Eonia was announced, its administrator, EMMI, has repeatedly reported the date on which it will be permanently discontinued and has warned that to mitigate all legal and economic risks as far as possible, benchmark users should use €STR on new contracts, especially if they expire after 3 January 2022.⁴²

Transaction and market volumes

Although the issuances of instruments linked to \notin STR are increasing progressively, there is still a high preference for the Eonia index. The liquidity of the derivatives market remains concentrated in Eonia, whereas the use of \notin STR is still low. According to data published by ESMA,⁴³ in 2020, the notional gross volume of IRS outstanding on Eonia went from \notin 20 to \notin 18 billion, while IRS linked to \notin STR rose from \notin 0.6 to \notin 1.4 billion at the end of the year.

Considering only OIS instruments in euros on Eonia and €STR, according to the data published through Clarus Financial Technology, in 2020 the total volume cleared by clearing houses of OIS linked to €STR accounted for only 2% (€820 billion) of the total volume of these instruments, which amounted to €36.3 trillion.⁴⁴ The difference therefore corresponds to the instruments linked to Eonia.

It is expected that once Eonia has finally been discontinued and the clearing houses convert all pending payments from Eonia into €STR, liquidity will be transferred to this index.

7.3 Adaptation of Euribor to European regulation

Euribor is the most important benchmark in the Euro area and one of the most widely used across the world. It measures the cost at which European credit institutions can obtain wholesale funds in euros on the unsecured money market at various terms, ranging from 1 week to 12 months.

Due to its systemic importance and relevance for the financial stability of the European Union, in April 2016 it was declared a critical benchmark by the European Commission.⁴⁵ It is estimated that this index is used as a reference in contracts worth more than €180 billion, for the most part interest rate derivatives. However, unlike other indices such as Libor or Eonia, Euribor is widely used in contracts and instruments with consumers and retail investors, especially in consumer loan and mortgage contracts. These contracts are estimated to be worth €1 billion in Europe. In Spain, in June 2020, more than 86% of the outstanding mortgage credit balance (€637.78 billion)⁴⁶ was linked to Euribor.

⁴² This information can be found on the administrator's website (https://www.emmi-benchmarks.eu/ emmi/) and in the EMMI statement (2021b).

⁴³ This analysis can be found in ESMA (2021).

⁴⁴ Khwaja (2021).

⁴⁵ Commission Implementing Regulation (EU) 2016/1368, of 11 August 2016, establishing a list of critical benchmarks used in financial markets pursuant to Regulation (EU) 2016/1011 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU).

⁴⁶ According to data from the Bank of Spain published by the Spanish Mortgage Association (2020).

Therefore, the value of financial instruments and contracts that use this benchmark index in the European Union far exceeds the threshold of €500 billion defined in the BMR for consideration as a critical or systemically important index.

Its administrator, EMMI,⁴⁷ is established in Brussels (Belgium) and its supervisor is the Belgian FSMA. However, as of 1 January 2022, ESMA will take on the role of the competent authority for the supervision of the index.⁴⁸

Euribor has been published since 1999, coinciding with the introduction of the euro. Previously, there were different national benchmarks such as MIBOR in Spain, PIBOR in France or FIBOR in Germany.

It is calculated from the daily contributions made by a group of 18 banks belonging to nine jurisdictions. Since its creation, 26 banks have stopped contributing to the Euribor calculation.

Euribor panel of contributors		TABLE 6
Country	Institution	
Germany	DZ Bank	
	Deutsche Bank	
Belgium	Belfius	
Spain	Banco Bilbao Vizcaya Argentaria	
	Banco Santander	
	Cecabank	
	CaixaBank	
France	BNP-Paribas	
	HSBC France	
	Natixis	
	Credit Agricole	
	Société Générale	
Holland	ING Bank	
Italy	Intesa Sanpaolo	
	UniCredit	
Luxembourg	Banque et Caisse d'Épargne de l'État	
Portugal	Caixa Geral De Depósito	
United Kingdom	Barclays	

Source: EMMI.

Banks have progressively left the panel of contributors due to a reluctance to continue using a calculation methodology based (until the reform) exclusively on the expert estimates of banks and due to the operating costs deriving from the transition to a methodology adapted to the BMR requirements. At present, membership of the panel remains voluntary and maintaining the index continues to depend on

⁴⁷ Until 2015, the index was published by the European Banking Federation.

⁴⁸ In accordance with the amendment to the BMR introduced by Article 5 of Regulation (EU) 2019/2175 of the European Parliament and of the Council, of 18 December 2019.

the contributions of the panel banks, so ensuring the stability and representativeness of its composition is essential for its continuity.⁴⁹

7.3.1 Stability of the contributors panel

Both EMMI and the authorities have been carrying out actions aimed at mitigating this risk of instability in the panel, seeking to find a way to increase the presence of European institutions and prevent any further departures.

For this purpose, EMMI has initiated contact with a selection of European banks to ask them to join the panel⁵⁰ with the aim of achieving greater geographical diversity, including areas that are not currently represented and that make substantial use of the benchmark. Now that the Euribor has undergone the necessary adaptations to comply with the BMR, the cost of membership is lower than the incurred by banks that made the transition as panel members. In addition, while the crisis caused by COVID-19 could be an obstacle for some banks that would now have other priorities, it might also be used to highlight the importance of maintaining a strong and representative Euribor.

Since the entry into force of the BMR in 2016, the authorities have been able to prevent banks from leaving the panel if such a departure would put its representativeness at risk. This measure was reinforced with the recent amendment to the BMR that came into effect on 10 December 2019,⁵¹ which extends from two to five years the maximum period for which an institution can be obliged to continue contributing to the calculation of the index, which, if applicable, would confer a reasonable guarantee of stability to allow a solution to be found, that could include transition to another alternative index, without obstacles and in a manner that is not disruptive to the markets or to financial stability.

If deemed necessary, the authorities may also request (also for a maximum period of five years) that institutions that are not contributors to the index join the panel, in the event that an eventual request to leave the panel by another entity were to jeopardise its representativeness. To date, it has not been necessary to make use of this power, which does not prevent the administrator, as stated above, from trying to get new entities to join voluntarily to reinforce this representativeness, gain geo-graphical diversity and avoid the *stowaway problem* (also known as the *free rider problem*), which occurs when there are many banks in the Euro area that use the benchmark, in some cases widely, without bearing the costs involved in belonging to the panel of contributors.

⁴⁹ Sections 4.4. "Pending challenges" and 5. "Conclusions" of the Gómez-Yubero article (2016) analyse the role of the administrator, the institutions and the authorities in dealing with the challenge of ensuring the continuity of the Euribor.

⁵⁰ The minutes of the EMMI Euribor Steering Committee meeting of 18 March 2020 (item 11) contain information on this subject. EMMI (2020).

⁵¹ Amendment of Article 23.6 of the BMR introduced through Regulation (EU) 2019/2089 of the European Parliament and of the Council, of 27 November 2019, amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks.

The institutions have successfully completed their adaptation to the new methodology, designing their own processes for establishing Level 3 contributions with sufficient guarantee of rigour and control to obtain the approval of the administrator of the index required under the BMR. Only two entities left the panel during this process⁵² and the FSMA, as the competent supervisory authority or the College of Supervisors⁵³ (of which the CNMV is a member), has not deemed it necessary to oblige them to continue providing data due to their low level of real and potential participation in the market that the Euribor seeks to measure.

7.3.2 Adaptation of governance

Following the recommendations of the FSB, since 2013 EMMI has worked to strengthen its own governance and transparency structure and to implement a methodology that complies with the requirements of Regulation (EU) 2016/1011.

Regarding the strengthening of governance, EMMI adopted a code of conduct⁵⁴ and the codes of obligations to which the banks of the panel of contributors must comply⁵⁵ and the calculation agent,⁵⁶ as well as a policy on conflicts of interest.⁵⁷

A Euribor Steering Committee,⁵⁸ made up of independent experts, market professionals and members of EMMI, was also set up to exercise independent supervision of all aspects related to the governance and methodology of the Euribor index.

Additionally, to guarantee the effectiveness of the controls and compliance with the obligations established in the aforementioned codes, EMMI has implemented internal reviews and external audit processes that are carried out with a minimum frequency of one year.

⁵² The National Bank of Greece left the panel on 28 May 2019 – EMMI (2019f) – and Banca Monte dei Paschi di Siena, on 7 January 2019 – EMMI (2019a).

⁵³ To the extent that critical indices involve contributors, administrators and users from more than one Member State, which are also systemically important, Article 46 of the Regulation provides for the creation of colleges of supervisors, which are intended to ensure that supervision is efficient and effective, the exchange of information between the competent authorities and the coordination of supervisory activities and measures. In addition, decisions on mandatory contributions and administration should be submitted for consultation by the college.

The Euribor college is chaired by the Belgian FSMA, as the competent authority of the administrator, and is made up of the authorities of the supervised contributors, as well as other authorities that have accredited that the index is critical in their State. ESMA is involved with the college with the function of ensuring and monitoring its efficient, effective and coherent operation, and exercises a mediating role, which in certain cases is binding.

⁵⁴ EMMI (2019e).

⁵⁵ EMMI (2019d).

⁵⁶ EMMI (2019c).

⁵⁷ EMMI (2013).

⁵⁸ EMMI (2018).

7.3.3 Adaptation of the methodology

At the same time, EMMI also adapted the Euribor methodology⁵⁹ to the recommendations of the FSB and the requirements of the regulation, so that throughout 2019 it moved to a three-level hybrid system based on market transactions, which prioritises real transactions over expert judgement.⁶⁰ To ensure the robustness of the calculation in the absence of transactions, the Euribor methodology followed a three-level hierarchical approach. These levels should be applied progressively, in the order specified in Table 7.

This adaptation has also implied the cessation of the less liquid and less used terms (2 weeks, 2 months and 9 months) and the extension of the types of eligible transactions, i.e. transactions that may be considered suitable for the calculation of the benchmark (including not only unsecured cash deposits from other banks, but also from other financial institutions such as insurance companies, money market funds, investment firms, central banks and government institutions) and short-term securities such as commercial paper or depositary receipts.

The hybrid or waterfall methodology consists of the consideration, first of all, of the eligible transactions of each entity in the reference market. Only in the event that a contributor does not have any operation of Level 1,Level 2 can be activated by contributing eligible transactions across the entire spectrum of money market maturities using calculation formulas provided by the administrator, such as linear interpolation between adjacent terms. If Level 2 is not available, banks would move to contribution Level 3.

The system for calculating Level 3 contributions has been defined individually by each bank, which allows their particular circumstances in terms of business model and financing and liquidity conditions to be reflected. However, the system used by each bank must adhere to the general framework approved by the administrator and, in particular, must take into account data from transactions carried out in the underlying market not considered in Levels 1 and 2 or other market data closely related with the unsecured euro money market. Contributions under the Level 3 system must also meet administrator-defined consistency checks.

In addition, contributors are subject to the control requirements established in Article 16 of the BMR and their contribution determination systems are subject to various internal control and external audit processes and to the supervision of their competent authority.

⁵⁹ EMMI (2019b).

⁶⁰ Until then, the index was calculated from the contributions made by the panel banks on the interest rates at which they would be willing to offer unsecured financing in euros to other credit institutions with similar characteristics, at different terms.

Waterfall of contributions of Euribor methodology

		Level 1	Contributions based solely on underlying market transactions for the term defined the day before the reference day using the formula provided by EMMI.			
		Level 2	Contributions spectrum of n calculation tec	based on underl noney market n hnique providec	ying market transactions across the naturities and past days using the I by EMMI.	
		Level 3	Contributions based on underlying market transactions or other market data closely related to the unsecured euro money market using a combination of techniques or the judgement of the contributing bank.		lying market transactions or other the unsecured euro money market niques or the judgement of the	
1	Ļ					
			C	Level 2.1	Adjusted linear interpolation of adjacent terms.	
			Level 2.2 Transactions on undefined terms.			
			Level 2.3 Eligible transactions from prior dates.			

Source: EMMI and CNMV.

This adaptation has made it possible to improve Euribor methodology to continue measuring the same underlying interest, but in a much more precise way and in compliance with European regulations. The strengthening of its governance and control environment and transparency has enabled the index to obtain authorisation⁶¹ in accordance with the BMR of the Belgian FSMA, following the positive advice of the College of Supervisors dated 2 July 2019.

Unlike Libor, the continuity of Euribor has been possible thanks to the changes made to its calculation methodology, which has proved to be solid and credible during the crisis generated by the COVID-19 pandemic. As analysed in the following section, Euribor in its current configuration plays an important role in the transmission of monetary policy decisions and reflects the financing conditions of the market, even in difficult circumstances, which corroborates the soundness of the methodology used to calculate the benchmark and, in particular, the robustness of the Level 3 contributions.

Recent public statements made by ESMA confirm its intention to support the continuity of Euribor, thereby following a path that diverges from that of Libor,⁶² recognising that the Euribor hybrid methodology is robust, resilient, transparent and that it continues to measure the same underlying interest, in other words, the cost of wholesale funding of banks in the unsecured money market.⁶³

TABLE 7

⁶¹ FSMA (2019).

^{62 &}quot;I can clearly state that, as of today, the discontinuation of EURIBOR is not part of our plans. So, ahead of us there are diverging paths for Libor and Euribor". Steven Maijoor, Chairman of ESMA (2020a).

^{63 &}quot;Thanks to the hybrid methodology, Euribor was able to properly navigate the turbulent waters of 2020. During this challenging period, Euribor has been reacting smoothly to monetary decisions by the ECB, playing its role in the monetary transmission mechanism for the euro area. Also, between the first and second quarter of this year the underlying market of Euribor experienced a temporary liquidity reduction, but the hybrid methodology was able to cope with these adverse circumstances". Steven Maijoor, Chairman of ESMA (2020b).

7.3.4 Performance of the index based on the new methodology

The methodological adaptation of the benchmark to European regulations was carried out progressively throughout 2019, with the staggered incorporation of institutions to avoid any sudden adjustments and to minimise the operational and technological risks that would have been triggered if all banks had joined at the same time.

As shown in Figure 5, as of mid-2019 there was a change in trend marked by the index, in accordance with the situation of the market it represents. During that period there was some economic and financial uncertainty due, among other factors, to tensions in world trade, the vulnerabilities of some emerging economies and concerns over Brexit. These factors led to a change in the messages given out by the world's main central banks, especially, the ECB, which at its June 2019 meeting already warned of a delay in the increase in interest rates, thus explaining the downward trend embarked on by the Euribor in the month of May 2019.



Source: Index data published by EMMI and CNMV.

As we have already mentioned, the Euribor is intended to reflect the cost of unsecured wholesale funding of European credit institutions. This cost is directly affected by the ECB's monetary policy decisions and expectations, so the fact that the Euribor was able, during its transition phase, to reflect the financial context and the ECB's expected interest rate movements not only reflects the representativeness of the benchmark but also the robustness of its calculation methodology, as well as the success of the reform.

The reaction of the Euribor after most of the meetings held by the Governing Council of the ECB⁶⁴ is a true reflection of the role of the index in facilitating the transmission of monetary policy decisions to the real economy. Figure 6 shows the

⁶⁴ The ECB's monetary policy decisions are made by its Governing Council, which meets every six weeks for this purpose.

relationship between the 12-month Euribor and the dates of the ECB meetings, with some examples standing out:

- The meeting of 12 September 2019, after which a rapid adjustment of the Euribor takes place, following the announcement of a change in remuneration of the reserves that the institutions hold with the ECB.⁶⁵
- Before the meeting of 12 March 2020,⁶⁶ the market expected the ECB to act in a similar way to other central banks to address the consequences of COVID-19. However, as no changes to monetary policy were made, there was a rapid adjustment of expectations, which caused the Euribor to rise.



Source: EMMI, ECB and CNMV.

The Euribor contains a credit risk component that can be observed through the spread between the 3-month Euribor (the most widely used in the wholesale market) and the price of the *overnight interest swaps* linked to Eonia or the €STR for the same term. The strong correlation between the spread stated above and the iTraxx Europe Senior Financials Series 31 Version 2 – around 75% during the period analysed (December 2019 to March 2021) – shows not only the high capacity of Euribor to reflect monetary policy, but also as an indicator of confidence between the different counterparties.

During the worst moments of the crisis generated by the COVID-19 pandemic, the Euribor was still published daily without incident. In this context of global pandemic, two elements could have raised uncertainty about the benchmark. In the first place, the situation of the contributors since all or the vast majority of their employees worked remotely as a result of the measures adopted to curb the virus and that mode of work was adopted in the vast majority of cases very suddenly. Another factor that could have generated uncertainty about the index was the reduction in transactions in the unsecured money market, especially at longer terms, as a consequence of the measures adopted by central banks.

⁶⁵ ECB (2019d).

⁶⁶ ECB (2020b).

However, these two factors had no impact since the contributors' control systems and contingency plans worked efficiently. On the other hand, the Euribor continued to correctly reflect not only market tensions, but also existing expectations about monetary policy decisions. During the crisis, the following three phases can be distinguished in the performance of the index:

- Phase 1 or bearish phase (from 30 January to 12 March 2020): as a result of the global expansion of COVID-19, different central banks announced interest rate cuts to soften the financial impact derived from the pandemic. This encouraged an expectation that the ECB would act in the same direction, however, such an announcement was not forthcoming, giving rise to the second phase.
- Phase 2 or bullish phase (from 12 March to 22 April 2020): this period started as a result of a readjustment of the market outlook, an increase in country risk and an increase in bank credit risk, as shown by the performance of the iTraxx index in Figure 8.
- Phase 3 or correction phase of the Euribor (from 22 April 2020 to the date of publication): following the ECB's announcement of a relaxation of its collateral policy, there was a decrease in the risk premiums of Euro area member states and a reduction in the price of the CDS of panel banks. All this led to a fall in the Euribor, which marked a new all-time low on 7 September. Since this announcement, the benchmark has been falling continuously, a drop that was accelerated by the announcement of the agreement adopted on 21 July by the European Council on the European recovery fund.⁶⁷



Source: EMMI and CNMV.

⁶⁷ A complete analysis of the determining factors in the performance of the Euribor in 2020 can be found in Amor (2021).

Performance of the iTraxx Europe Senior Financials Series 31 Version 2 index FIGURE 8



Source: Data from Reuters and CNMV.

During the core months of the COVID-19 crisis, March and April 2020, as shown in Figure 9, the weight of Level 3 contributions was fairly high, due to the drastic reduction in market transactions especially at longer terms. This greater dependence on Level 3 fell after May 2020, in line with the recovery in the number and volume of transactions made in the underlying market.

In conclusion, it can be said that at all times during the COVID-19 crisis, the Euribor has been published regularly and even if during the worst months the composition of the index was based mainly on Level 3 contributions, its performance continued to reflect monetary policy decisions and market perception of credit and liquidity risk, both of which are expected from an index based on market criteria.⁶⁸

EMMI has recently published the results of the first annual review of Euribor methodology,⁶⁹ in accordance with regulatory requirements. It concludes that the index remains strong, resilient, and representative of its underlying market. In addition, it identifies four non-material adjustments that will contribute to improving the robustness of the index, increasing the weight of Level 1 and Level 2 contributions (decreasing those of Level 3), and improving the index's responsiveness to market events.⁷⁰

- Include T+3 settlement among eligible transactions.

⁶⁸ The EMMI website offers comprehensive information on the calculation methodology used and periodically publishes indicators on the use of each level of the hybrid methodology, the volumes of transactions supporting the calculation and the distribution by sector of the counterparties of these transactions, all broken down by term.

⁶⁹ EMMI (2021a).

⁷⁰ The adjustments, agreed with the panel banks, are as follows:

⁻ Lower the minimum size threshold for eligible transactions from €20 million to €10 million.

⁻ Increase the retroactive period of usable Level 1 historical contributions by one day.

⁻ Renewal of quarterly Euribor futures used to adjust historical contributions on a target day.



Source: EMMI. Euribor Transparency Indicators Reports, December 2019 to October and CNMV.

7.4 Robustness of contracts. Euribor fallback and ISDA work

One of the priorities for ESMA, as the new Euribor supervisory authority, will be the robustness of the financial product contracts indexed to the Euribor,⁷¹ which requires fallback clauses to be included in each of them to cover the cessation or possible disappearance of the benchmark, as required by European regulations,⁷² in order to guarantee the continuity of the contracts in the unlikely scenario of the discontinuation of the Euribor, increasing legal certainty and minimising the risks of frustration and litigation.

⁷¹ This reference can be found in ESMA (2020b).

⁷² As with the other authorised benchmarks under European regulation, all new contracts signed from 1 January 2018 must include certain fallback provisions to provide for the cessation or possible disappearance of the benchmark, as required by Article 28.2 of the BMR.

For this reason, the EuroRFR working group continues to work on identifying Euribor fallback rates, based on forward-looking rates calculated using the \in STR.⁷³ The group recently held a public consultation on possible fallback rates for cash products such as loans, deposits, debt instruments, securitisations and investment funds. The objective of the consultation was to identify the most appropriate rate per product, the calculation methodology for the spread that would have to be adjusted to avoid a possible transfer of value if the fallback were activated and the market conventions that should be used to calculate the compounded forward rate based on \notin STR.

The Euribor is, by definition, a forward-looking index, in the sense that it is calculated for different terms, set at the beginning of these periods, therefore it incorporates the expectations of intraday rates in those periods. In addition, it reflects the bank counterparty risk related to those terms. Therefore, the risk-free rate, lacking the term and credit risk component, could not act as a substitute for Euribor without further adjustment.

The working group has been analysing different methodologies to build a temporary structure based on the intraday risk-free index, €STR, equivalent to the current Euribor rate structure. This methodology requires incorporating three components: term, expectations and credit risk.

To do this, the group has used two possible conventions: the *backward-looking approach*, based on the use of historical data in average terms, and the *forward-looking approach*, which uses the derivatives market to reflect expectations about the performance of the risk-free rate during the next period.

The backward-looking approach has in its favour the simplicity of its calculation based on the overnight rate, which, in principle, seems adequate for derivatives contracts, but entails operational and accounting adjustment problems for institutions.

However, to manage asset and liability risk, financial intermediaries may still need benchmark rates that reflect their marginal financing costs and expectations. The forward-looking approach, which is considered more suitable for spot contracts and instruments, raises the problem that it requires a deep and liquid derivatives market to serve as the basis of calculation, but RFR-based derivatives markets are still far from sufficiently liquid for this purpose. Furthermore, the liquidity of derivatives markets tends to suffer greatly in times of crisis, as shown by the recent tensions experienced as a result of COVID-19.

⁷³ In November 2019, the working group published a report with high-level recommendations for fallback provisions in spot and derivatives contracts linked to the Euribor. At that time, pending further guidance from the working group or regulatory authorities, market participants were encouraged to consider including generic language in their fallback provisions that would at least provide for the future designation of substitutes. Working Group on Euro Risk Free Rates (2019b).

The ISDA-Clarus RFR indicator,⁷⁴ which measures the degree of global activity in derivatives at risk-free rates, reached only 10% during January 2021. In terms of notional volumes traded, the percentage of instruments linked to RFRs represented 11.8% of the total volume of derivative instruments linked to interest rates in January 2021, while at the end of 2020 this figure was 13.3%.

For 2020 as a whole, the ISDA-Clarus RFR indicator showed a level of RFR adoption of 7.6%, compared to 4.6% the previous year. Trading activity in terms of notional volumes was 8.8% of the total, compared to 5.4% in 2019.



Source: ISDA (2021a).

As shown in Figure 10, these figures indicate a very low level of adoption of the new RFRs and very illiquid derivatives markets compared to the figures that the traditional benchmark continue to show. As a result, it is difficult to anticipate when it will be possible to have strong forward-looking rates.

In the case of derivatives linked to €STR, it is expected that once Eonia has definitively disappeared as of January 2022, all the liquidity currently concentrated in this index will shift to €STR, as discussed in Section 7.2 of this article.

⁷⁴ This indicator has been designed to monitor how much derivative trading activity is carried out at riskfree rates in interest-rate derivatives markets. The full definition of this indicator can be found in the ISDA-Clarus RFR Adoption Indicator White Paper.

Backward-looking methodology diagram (lookback period mode)



According to this backward-looking methodology, the observation period for calculating the interest rate begins and ends a certain number of days before the interest period, which allows the interest payment to be calculated before it ends. This option is used by ISDA in its IBOR Fallbacks Protocol, which facilitates hedging if used in spot transactions.

Source: Working Group on Euro Risk Free Rates (2020b).



This is the most common form of backward-looking methodology used when it is necessary for the borrower to know the interest at the beginning of the payment period. It is not recommended for periods of more than three months as it can generate coverage problems.

Source: Working Group on Euro Risk Free Rates (2020b).

ILLUSTRATION 2

Forward-looking methodology diagram



The forward-looking methodology is based on the €STR derivatives market and reflects market expectations about the index performance during the next interest rate period. It allows interest payments at the beginning of the interest period to be calculated and known.

Source: Working Group on Euro Risk Free Rates (2020b).

The working group has carried out a complete analysis of the pros and cons of each methodology and their variants, as well as their viability and applicability to different types of financial products, taking into account a series of criteria and considering the recommendations made by the FSB, the work carried out by ISDA for the development of fallback provisions in OTC derivatives contracts and the recommendations of the risk-free rate working groups in other jurisdictions.

Based on its findings, the working group estimates that, for the most sophisticated market participants operating globally, the most appropriate Euribor fallback rate would be based on a backward-looking methodology⁷⁵ using a compounded average⁷⁶ and of the possible alternatives, using the lookback period (see Illustration 2) or *last reset* (see Illustration 3) approach. However, the working group recognises that in other less sophisticated areas, in which it is necessary to know the interest rate in advance,⁷⁷ a forward-looking fallback rate is needed.

⁷⁵ The FSB in its Guide on the use of risk-free rates (FSB (2019)) recommends the widespread use of risk-free indices, including for spot instruments and contracts. For cash contracts, their use is recommended as an average over a given period (either in a simple or compounded format), which allows the frequency of payments to be adjusted (in certain contracts, the payment or daily review of the applicable interest rate does not make sense) while idiosyncratic daily fluctuations are smoothed out, in other words, volatility is reduced, while still reflecting market movements. The measures implemented by ISDA in its 2006 Definitions and in the ISDA Protocol, *IBOR Fallbacks Protocol*, also follow the same lines as the recommendation of the working group.

⁷⁶ As proposed by the ECB in its announcement of the publication, as of 15 April 2021, of a compounded rate at different terms calculated on the basis of the €STR. This proposal and the calculation rules for the compounded €STR average rate can be found in ECB (2021c) and ECB (2021b).

⁷⁷ Spanish legislation on consumer credit contracts (Law 16/2011, of 24 June) requires, in line with other European countries, the consumer borrower to know the applicable rate in advance. In the case of mortgage loan contracts, the lender must inform the borrower of any change in the payment rate at least 15 days in advance of the effective date of the change.

In these cases, the group recommends introducing the forward rate in the contracts through a waterfall structure including an appropriate backward-looking rate (lookback period or last reset) as a second layer of fallback to mitigate the risk that forward-looking methodology is not available.

There are currently several private initiatives underway to calculate and publish forward-looking term structures based on \notin STR. Both the project of the current Euribor administrator, EMMI, together with the Libor administrator, IBA, and the Refinitiv project contemplate a methodology based on a temporary structure based on firm OIS quotes obtained through trading platforms. These methodologies coincide with those used by both IBA and Refinitiv for forward rates based on SONIA, which are discussed in Section 4 of this article.⁷⁸

Euro area RFR working group proposals on fallbacks by product			
Product	Recommended methodology at the first level of the waterfall	Recommended methodology in the second level of the waterfall	Spread
Corporate loans	F/B	В	
Loans to consumers (consumer and mortgages) and SMEs	F	В	
Current accounts	В	_	
Trade finance products	F	В	Average
Export financing and transactions in emerging markets	F	В	historical spread
Debt instruments	В	_	
Securitisations	F/B	F/B	
Transfer pricing model	F/B	В	
Linked investment funds	F/B	_	

Source: Working Group on Euro Risk Free Rates (2020b).

B: backward-looking approach.

F: forward-looking approach.

In order for the fallback rate calculated according to the methodologies above described to be economically equivalent to the Euribor, in the case that such benchmark cease to exist, the group proposes the introduction of an adjustment calculated on the historical average of spreads.⁷⁹ With this simple adjustment methodology, equivalent to the one used by ISDA in the *IBOR Fallbacks Protocol*⁸⁰ and to the

⁷⁸ Both projects were presented at the Euro area RFR working group meeting on 18 February 2021. The presentations and the minutes of the meeting can be consulted in the "Working group on euro risk-free rates" section of the ECB website.

⁷⁹ The difficulties inherent in determining a dynamic credit spread make it advisable to use a fixed credit spread adjustment based on historical averages.

⁸⁰ In ISDA contracts, this adjustment was set by Bloomberg on 5 March 2021, once the official announcement of the cessation of Libor had taken place. Bloomberg (2021).

proposals made by the working groups of other jurisdictions for spot products denominated in USD and GBP that are linked to Libor, the coverage and alignment between jurisdictions and between asset classes is facilitated.

The public consultation has received a significant level of response from financial market participants and broad support for its approaches.⁸¹ The final recommendation is expected to be formalised before the end of the first half of 2021.

8 Regulatory response to tough legacy contracts

There are a large number of contracts and instruments linked to Libor around the world expiring after 31 December 2021 that do not contain sufficiently strong fallback clauses to cover the cessation or winding down of this index and that cannot be renegotiated to incorporate a contractual fallback provision prior to that date. These are the contracts known as *tough legacy* contracts.

In order to prevent these contracts from being affected, on cessation of the benchmark, by contractual frustration and litigation that could significantly disrupt the functioning of the financial markets, solutions to guarantee the continuous orderly operation of these contracts and instruments have been arbitrated in different jurisdictions, which refer to debt, loans, time deposits, securities and derivatives, so as to address systemic risks.⁸²

In the European Union, an amendment to the Benchmark Regulation (*BMR Review*)⁸³ was approved to introduce a mechanism that allows the European Commission to designate a legal substitute rate, based on the recommendations made by the specific working groups on alternative indices, which will be applied to all contracts and financial instruments that do not contain a substitute index, permanently and subject to the legislation of a Member State of the European Union. In this way, the continuity of these contracts would be guaranteed within a framework of legal certainty.

Likewise, this new legislation contemplates the possible legal substitution of benchmarks in contracts with fallback provisions, but in which the application of these would jeopardise financial stability and lead to market disturbance in a Member State. Exhibit 1 contains a synopsis of the amendments introduced by the *BMR Review*.

⁸¹ A summary of the responses to this consultation can be found in ECB (2021a), published in the "Working group on euro risk-free rates" section of the ECB website.

⁸² An analysis of the difficulties in the transition of existing tough legacy contracts can be found in Gómez-Yubero (2020).

⁸³ Regulation (EU) 2021/168 of the European Parliament and of the Council, of 10 February 2021, amending Regulation (EU) 2016/1011 as regards the exemption of certain third-country spot foreign exchange benchmarks and the designation of replacements for certain benchmarks in cessation, and amending Regulation (EU) No. 648/2012.

Amendment of the BMR due to the disappearance of Libor

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EXHIBIT 1
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The recent BMR amendment (published on 12 February 2021), which has been negotiated and approved in record time, contains four significant blocks of amendments:

i) Mechanism of legal substitution in all types of contracts of an index of systemic importance in the case of its disappearance.

The end of the transitional period of application of European regulations in the United Kingdom as of 31 December 2020 (as a result of the Brexit agreements) means that Libor is no longer considered a critical index according to the BMR. This, together with the fact that Libor will disappear or will cease to be used from the end of 2021 (in the case of USD Libor, June 2023) has motivated the authorities of the European Union to implement reforms to provide a legal solution for tough legacy contracts, in other words, those expiring beyond 2021 (or, where appropriate, 2023) that cannot be modified to replace the index or to include an appropriate fallback provision.

The modification of the BMR approved in the European Union gives the European Commission the power to designate a substitute index (based on the recommendations of the working groups put forward by the central banks) to replace the index that is discontinued for all instruments and contracts that do not contain a permanently applicable surrogate index. The substitution will be applicable to all types of instruments and contracts subject to the laws of a Member State of the European Union and to those between European parties that are subject to the legislation of third States that do not contain an equivalent mechanism to address the discontinuation of the index.

This substitution may also be applied in contracts in which the underlying indices, even having substitute indices of permanent application, no longer fully or significantly reflect the underlying market or the economic reality that is intended to be measured with the index being discontinued, which could lead to an adverse impact on financial stability in a Member State, based on an assessment by the competent authority. In these cases, two additional requirements must also be met that seek to preserve the principle of freedom of agreement in contracts: i) that one of the parties to the contract objects to its application and ii) that the parties have not agreed on another alternative rate.

The authority determining the negative impact could be a macroprudential authority or systemic risk council, or a central bank. Their designation must be communicated to the European Commission and ESMA within six months of the approval of the regulation.

This mechanism will be applicable in the event of the disappearance of a critical or systemically important index, so it would also be applicable in the event of the disappearance of Euribor. This would guarantee the continuity of contracts that do not contain adequate substitutes and would avoid a negative impact on the functioning of the markets and on financial stability.

ii) Extension of the transition period applicable to third country benchmarks.

The deadline for third country benchmarks to be used by supervised entities of the European Union before the equivalence decision of the European Commission (Article 30 of the BMR) or the recognition and validation agreements referred to in Articles 32 and 33 of the BMR are obtained has been extended until December 2023. However, the European Commission is empowered to extend this period by means of a delegated act for a maximum of two years if, after the analysis that must be submitted before June 2023, it is demonstrated that the envisaged period is detrimental or represents a threat to financial stability in the European Union.

This extension has been a widespread demand by the European financial industry in order to avoid a competitive disadvantage in world markets and, at the same time, allow policy makers to carry out a comprehensive review of the current third country regime in the BMR framework.

The third-country regime envisaged in the BMR has not been as effective as expected since, on the one hand, equivalence agreements are not a viable alternative, since the vast majority of jurisdictions outside the European Union have not introduced a regulation equivalent to the BMR. Where regulation has been adopted, it generally only covers systemically important interest rate benchmarks and occasionally currency benchmarks. On the other hand, neither the recognition nor the approval mechanisms have been effective for this purpose, due to the complexity and high cost that many third-country index administrators that are provided free of charge incur in reaching agreements with European Union entities willing to assume the surveillance function required by the BMR.

iii) Exclusion of the BMR from certain non-convertible currency indices.

Also related to the expiry of the transition period for third-country indices and in order to avoid damage to companies that need to hedge non-deliverable currencies due to exchange restrictions in some countries, certain benchmark indices of spot currencies administered in third countries (by entities other than central banks) when they are not normally freely convertible are excluded from the scope of application of the BMR. The European Commission will publish the list of excluded indices in June 2023, after the corresponding public consultation.

iv) Relief of collateralisation and centralised clearing requirements.

The interest rate benchmark reform has prompted a series of global initiatives aimed at removing certain obstacles to contract amendment in order to replace the indices with the new RFRs or to include suitable fallback provisions. In the European Union, Article 28.2 of the BMR also requires that the supervised entities reflect these clauses in all their contracts with clients, which obliges them to amend a significant number of derivatives contracts linked not only to interest rates but to other indices such as currency, commodities, share, credit indices and others.

In order to prevent derivatives contracts exempted (in accordance with Articles 4 and 11 of EMIR) from bilateral collateralisation or centralised clearing requirements from losing this exemption when they are amended to adjust to the reform, the corresponding exemption under EMIR has been included (through a new Article 13 *bis*), thereby following the recommendations of the FSB and the actions followed in other jurisdictions such as the United States, Asia or Australia.

Legislative solutions for the tough legacy problem are also being considered in the United Kingdom and the United States. The UK Government has announced its intention of putting forward legislation that would empower the FCA to protect entities that are not able to amend their contracts, urging the Libor administrator to modify the calculation methodology to allow its use in these contracts for a period of time limited to 10 years.⁸⁴ The methodological change, which would be carried out only for certain terms and currencies, would be similar to the change made in Eonia (which is currently calculated as &STR plus a spread of 8.5 basis points); in other words, starting from the risk-free rates chosen for each currency area, adjusting for the term of the contract and with a spread that includes the credit margin. This solution, known as the *tracking benchmark approach* or synthetic Libor, would only be used for legacy contracts, not in new contracts.

Coinciding with the official announcement of the cessation of Libor that took place on 5 March 2021, the FCA stated its intention to consider the publication of a synthetic Libor that could be calculated with a forward-looking methodology from the forward versions (term rate) of the corresponding RFRs (SONIA, TONAR, SOFR) plus the spread set in the ISDA *IBOR Fallbacks Protocol*. The synthetic methodology would be applied to the following terms and currencies:

- GBP Libor: 1, 3 and 6 months, for a time to be determined.
- JPY Libor: 1, 3 and 6 months, for 1 additional year.
- USD Libor: 1, 3 and 6 months, for a time to be determined.

In the United States, the ARRC working group has proposed legislation similar to the new framework approved in the European Union, that is, the legal designation of a surrogate index for contracts lacking adequate fallbacks.

These solutions are, for now, projects in the consultation or negotiation phase, so it will be necessary to wait for the corresponding standards to be approved. However, time is of the essence and it is important that these solutions progress rapidly, as has already happened in the European Union.

Although a more coordinated line of action would have been desirable in all jurisdictions to avoid legal uncertainty for contracts between parties belonging to different

⁸⁴ HM Treasury (2020).

jurisdictions, it is unlikely to occur due to the difficulty of identifying a single solution valid for all types of circumstances and cash and derivatives products. Therefore, market participants should continue their efforts to actively move away from Libor before the end of 2021, realising that there may be legislative solutions that provide relief for some legacy products, but not for all.

9 Conclusions and next steps

The official announcement of the cessation of Libor has marked a definitive milestone for the completion of the interest rate benchmark reforms that began almost a decade ago. The time remaining before the benchmark disappears is short, but the path is not without obstacles.

The main objectives of the Anglo-Saxon working groups include facilitating the transition from Libor to SONIA and SOFR throughout 2021 and in the case of the dollar before June 2023. Regulatory pressure is mounting to ensure that the best practices and adaptation schedules recommended by central banks and international financial authorities are met.

However, the transition is especially complex, since it will mark a paradigm shift for the markets, which implies the definition of new products, the amendment and renegotiation of existing ones and the solution of legal, accounting, technological, operational and fiscal issues in some cases.

Furthermore, the need to create a liquid market for risk-free rates and standardised market conventions across jurisdictions is an added difficulty in the development of transition plans.

Unlike the breakthrough approach chosen in the Anglo-Saxon sphere, the Euro area solution is less disruptive as the disappearance of the Euribor is not envisaged, at least in the medium term. However, the reform of its methodology and control environment mean that it has been authorised in accordance with the new regulations. The crisis caused by COVID-19 has been a tough test that the index has successfully passed, which corroborates its strength, the success of the methodology reform and the reliability of the index for users.

However, it is also advisable to develop alternative markets, in this case, the market linked to \notin STR, to ensure there are sufficient options to reduce any excessive dependency on traditional indices, as recommended by the FSB in its 2014 report. The development of the markets linked to \notin STR is still low, in terms of issuance of instruments and derivatives. It is expected that with the demise of Eonia, liquidity will automatically shift to \notin STR and this, in turn, will allow suitable fallbacks for Euribor to be established based on forward-looking methodology.

In short, the outlook for reference rates based on unsecured money markets in the Euro area is characterised by the coexistence of various types of benchmarks: Euribor, \in STR and their derivatives based on both backward-looking and forward-looking methodology, which will offer different alternatives to users, better

legal coverage of contracts and instruments, and eliminate concentration in a single index and, therefore, reduce the risks posed by an excessive concentration in interbank indices in their previous format.

As seen up until now, completing this process will require intensive coordinated action by the public and private sectors.

References and bibliography

Amor, J.M. (2021). "El nuevo euríbor supera un 2020 complicado". Funcas, *Cuader*nos de Información Económica, No. 280 (January-February).

Asociación Hipotecaria Española (2020). *Actividad crediticia hipotecaria a junio de 2020*. October.

Bloomberg (2021). *IBOR Fallbacks. Technical Notice. Spread Fixing Event for Libor.* 5 March.

Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation (2020). *Statement on Libor Transition.* 30 November.

CNMV (2018). Application of new financial benchmarks regulation. 20 March.

— (2019). Information for the sector about the process of adaptation of interest rate benchmarks to the new European Regulation on benchmarks. 30 July.

— (2021). CNMV recommendations in view of the potential cessation of Libor (and Eonia) by the end of 2021. 13 January.

ECB (2017). *First ECB public consultation on developing a euro unsecured overnight interest rate.* November.

— (2018). *Private sector working group on euro risk-free rates recommends ESTER as euro risk-free rate.* Press release. 13 September.

— (2019a). Recommendations of the working group on euro risk-free rates on the Eonia to \notin STR legal action plan. 16 July.

- (2019b). Report by the working group on euro risk-free rates on the impact of the transition from Eonia to the \notin STR on cash and derivatives products. August.

— (2019c). Euro money market study 2018. September.

— (2019d). *Monetary policy decisions*. Press release. 12 September.

— (2019e). Report by the working group on euro risk-free rates on the risk management implications of the transition from Eonia to the \in STR and the introduction of \notin STR-based fallbacks for EURIBOR. 17 October.

— (2019f). Report by the working group on euro risk-free rates on the financial accounting implications of the transition from Eonia to the \in STR and the introduction of \notin STR-based fallbacks for EURIBOR. 5 November.

— (2020a). Report by the working group on euro risk-free rates on the transfer of Eonia's cash and derivatives markets liquidity to the €STR. 19 February.

— (2020b). Account of the monetary policy meeting of the Governing Council of the European Central Bank held by means of a teleconference on Wednesday, 18 March 2020.

— (2020c). Report on preparations for benchmark rate reforms. July.

— (2021a). Summary of responses to the public consultation by the working group on euro risk-free rates on €STR-based EURIBOR fallback rates. 15 February.

— (2021b). Compounded \in STR average rates and index. Calculation and publication rules. 18 March.

— (2021c). ECB starts publishing compounded euro short-term rate (€STR) average rates on 15 April 2021. Press release. 18 March.

EMMI. Euribor Transparency Indicators Reports. December 2019 to October 2020.

— (2013). Euribor Conflict of Interests Policy. 26 September.

— (2018). Euribor Steering Committee Terms of Reference. 13 December.

— (2019a). Banca Monte dei Paschi di Siena (BMPS) withdraws from the Euribor bank Panel. 7 January.

— (2019b). *Benchmark Determination Methodology for Euribor*. 31 January.

— (2019c). *Euribor Code of Obligations of Calculation Agent.* 31 January.

— (2019d). Euribor Code of Obligations of Panel Banks (COPB). 31 January.

— (2019e). Euribor Governance Code of Conduct. 31 January.

- (2019f). National Bank of Greece withdraws from the Euribor panel. 28 May.

— (2020). 76th Steering Committee Meeting minutes. 18 March.

— (2021a). Outcome of the first annual review of the hybrid methodology for Euribor.
2 February.

— (2021b). Planned cessation of Eonia on 3 January 2022. 12 February.

ESMA (2020a). "2021: A Defining Moment for The Interest Rates Reform". Speech of Steven Maijoor, Chairman of ESMA. City Week 2020 – London. 21 September.

— (2020b). "A supervisory perspective on the interest rate benchmarks reform". Speech of Steven Maijoor, Chairman of ESMA. ECB Third Roundtable on Euro Risk-Free Rates. 14 December 2020.

— (2021). Report on Trends, Risks and Vulnerabilities. No. 1, March.
FCA (2017). "The future of Libor". Speech of Andrew Bailey, Executive Director of the FCA. 27 July.

— (2020). Impact of the coronavirus on firms' Libor transition plans. March.

— (2021). Announcements on the end of Libor. 5 March.

FSB (2014). Reforming Major Interest Rate Benchmarks. 22 July.

— (2019). Overnight Risk-Free Rates. A User's Guide. 4 June.

— (2020a). FSB encourages broad and timely adherence to the ISDA IBOR Fallbacks *Protocol.* 9 October.

— (2020b). *Global Transition Roadmap for Libor.* 16 October.

— (2020c). *Reforming Major Interest Rate Benchmarks.* 2020 Progress report. The year of transition away from Libor. 20 November.

— (2021). FSB Chair's letter to G20 Finance Ministers and Central Bank Governors. 24 February.

FSB and BCBS (2020) Supervisory issues associated with benchmark transition: Report to the G20. July.

FSMA (2019). *The FSMA authorises EMMI as administrator of the Euribor benchmark.* Press release. 3 July.

Gómez-Yubero, M.J. (2016). "La regulación de los índices de referencia y la reforma del euríbor". Banco de España, *Revista de Estabilidad Financiera*, No. 31, pp. 9-26.

— (2019). "Modernizando los tipos de interés de referencia". *ASSET Actualidad*. November.

— (2020). "De índices interbancarios a índices libres de riesgo". Instituto Español de Analistas Financieros, *Análisis Financiero*. December.

HM Treasury (2020). Amendments to the Benchmarks Regulation to support Libor Transition. October.

ICE Benchmark Administration (2020). Consultation on potential cessation. December.

IMF (2020). World Economic Outlook Database. October.

INE (2021). Estadística de hipotecas anuales. Indicadores nacionales. Porcentaje de hipotecas constituidas según tipo de interés, total fincas. April.

IOSCO (2013). Principles for Financial Benchmarks. July.

ISDA (2021a). ISDA-Clarus RFR Adoption Indicator. January.

— (2021b). ISDA 2020 IBOR Fallbacks Protocol. List of Adhering Parties. April.

ISDA. Clarus RFR Adoption Indicator White Paper.

Khwaja, A. (2021). 2020 CCP Volumes and Market Share in IRD. Clarus Financial Technology. 13 January.

LCH (2019). LCH's Position in respect of Pre-cessation Triggers in relation to Swap-Clear. December.

Schrimpf, A. and Sushko, V. (2019). "Beyond Libor: a primer on the new reference rates". *BIS Quarterly Review*. March.

Working Group on Euro Risk Free Rates (2019a). *Recommendations of the working group on euro risk-free rates on the transition path from Eonia to the* \in *STR and on a* \notin *STR-based forward-looking term structure methodology.* 14 March.

— (2019b). *High level recommendations for fallback provisions in contracts for cash products and derivatives transactions referencing Euribor.* 6 November.

— (2020a). *Preparing for the interest rate benchmark reforms and the new risk-free rates.* SG7 Communication and Education. June.

— (2020b). Public consultation by the working group on euro risk-free rates on €STRbased EURIBOR fallback rates. 23 November.

Working Group on euro risk-free rates, BCE, ESMA, Europe Commission and FSMA (2020). *Statement welcoming the launch by ISDA of its 2020 IBOR Fallbacks Protocol and IBOR Fallbacks Supplement.* 23 November.

Annex Global overview of the interest rate benchmark reform

Geographical area	Currency	IBOR index	Administrator	Risk free index	Administrator	Index type	Approach	Status of the reform
Euro area	EUR	Euribor Eonia	EMMI	€STR	European Central Bank	Non- collateralised	Multi-index	Euribor authorised under BMR Eonia in transition to €STR Ongoing fallback for Euribor
United Kingdom	GBP	Libor	ICE	SONIA	Bank of England	Non- collateralised	Single index	Preparation for the cessation of Libor in progress Developing a forward-looking approach
USA	USD	Libor	ICE	SOFR	New York Federal Reserve	Collateralised	Single index	Possibility of cessation of USD Libor being delayed to June 2023 Developing a forward-looking approach based on futures, OIS
Switzerland	CHF	Libor	ICE	SARON	SIX Swiss Exchange	Collateralised	Single index	Preparation for the cessation of Libor in progress Possible development of a forward-looking approach
Japan	JPY	Libor	ICE	TONA or TIBOR	Japan's Bankers Association	Non- collateralised	Multi-index	Preparation for the cessation of Libor in progress Developing a forward-looking approach
Australia	AUD	BBSV	ASX	AONIA	Reserve Bank of Australia	Non- collateralised	Multi-index	Preparation for the cessation of Libor in progress Possible development of a forward index Improved fallback clauses
Brazil	BRL	DI Rate	CETIP	Selic	Central Bank of Brazil	Collateralised	Multi-index	Reform of the current Selic index to adapt it to IOSCO principles in progress
Canada	CAD	CDOR	Refinitiv	RUN	Bank of Canada	Collateralised	Multi-index	Analysing the possibility of developing a forward RFR index Analysing the implications of the transition from IBOR to RFR
Hong Kong	HKD	HIBOR	НКАВ	HONIA	Treasury Market Association	Non- collateralised	Multi-index	Forward HONIA Publication
Mexico	MXN	TIIE	Bank of Mexico	Overnight TIIE	Bank of Mexico	Collateralised	Multi-index	Creation of a working group at the national level Development of an OIS market linked to RFR
Singapore	SGD	SOR	Singapore Banking Association	SORA	Singapore Banking Association	Non- collateralised	Single index	Public consultation on the transition from the spot market to a single index approach
South Africa	CZAR	JIBAR	SARB	ZARONIA		Non- collateralised	Multi-index	Developing the framework to ensure a smooth transition
Turkey	TRY	TRLibor	Turkish Banks Association	TLREF	lstanbul Stock Exchange	Collateralised	Multi-index	Developing an OIS curve up to 10 years

Source: FSB (2020c) and CNMV.

III Legislative Annex

Since the publication of the *CNMV Bulletin* for the fourth quarter of 2020, the following legislative developments have occurred:

National regulations

 Royal Decree-Law 5/2021, of 12 March, on extraordinary measures to support business solvency in response to the COVID-19 pandemic.

The Second Final Provision reinforces the legal framework for the protection of citizens and investors with regard to the advertising of new instruments and financial assets in the digital area.

Crypto-assets, understood to be digital representations of value or rights that can be transferred and stored electronically using distributed ledger technology or similar, are increasing in the financial system, and there is still no specific regulatory framework at the European level.

These technologies present some risks today. Firstly, they allow transactions to be made anonymously, which means they can more easily be used for illegal purposes. Secondly, proper custody of the customer codes associated with crypto-assets is crucial to provide services in relation to these assets and for customer protection. Thirdly, they are being offered with growing frequency as an object of investment, both to specialist investors and to the general public.

The CNMV and the Bank of Spain published a joint statement on 9 February 2021, building on another statement from 2018, in which they warn about the risks that these new type of assets pose for participants in the financial system and in particular for small investors. The statement highlights the complexity, volatility and potential lack of liquidity of these investments.

Therefore, to strengthen investor protection, a new Article 240 bis has been included in the Second Final Provision of Royal Legislative Decree 4/2015, of 23 October, approving the recast text of the Spanish Securities Market Act, to grant the CNMV powers to exercise administrative control over the advertising of crypto-assets and other assets and instruments that are not regulated in the Securities Market Act and that are offered as an investment proposal. The CNMV is also empowered to develop the objective and subjective scope, as well as the control mechanisms and procedures that will be applied, through a Circular.

 Law 2/2021, of 29 March, on urgent prevention, containment and coordination measures to address the health crisis caused by COVID-19.

The Fourth Final Provision amends Article 40 and repeals Article 42 of Royal Decree-Law 8/2020, of 17 March, on extraordinary urgent measures to address the economic and social impact of COVID-19, in order to extend to 31 December 2020 the possibility that even when not provided for in the articles of association, meetings of governance and management bodies of associations, civil and commercial companies, the governance bodies of cooperative companies and foundation boards of trustees may be held by video conference or by

conference call, and also that their resolutions may be adopted in writing and without holding a meeting if decided by the chairman or at the request of at least two of the members of the body.

The Fourth Final Provision also introduces a Section Three, to apply, during 2021, to the capital companies provided for in Article 1 of Royal Legislative Decree 1/2010, of 2 July, approving the recast text of the Spanish Corporate Enterprises Act, the following exceptional measures:

- In the case of public limited companies, even when not provided for in the articles of association, the board of directors may establish attendance by telematic means and distance voting in the call for the general meeting under the terms provided in Articles 182 and 189 of Royal Legislative Decree 1/2010, of 2 July, and Article 521 of the same legal text, in addition to holding the meeting anywhere in Spain. The management body may establish in the call announcement that the meeting will be held exclusively using telematic means.
- Exceptionally, in 2021, even when not provided for in the articles of association, the board meetings or assemblies of associates or partners of all other private law legal entities (associations, civil companies and cooperatives) may be held by video conference or by conference call, provided that all the people who have the right to attend or those who represent them have the necessary means available to access the meeting online and that the secretary is able to identify them, which will be recorded in the meeting minutes and sent immediately to the corresponding email addresses.
 - Likewise, in 2021, meetings of foundation boards of trustees may be held by video conference or by conference call, provided that all the members of the body have the necessary means available to access the meeting and the secretary of the body is able to identify them, which will be recorded in the minutes.
- Further, in 2021, meetings of management bodies of associations, civil and commercial companies and the governance bodies of cooperative companies may be held by video conference or by conference call, provided that all members of the body have the necessary means available to access the meeting and the secretary of the body is able to identify them, which will be recorded in the minutes.
- Royal Decree 203/2021, of 30 March, approving the Regulation of the work and functioning of the public sector using electronic means.

Law 39/2015, of 1 October, on the common administrative procedure of public administrations and Law 40/2015, of 1 October, on the legal regime of the public sector establish the right of citizens to interact with public administrations using electronic means and include the elements that make up the legal framework for the electronic functioning of public administrations, introducing a model that goes beyond the concept behind Law 11/2007, of 22 June, on the

electronic access of citizens to public services and its partial regulatory implementation in the central government and associated or dependent public bodies through Royal Decree 1671/2009, of 6 November, according to which electronic processing is no more than a way of managing procedures.

The Regulation that approves this Royal Decree has four main objectives: to improve administrative efficiency, increase transparency and involvement, guarantee easily usable digital services and improve legal certainty.

In the first place, it seeks to improve administrative efficiency to make a fully electronic and interconnected public administration service effective. Thus, the use of electronic means established in Law 39/2015, of 1 October, and Law 40/2015, of 1 October, has been implemented and specified, to guarantee, on the one hand, that administrative procedures are processed by the government electronically, and, on the other, that citizens interact with the government using these means in the cases in which this is mandatory or in those in which they voluntarily decide to do so.

A second objective is to increase the transparency of administrative work and the involvement of citizens in the eGovernment process. Therefore, the functioning of the electronic General Access Point (eGAP) and the Citizen Folder in the State Public Sector has been developed.

Third, the Regulation seeks to guarantee digital services that are easy to use, so that the relationship between the interested party and the government is straightforward, intuitive and effective when using the electronic channel.

Fourth, it seeks to improve legal certainty. The overlapping of different legal regimes has been eliminated. The Regulation that was previously in force under Royal Decree 1671/2009, of 6 November, has been adapted and integrated into this Regulation and subsequently definitively repealed and the Regulation has been adapted to the new framework of Law 39/2015, of 1 October, and Law 40/2015, of 1 October.

The Royal Decree consists of a single article that approves the Regulation of the work and functioning of the public sector by electronic means, two transitional provisions, a repealing provision and five final provisions.

Two of the five final provisions amend current regulations. These affect Royal Decree 4/2010, of 8 January, which regulates the national interoperability scheme in the area of eGovernment and Royal Decree 931/2017, of 27 October, which regulates the regulatory impact analysis report.

Article 29 of Royal Decree 4/2010, of 8 January, establishes that the national interoperability scheme will be implemented and perfected over time in parallel with the progress of eGovernment services, technological developments and as the infrastructures that support it are consolidated. Certain aspects of its current wording have been amended (Articles 9, 11, 14, 16, 17 and 18), as well as the First Additional Provision and the Glossary Annex, while Article 19 and the Third and Fourth Additional Provisions have been deleted.

Royal Decree 931/2017, of 27 October, has been amended to include in the regulatory impact analysis report an analysis of the impact on expenses of eGovernment means and services as part of the budgetary impact of the projects and also to include in the "Other impacts" section the impact of the implementation or use of eGovernment means and services as a result of the application of the projected regulation on those subject to the rule and for the organisation and functioning of the Administration.

Royal Decree 1671/2009, of 6 November, which partially implements Law 11/2007, of 22 June, on the electronic access of citizens to public services has been repealed.

This Royal Decree entered into force on 2 April 2021.

Comisión Nacional del Mercado de Valores (CNMV)

CNMV Board Resolution, of 11 March 2021, which amends the Internal Regulations of the Commission and the CNMV Board Agreement, of 11 March 2021, on the delegation of powers.

The CNMV's internal regulations establish that some matters may be delegated by the Board to the Executive Committee, the chairman and the vice-chairman, or to the general directors of the CNMV, which is usual practice in the public administration service. This is reflected in the Agreement for the delegation of powers of 11 March 2021.

 Correction of errors in the CNMV Agreement, of 11 March 2021, on the delegation of powers.

Other

Bank of Spain Circular 1/2021, of 28 January, which amends Circular 1/2013, of 24 May, on the risk information centre, and Circular 5/2012, of 27 June, addressed to credit institutions and payment service providers, on transparency in banking and responsible lending.

The main objective of this Circular is to adapt Bank of Spain Circular 1/2013, of 24 May, on the risk information centre and Circular 5/2012, of 27 June, addressed to credit institutions and payment service providers, on transparency in banking and responsible lending, to the changes introduced in the regulation of the risk information centre and the official benchmark rates by Order ETD/699/2020, of 24 July, regulating revolving credit and amending Order ECO/697/2004, of 11 March, on the risk information centre; Order EHA/1718/2010, of 11 June, on the regulation and control of advertising for banking services and products, and Order EHA/2899/2011, of 28 October, on transparency and protection of banking services customers.

European Union regulations (in order of publication in the *OJEU*)

Regulation (EU) 2021/23 of the European Parliament and of the Council, of 16
 December 2020, on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No. 1095/2010, (EU) No. 648/2012, (EU) No. 600/2014, (EU) No. 806/2014 and (EU) 2015/2365 and Directives 2002/47/EC, 2004/25/CE, 2007/36/CE, 2014/59/EU and (EU) 2017/1132.

Published in the *OJEU* (L) No. 22, of 22/01/2021, pp. 1-102.

Commission Implementing Decision (EU) 2021/85, of 27 January 2021, on the equivalence to the requirements of Regulation (EU) No. 648/2012 of the European Parliament and of the Council of the regulatory framework of the United States of America for central counterparties that are authorised and supervised by the U.S. Securities and Exchange Commission.

Published in the *OJEU* (L) No. 29, of 28/01/2021, pp. 27-33.

Regulation (EU) 2021/168 of the European Parliament and of the Council, of 10
 February 2021, amending Regulation (EU) 2016/1011 as regards the exemption of certain third-country spot foreign exchange benchmarks and the designation of replacements for certain benchmarks in cessation, and amending Regulation (EU) No. 648/2012.

Published in the *OJEU* (L) No. 49, of 12/02/2021, pp. 6-17.

Commission Delegated Regulation (EU) 2021/236, of 21 December 2020, amending technical standards laid down in Delegated Regulation (EU) 2016/2251 as regards to the timing of when certain risk management procedures will start to apply for the purpose of the exchange of collateral.

Published in the *OJEU* (L) No. 56, of 17/02/2021, pp. 1-5.

Commission Delegated Regulation (EU) 2021/237, of 21 December 2020, amending regulatory technical standards laid down in Delegated Regulations (EU) 2015/2205, (EU) 2016/592 and (EU) 2016/1178 as regards the date at which the clearing obligation takes effect for certain types of contracts.

Published in the *OJEU* (L) No. 56, of 17/02/2021, pp. 6-9.

Regulation (EU) 2021/241 of the European Parliament and of the Council, of 12
 February 2021, establishing the Recovery and Resilience Facility

Published in the *OJEU* (L) No. 57, of 18/02/2021, pp. 17-75.

 Communication from the Commission. Technical guide on the application of the principle of "do not cause significant harm" under the Regulation on the Recovery and Resilience Facility.

Published in *OJEU* (C) No. 58, of 18/02/2021, pp. 1-30.

European Securities and Markets Authority Decision (EU) 2021/272, of 16 December 2020, renewing the temporary requirement to natural or legal persons who have net short positions to lower the notification thresholds of net short positions in relation to the issued share capital of companies whose shares are admitted to trading on a regulated market to notify the competent authorities above a certain threshold in accordance with point (a) of Article 28(1) of Regulation (EU) No. 236/2012 of the European Parliament and of the Council.

Published in the $O\!J\!E\!U\left(L\right)$ No. 61, of 22/02/2021, pp. 7-26.

Directive (EU) 2021/338 of the European Parliament and of the Council, of 16
 February 2021, amending Directive 2014/65/EU as regards information requirements, product governance and position limits, and Directives 2013/36/EU and (EU) 2019/878 as regards their application to investment firms, to help the recovery from the COVID-19 crisis.

Published in the *OJEU* (L) No. 68, of 26/02/2021, pp. 14-28.

 Commission Delegated Regulation (EU) 2021/424, of 17 December 2019, amending Regulation (EU) No. 575/2013 of the European Parliament and of the Council with regard to the alternative standardised approach for market risk.

Published in the $O\!J\!E\!U\left(L\right)$ No. 84, of 11/03/2021, pp. 1-15.

Commission Implementing Regulation (EU) 2021/437, of 3 March 2021, amending Implementing Regulation (EU) No. 1011/2014 as regards changes to the model for transmission of financial data, to the model for the payment application including additional information concerning financial instruments and to the model for the accounts.

Published in the *OJEU* (L) No. 85, of 12/03/2021, pp. 107-146.

 Commission Implementing Regulation (EU) 2021/451, of 17 December 2020, laying down implementing technical standards for the application of Regulation (EU) No. 575/2013 of the European Parliament and of the Council with regard to supervisory reporting of institutions and repealing Implementing Regulation (EU) No. 680/2014.

Published in the *OJEU* (L) No. 97, of 19/03/2021, pp. 1-1,955.

Commission Delegated Regulation (EU) 2021/539, of 11 February 2021, amending Delegated Regulation (EU) No. 1222/2014 supplementing Directive 2013/36/EU of the European Parliament and of the Council with regard to regulatory technical standards for the specification of the methodology for the identification of global systemically important institutions and for the definition of subcategories of global systemically important institutions.

Published in the OJEU (L) No. 108, of 29/03/2021, pp. 10-14.

 Regulation (EU) 2021/523 of the European Parliament and of the Council, of 24 March 2021, establishing the InvestEU Programme and amending Regulation (EU) 2015/1017.

Published in the *OJEU* (L) No. 107, of 26/03/2021, pp. 30-89.

Commission Delegated Regulation (EU) 2021/529, of 18 December 2020, establishing regulatory technical standards amending Delegated Regulation (EU) 2017/583 as regards adjustment of liquidity thresholds and trade percentiles used to determine the size specific to the instrument applicable to certain non-equity instruments.

Published in the *OJEU* (L) No. 106, of 26/03/2021, pp. 47-48.

Commission Delegated Regulation (EU) 2021/528, of 16 December 2020, supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council as regards the minimum information content of the document to be published for a prospectus exemption in connection with a takeover by means of an exchange offer, a merger or a division.

Published in the $O\!J\!E\!U\left(L\right)$ No. 106, of 26/03/2021, pp. 32-46.

 Commission Delegated Regulation (EU) 2021/527, of 15 December 2020, amending Commission Delegated Regulation (EU) 2017/565 as regards the thresholds for weekly position reporting.

Published in the *OJEU* (L) No. 106, of 26/03/2021, pp. 30-31.

- Guidelines on disclosure requirements under the Prospectus Regulation (4 March 2021). European Securities Market Authority (ESMA).

IV Statistics Annex

1 Markets

1.1 Equity

Share issues and public offerings¹

				2020				2021
	2018	2019	2020	I	11		IV	I
NO. OF ISSUERS								
Total	46	33	28	8	8	8	14	10
Capital increases	45	33	28	8	8	8	14	10
Primary offerings	2	1	1	0	0	0	1	0
Bonus issues	12	10	12	5	1	5	6	6
Of which, scrip dividend	10	9	12	5	1	5	6	6
Capital increases by conversion	6	3	2	2	0	0	0	0
For non-monetary consideration	7	2	1	1	0	0	1	1
With pre-emptive subscription rights	10	8	5	0	1	1	3	0
Without trading warrants	16	13	9	0	6	2	4	3
Secondary offerings	1	0	0	0	0	0	0	0
NO. OF ISSUES								
Total	81	52	40	8	8	8	16	10
Capital increases	80	52	40	8	8	8	16	10
Primary offering	2	1	1	0	0	0	1	0
Bonus issues	17	15	17	5	1	5	6	6
Of which, scrip dividend	15	14	17	5	1	5	6	6
Capital increases by conversion	10	4	2	2	0	0	0	0
For non-monetary consideration	9	2	2	1	0	0	1	1
With pre-emptive subscription rights	10	9	5	0	1	1	3	0
Without trading warrants	32	21	13	0	6	2	5	3
Secondary offerings	1	0	0	0	0	0	0	0
CASH VALUE (millions of euros)								
Total	12,063.2	9,806.0	10,852.1	571.3	1,611.9	5,108.5	3,560.3	2,958.2
Capital increases	11,329.5	9,806.0	10,852.1	571.3	1,611.9	5,108.5	3,560.3	2,958.2
Primary offerings	200.1	10.0	150.1	0.0	0.0	0.0	150.1	0.0
Bonus issues	3,939.7	1,565.4	1,949.0	396.4	93.5	1,083.9	375.2	772.5
Of which, scrip dividend	3,915.2	1,564.1	1,949.0	396.4	93.5	1,083.9	375.2	772.5
Capital increases by conversion	388.7	354.9	162.4	162.4	0.0	0.0	0.0	0.0
For non-monetary consideration ²	2,999.7	2,034.2	233.0	12.5	0.0	0.0	220.5	2,079.2
With pre-emptive subscription rights	888.4	4,729.8	6,837.2	0.0	50.0	3,999.5	2,787.7	0.0
Without trading warrants	2,912.9	1,111.8	1,520.3	0.0	1,468.4	25.1	26.8	106.5
Secondary offerings	733.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NOMINAL VALUE (millions of euros)								
Total	2,092.4	1,336.9	1,282.0	124.2	30.3	328.3	799.2	2,396.6
Capital increases	1,810.6	1,336.9	1,282.0	124.2	30.3	328.3	799.2	2,396.6
Primary offerings	104.9	0.5	7.8	0.0	0.0	0.0	7.8	0.0
Bonus issues	381.6	307.6	799.6	121.4	1.2	301.7	375.2	303.9
Of which, scrip dividend	357.1	306.3	799.6	121.4	1.2	301.7	375.2	303.9
Capital increases by conversion	90.0	16.6	1.7	1.7	0.0	0.0	0.0	0.0
For non-monetary consideration	557.6	401.0	68.0	1.1	0.0	0.0	66.8	2,079.2
With pre-emptive subscription rights	611.1	372.1	370.9	0.0	1.0	25.3	344.5	0.0
Without trading warrants	65.5	239.1	34.1	0.0	28.1	1.3	4.8	13.4
Secondary offerings	281.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pro memoria: Transactions BME Growth ³								
No. of issuers	8	12	9	5	3	2	3	9
No. of issues	12	17	14	6	3	2	3	11
Cash value (millions of euros)	164.5	298.3	238.5	18.3	9.9	36.0	174.3	83.2
Capital increases	164.5	298.3	238.5	18.3	9.9	36.0	174.3	83.2
Of which, primary offerings	0.0	229.4	173.5	0.1	0.0	0.0	173.4	0.0
Secondary offerings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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 listed¹

				2020				2021
	2018	2019	2020	I	II	III	IV	I
Total electronic market ²	133	129	127	129	129	127	127	127
Of which, foreign companies	8	7	7	7	7	7	7	7
Second market	4	3	0	3	0	0	0	0
Madrid	1	1	0	1	0	0	0	0
Barcelona	3	2	0	2	0	0	0	0
Bilbao	0	0	0	0	0	0	0	0
Valencia	0	0	0	0	0	0	0	0
Open outcry	11	9	11	8	11	11	11	10
Madrid	4	3	3	2	3	3	3	3
Barcelona	6	5	6	4	6	6	6	6
Bilbao	3	2	2	2	2	2	2	2
Valencia	3	2	2	2	2	2	2	1
BME MTF Equity ³	2,842	2,709	2,580	2,677	2,653	2,627	2,580	2,530
Latibex	19	19	19	19	19	19	19	19

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

1 2 3

Capitalisation¹

Millions of euros

				2020				2021
	2018	2019	2020	I	II	III	IV	I
Total electronic market ²	733,656.4	806,064.3	690,101.6	551,292.8	587,384.7	565,124.3	690,101.6	740,998.9
Of which, foreign companies ³	143,598.7	141,671.0	113,478.9	73,645.8	78,273.2	79,132.6	113,478.9	127,137.4
lbex 35	444,178.3	494,789.4	424,167.3	352,613.5	377,846.0	355,491.3	424,167.3	424,167.3
Second market	37.4	31.1	0.0	31.1	0.0	0.0	0.0	0.0
Madrid	1.9	1.9	0.0	1.9	0.0	0.0	0.0	0.0
Barcelona	35.4	29.2	0.0	29.2	0.0	0.0	0.0	0.0
Bilbao	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Open outcry	1,459.1	1,154.2	1,053.6	1,053.0	1,096.6	1,053.9	1,053.6	1,072.1
Madrid	219.4	69.8	30.9	58.9	54.0	44.4	30.9	27.1
Barcelona	1,318.4	1,036.5	956.0	939.6	981.3	944.6	956.0	1,009.5
Bilbao	56.5	32.9	20.6	32.9	26.0	22.5	20.6	21.2
Valencia	257.0	80.4	76.0	76.0	76.0	76.0	76.0	45.3
BME MTF Equity ^{4, 5}	40,020.7	44,706.4	43,595.5	39,698.8	41,841.8	42,231.5	43,595.5	44,706.5
Latibex	223,491.3	199,022.2	177,210.3	128,748.4	144,296.1	136,210.7	177,210.3	184,754.0

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

TABLE 1.2

Trading

Millions of euros

		2020						2021
	2018	2019	2020	I	II	III	IV	I
Total electronic market ¹	583,327.6	462,378.8	421,921.5	127,686.0	108,194.3	82,005.2	104,900.9	92,325.6
Of which, foreign companies	3,517.1	3,477.8	4,261.3	987.7	1,265.4	1,079.2	941.4	1,056.9
Second market	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Madrid	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Barcelona	0.2	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	8.2	6.2	2.5	1.1	0.6	0.2	0.5	2.8
Madrid	0.7	0.8	0.1	0.1	0.0	0.0	0.0	0.0
Barcelona	7.4	3.2	2.4	1.0	0.6	0.2	0.5	2.7
Bilbao	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Valencia	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
BME MTF Equity ²	4,216.3	4,014.4	3,919.2	1,145.3	809.5	651.6	1,322.6	971.2
Latibex	151.6	136.4	79.4	29.2	24.5	16.6	9.3	11.2

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

Trading on the electronic market by type of transaction¹

Millions of euros

				2020				2021
	2018	2019	2020	I	II	III	IV	I
Regular trading	552,826.8	450,575.7	405,120.5	123,941.0	102,664.3	77,141.0	101,374.2	89,838.4
Orders	300,217.8	258,242.2	278,516.1	87,831.8	70,418.8	55,007.2	65,258.3	65,154.6
Put-throughs	48,644.1	38,888.0	42,666.5	12,503.4	9,276.1	9,273.5	11,613.4	10,629.0
Block trades	203,965.0	153,445.5	83,938.0	23,605.8	22,969.4	12,860.3	24,502.5	14,054.8
Off-hours	1,667.2	3,098.1	4,174.3	1,715.4	1,065.4	456.4	937.2	970.0
Authorised trades	2,597.0	1,706.3	2,001.4	254.7	239.5	938.5	568.8	261.8
Art. 36.1 SMA trades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tender offers	18,871.7	2,509.5	5,250.9	0.0	2,569.1	2,681.7	0.0	0.0
Public offerings for sale	1,333.2	634.4	967.8	0.0	802.8	0.0	165.0	105.0
Declared trades	200.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Options	3,793.9	3,422.0	3,369.1	980.5	701.6	378.3	1,308.7	747.8
Hedge transactions	2,037.8	1,799.4	1,902.4	794.5	151.6	409.3	546.9	402.7

1 Without ETFs (Exchange Traded Funds).

TABLE 1.4

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Statistics Annex

1.2 Fixed income

Gross issues registered at the CNMV

				2020				2021
	2018	2019	2020	1	11	III	IV	I
NO. OF ISSUERS								
Total	43	39	47	13	17	13	25	11
Mortgage-covered bonds	12	12	14	3	8	3	6	3
Territorial-covered bonds	2	2	3	0	2	3	0	0
Non-convertible bonds and debentures	13	13	11	6	3	3	8	3
Convertible bonds and debentures	0	0	0	0	0	0	0	0
Backed securities	14	13	15	2	3	4	6	3
Commercial paper	13	11	11	2	4	1	4	1
Of which, asset-backed	1	0	0	0	0	0	0	0
Of which, non-asset-backed	12	11	11	2	4	1	4	1
Other fixed-income issues	0	1	2	0	2	0	0	1
Preference shares	4	1	2	0	0	1	1	1
NO. OF ISSUES								
Total	303	298	244	59	56	62	67	44
Mortgage-covered bonds	28	29	26	6	10	4	6	3
Territorial-covered bonds	2	3	6	0	3	3	0	0
Non-convertible bonds and debentures	215	205	143	43	24	42	34	28
Convertible bonds and debentures	0	0	0	0	0	0	0	0
Backed securities	41	48	52	8	11	11	22	10
Commercial paper ¹	13	11	11	2	4	1	4	1
Of which, asset-backed	1	0	0	0	0	0	0	0
Of which, non-asset-backed	12	11	11	2	4	1	4	1
Other fixed-income issues	0	1	4	0	4	0	0	1
Preference shares	4	1	2	0	0	1	1	1
NOMINAL AMOUNT (millions of euros)								
Total	101,295.6	90,164.5	132,111.3	20,762.7	35,880.4	20,743.1	54,734.5	23,527.2
Mortgage-covered bonds	26,575.0	22,933.0	22,960.0	6,250.0	11,100.0	1,160.0	4,450.0	3,500.0
Territorial-covered bonds	2,800.0	1,300.0	9,150.0	0.0	4,750.0	4,400.0	0.0	0.0
Non-convertible bonds and debentures	35,836.4	29,605.6	33,412.5	6,158.7	924.7	373.2	25,955.9	9,569.3
Convertible bonds and debentures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Backed securities	18,145.2	18,740.9	36,281.0	3,065.7	5,059.5	8,193.2	19,962.6	5,030.0
Commercial paper ²	15,089.1	15,085.0	22,291.6	5,288.3	7,780.0	5,616.6	3,616.0	4,229.6
Of which, asset-backed	240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Of which, non-asset-backed	14,849.1	15,085.0	22,291.6	5,288.3	7,780.0	5,616.6	3,616.0	4,229.6
Other fixed-income issues	0.0	1,500.0	6,266.2	0.0	6,266.2	0.0	0.0	823.3
Preference shares	2,850.0	1,000.0	1,750.0	0.0	0.0	1,000.0	750.0	375.0
Pro memoria:								
Subordinated issues	4,923.0	3,213.5	14,312.1	860.7	516.0	2,020.2	10,915.2	1,022.2
Underwritten issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Issues admitted to trading on AIAF¹

Nominal amount in millions of euros

				2020				2021
	2018	2019	2020	I	II	III	IV	I
Total	76,751.3	114,034.0	119,230.2	26,909.2	38,581.3	20,295.8	33,443.9	45,078.9
Commercial paper	15,007.0	15,036.1	22,293.8	4,126.3	8,951.9	4,264.1	4,951.4	2,902.1
Bonds and debentures	19,234.2	45,082.0	20,407.1	16,299.0	909.3	294.1	2,904.7	33,340.8
Mortgage-covered bonds	19,935.0	29,375.0	23,058.3	5,448.3	12,100.0	1,160.0	4,350.0	3,600.0
Territorial-covered bonds	800.0	3,300.0	9,150.0	0.0	4,750.0	4,400.0	0.0	0.0
Backed securities	18,925.2	18,740.9	36,281.0	1,035.7	5,580.0	9,177.5	20,487.8	4,030.0
Preference shares	2,850.0	1,000.0	1,750.0	0.0	0.0	1,000.0	750.0	375.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other fixed-income issues	0.0	1,500.0	6,290.1	0.0	6,290.1	0.0	0.0	831.0

1 Only corporate bonds are included.

TABLE 1.6

AIAF. Issuers, issues and outstanding balance

TABLE 1.8

				2020				2021
	2018	2019	2020	I	II	III	IV	I
NO. OF ISSUERS								
Total	353	331	321	327	325	323	321	316
Corporate bonds	320	299	289	295	293	291	289	282
Commercial paper	9	9	8	9	9	8	8	7
Bonds and debentures	45	40	41	39	39	40	41	41
Mortgage-covered bonds	40	35	29	35	36	30	29	29
Territorial-covered bonds	7	7	8	7	7	8	8	8
Backed securities	244	227	222	224	223	224	222	216
Preference shares	7	6	5	6	5	5	5	4
Matador bonds	5	5	5	5	5	5	5	5
Government bonds	33	32	32	32	32	32	32	34
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	14	13	13	13	13	13	13	13
Foreign public debt	9	10	10	10	10	10	10	12
Other public debt	8	8	8	8	8	8	8	8
NO. OF ISSUES								
Total	2,851	2,775	2,610	2,701	2,682	2,646	2,610	2,574
Corporate bonds	1,917	1,834	1,655	1,765	1,719	1,677	1,655	1,600
Commercial paper	106	84	53	67	78	49	53	26
Bonds and debentures	737	718	589	678	620	604	589	573
Mortgage-covered bonds	213	209	200	212	215	207	200	200
Territorial-covered bonds	20	23	22	21	21	22	22	22
Backed securities	828	787	777	774	773	782	777	765
Preference shares	8	8	9	8	7	8	9	9
Matador bonds	5	5	5	5	5	5	5	5
Government bonds	934	941	955	936	963	969	955	974
Letras del Tesoro	12	12	12	12	12	12	12	12
Long government bonds	243	236	231	237	237	233	231	232
Regional government debt	164	173	167	164	169	176	167	164
Foreign public debt	502	508	533	511	533	536	533	554
Other public debt	13	12	12	12	12	12	12	12
OUTSTANDING BALANCE ¹								
(millions of euros)								
Total	6,663,565.5	6,421,003.0	6,297,532.5	6,412,421.1	6,478,122.2	6,414,281.5	6,297,532.5	6,439,031.5
Corporate bonds	448,394.4	463,816.1	464,170.7	465,404.2	479,780.9	478,091.0	464,170.7	479,648.0
Commercial paper	9,308.7	6,423.1	4,812.4	5,840.2	6,401.8	4,675.1	4,812.4	3,245.0
Bonds and debentures	47,894.0	62,477.8	53,696.1	69,882.2	75,780.5	75,743.3	53,696.1	78,185.6
Mortgage-covered bonds	183,266.8	195,719.1	199,054.1	199,396.8	207,478.3	202,543.3	199,054.1	197,648.2
Territorial-covered bonds	18,362.3	20,762.3	18,262.3	17,762.3	19,112.3	18,512.3	18,262.3	18,262.3
Backed securities	185,002.7	172,878.9	181,341.0	166,967.9	165,753.2	170,362.2	181,341.0	175,017.1
Preference shares	4,245.0	5,240.0	6,690.0	5,240.0	4,940.0	5,940.0	6,690.0	6,975.0
Matador bonds	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8
Government bonds	6,215,171.1	5,957,186.8	5,833,361.8	5,947,017.0	5,998,341.3	5,936,190.4	5,833,361.8	5,959,383.5
Letras del Tesoro	70,442.2	68,335.5	79,765.7	68,888.5	81,414.0	88,038.0	79,765.7	82,265.0
Long government bonds	918,000.0	937,290.9	1,026,625.5	1,006,709.3	1,057,726.8	1,067,073.6	1,026,625.5	1,059,837.2
Regional government debt	33,100.4	35,247.6	32,775.5	31,493.3	32,097.8	32,815.4	32,775.5	33,894.9
Foreign public debt	5,192,055.3	4,914,792.7	4,692,674.9	4,838,405.6	4,825,582.4	4,746,743.2	4,692,674.9	4,781,866.2
Other public debt	1,573.2	1,520.2	1,520.2	1,520.2	1,520.2	1,520.2	1,520.2	1,520.2

1 Nominal amount.

AIAF. Trading

Nominal amount in millions of euros

				2020		2021		
	2018	2019	2020	1	11		IV	I
BY TYPE OF ASSET								
Total	94,241.3	158,807.2	140,509.4	45,994.9	53,413.4	25,232.4	15,868.7	21,502.7
Corporate bonds	435.4	275.2	170.2	61.8	27.5	36.4	44.5	38.9
Commercial paper	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bonds and debentures	427.0	260.0	169.4	61.4	27.5	36.2	44.3	38.9
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	7.3	13.8	0.0	0.0	0.0	0.0	0.0	0.0
Preference shares	1.2	1.4	0.8	0.4	0.1	0.2	0.2	0.0
Matador bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government bonds	93,805.8	158,532.0	140,339.2	45,933.1	53,385.9	25,196.0	15,824.2	21,463.8
Letras del Tesoro	24,766.7	25,858.4	27,975.5	5,504.2	12,722.2	5,472.2	4,276.9	2,076.0
Long government bonds	56,122.5	92,592.8	83,478.8	30,410.2	30,920.3	13,865.2	8,283.1	11,484.2
Regional government debt	3.2	35.1	0.0	0.0	0.0	0.0	0.0	0.0
Foreign public debt	12,913.5	40,027.8	28,884.9	10,018.6	9,743.4	5,858.6	3,264.3	7,903.5
Other public debt	0.0	18.0	0.0	0.0	0.0	0.0	0.0	0.0
BY TYPE OF TRANSACTION								
Total	94,241.3	158,807.2	140,509.4	45,994.9	53,413.4	25,232.4	15,868.7	21,502.7
Outright	94,241.3	158,807.2	140,509.4	45,994.9	53,413.4	25,232.4	15,868.7	21,502.7
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

Nominal amount in millions of euros

				2020				2021	
	2018	2019	2020	I	11		IV	I	
Total	92,661.9	158,792.5	140,495.9	45,990.7	53,407.9	25,230.1	15,867.2	21,492.7	
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Financial institutions	92,661.9	158,792.5	140,495.9	45,990.7	53,407.9	25,230.1	15,867.2	21,492.7	
Credit institutions	437.9	385.5	176.6	56.4	37.4	22.1	60.7	34.7	
CIS, insurance and pension funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other financial institutions	92,224.0	158,407.0	140,319.3	45,934.3	53,370.4	25,208.0	15,806.5	21,458.0	
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

				2020				2021	
	2018	2019	2020	I	II	III	IV	I	
NO. OF ISSUERS									
Total	14	13	11	12	12	12	11	11	
Private issuers	6	5	4	5	5	5	4	4	
Non-financial companies	0	0	0	0	0	0	0	0	
Financial institutions	6	5	4	5	5	5	4	4	
General government ¹	8	8	7	7	7	7	7	7	
Regional governments	2	2	2	2	2	2	2	2	
NO. OF ISSUES									
Total	58	54	44	52	52	50	44	53	
Private issuers	19	16	11	16	16	16	11	11	
Non-financial companies	0	0	0	0	0	0	0	0	
Financial institutions	19	16	11	16	16	16	11	11	
General government ¹	39	38	33	36	36	34	33	42	
Regional governments	21	20	18	18	18	18	18	27	
OUTSTANDING BALANCES ² (millions of euros)									
Total	8,268.3	7,340.4	6,158.4	6,249.6	6,242.6	6,227.9	6,158.4	8,830.8	
Private issuers	589.8	481.1	366.3	464.2	449.1	435.6	366.3	353.6	
Non-financial companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Financial institutions	589.8	481.1	366.3	464.2	449.1	435.6	366.3	353.6	
General government ¹	7,678.5	6,859.2	5,792.2	5,785.5	5,793.5	5,792.3	5,792.2	8,477.2	
Regional governments	6,959.7	6,260.7	5,179.3	5,179.3	5,179.3	5,179.3	5,179.3	7,862.8	
 Without public book-entry debt. Nominal amount. 									

SENAF. Public debt trading by type

TABLE 1.12

Nominal amounts in millions of euros									
				2020				2021	
	2018	2019	2020	I	II	III	IV	I	
Total	96,708.0	150,634.0	120,706.0	28,005.0	31,167.0	24,130.0	37,404.0	29,061.0	
Outright	96,708.0	150,634.0	120,706.0	28,005.0	31,167.0	24,130.0	37,404.0	29,061.0	
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

Number of contracts

				2020				2021
	2018	2019	2020	I	II	III	IV	I
Debt products	0	0	0	0	0	0	0	0
Debt futures ¹	0	0	0	0	0	0	0	0
lbex 35 products ^{2, 3}	6,983,287	6,625,993	6,395,357	2,135,233	1,325,909	1,427,735	1,506,481	1,316,423
lbex 35 plus futures	6,342,478	5,965,905	5,905,782	1,992,435	1,231,531	1,328,472	1,353,344	1,274,216
Futuro mini sobre Ibex 35	149,023	145,489	154,351	61,984	30,785	30,218	31,363	26,918
Ibex 35 micro futures		0	0	0	0	0	0	0
Ibex 35 dividend impact futures	70,725	144,831	91,571	10,122	8,225	24,922	48,302	15,289
Ibex 35 sector futures	2,745	6	0	0	0	0	0	0
Call mini options ⁴	193,480	177,369	104,132	36,055	18,825	12,461	36,792	_
Put mini options ⁴	224,835	192,393	139,521	34,636	36,543	31,662	36,680	_
Stock products ⁵	31,412,879	32,841,027	30,313,892	9,850,736	7,531,055	4,226,165	8,705,936	7,155,442
Futures	10,703,192	15,298,027	10,968,411	3,437,527	3,657,008	875,676	2,998,200	3,153,650
Stock dividend futures	471,614	758,700	130,055	62,040	4,200	7,800	56,015	0
Stock plus dividend futures	200	0	7,752	0	3,264	612	3,876	3,956
Call options ⁴	7,761,974	7,405,619	8,564,019	3,216,199	1,393,792	1,880,966	2,073,062	_
Put options ⁴	12,475,899	9,378,681	10,643,655	3,134,970	2,472,791	1,461,111	3,574,783	_

1

Contract size: €100,000. 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).

Contract size: Ibex 35, €10.

2 3 4 5 No reliable information is available to elaborate the breakdown

Contract size: 100 stocks.

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

Issues registered at the CNMV							TÆ	ABLE 1.14
				2020				2021
	2018	2019	2020	I	II	III	IV	I
WARRANTS								
Premium amount (millions of euros)	2,084.9	1,837.7	1,167.7	219.4	453.3	0.6	494.4	585.3
On stocks	819.0	901.4	445.7	72.1	202.0	0.0	171.6	200.3
On indexes	1,160.5	809.3	674.0	139.8	233.7	0.6	299.8	343.7
Other underlyings ¹	105.5	127.1	48.1	7.5	17.7	0.0	22.9	41.3
Number of issues	5,231	5,496	3,081	646	1,426	1	1,008	1,264
Number of issuers	5	6	5	3	2	1	3	3
OPTION BUYING AND SELLING CONTRACTS								
Nominal amounts (millions of euros)	953.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On stocks	950.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
On indexes	3.0	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	11	0	0	0	0	0	0	0
Number of issuers	2	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

2020 2021 Ш 2018 2019 2020 I П IV I WARRANTS Trading (millions of euros) 435.2 291.6 319.7 86.4 82.1 71.3 80.0 74.9 On Spanish stocks 93.3 81.1 121.1 20.5 28.3 29.7 42.6 43.9 On foreign stocks 19.7 9.6 5.3 31.6 26.0 6.5 4.6 4.9 On indexes 305.5 186.6 161.7 53.1 44.8 34.7 29.1 24.2 Other underlyings¹ 4.8 3.7 10.9 3.2 2.4 1.6 3.6 1.9 Number of issues² 3,986 3,605 3,785 1,095 1,074 805 811 878 Number of issuers² 6 4 4 7 8 7 7 7 CERTIFICATES 0.2 Trading (millions of euros) 0.0 0.0 0.3 0.3 0.2 0.0 0.0 Number of issues² 2 2 1 1 1 1 1 1 Number of issuers² 1 1 1 1 1 1 1 1 ETFs Trading (millions of euros) 3,027.6 1,718.8 2,548.1 819.0 671.4 436.0 621.6 400.5 Number of funds 6 6 5 5 5 5 5 5 Assets³ (millions of euros) 288.9 241.5 205.5 234.0 241.4 229.2 206.6 245.1

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

2 Issues or issuers which were traded in each period.

3 Only assets from national collective investment schemes are included because assets from foreign schemes are not available.

Investment services 2

Investment services. Spanish firms, branches and agents

				2020				2021
	2018	2019	2020	I	II	Ш	IV	I
BROKER-DEALERS								
Spanish firms	39	39	38	37	38	38	38	36
Branches in Spain	25	19	14	18	17	14	14	14
Agents operating in Spain	2,027	1,944	1,407	1,698	1,397	1,385	1,407	1,367
Branches in EEA ¹	9	9	8	9	9	9	8	8
Firms providing services in EEA ¹	24	25	25	25	26	25	25	23
Passports to operate in EEA ^{1, 2}	172	205	205	205	205	205	205	175
BROKERS								
Spanish firms	52	56	57	56	55	57	57	60
Branches in Spain	21	23	24	23	23	23	24	24
Agents operating in Spain	414	361	353	338	328	356	353	331
Branches in EEA ¹	2	1	0	1	1	0	0	0
Firms providing services in EEA ¹	25	24	30	25	24	28	30	32
Passports to operate in EEA ^{1, 2}	150	144	205	146	146	153	205	213
PORTFOLIO MANAGEMENT COMPANIES								
Spanish firms	1	1	1	1	1	1	1	1
FINANCIAL ADVISORY FIRMS								
Spanish firms	158	140	140	140	139	139	140	139
Branches in Spain	21	22	23	21	21	23	23	22
Branches in EEA ¹	2	2	2	2	2	2	2	1
Firms providing services in EEA ¹	29	29	27	26	28	28	27	27
Passports to operate in EEA ^{1, 2}	51	51	47	48	50	50	47	49
CREDIT INSTITUTIONS ³								
Spanish firms	114	112	111	111	111	111	111	110

1 EEA: European Economic Area.

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

Investment services. Foreign firms

				2020				2021
	2018	2019	2020	I	II	III	IV	I
Total	3,474	3,567	3,617	3,562	3,588	3,607	3,617	1,333
Investment services firms	3,002	3,088	3,131	3,083	3,105	3,123	3,131	927
From EU Member states	2,999	3,085	3,128	3,080	3,102	3,120	3,128	922
Branches	61	65	66	64	66	69	66	41
Free provision of services	2,938	3,020	3,062	3,016	3,036	3,051	3,062	881
From non-EU States	3	3	3	3	3	3	3	5
Branches	0	0	0	0	0	0	0	2
Free provision of services	3	3	3	3	3	3	3	3
Credit institutions ¹	472	479	486	479	483	484	486	406
From EU Member states	466	473	480	474	478	478	480	401
Branches	53	54	50	54	53	52	50	51
Free provision of services	413	419	430	420	425	426	430	350
Subsidiaries of free provision of services institutions	0	0	0	0	0	0	0	0
From non-EU States	6	6	6	5	5	6	6	5
Branches	3	3	4	3	3	4	4	3
Free provision of services	3	3	2	2	2	2	2	2

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

TABLE 2.2

Intermediation of spot transactions¹

TABLE 2.3

TABLE 2.4

Millions of euros

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
FIXED INCOME								
Total	3,082,789.5	3,222,363.2	3,782,640.8	735,041.6	1,108,871.4	1,117,312.0	812,220.5	744,236.9
Broker-dealers	2,184,921.9	2,263,416.4	3,345,439.9	497,478.6	679,536.9	1,114,160.4	809,770.1	741,972.5
Spanish organised markets	855,948.9	909,992.9	1,261,885.8	201,547.3	270,037.2	241,184.6	335,918.7	414,745.3
Other Spanish markets	1,111,231.9	1,012,359.1	1,721,922.5	215,515.3	321,387.3	767,902.7	386,420.7	246,211.8
Foreign markets	217,741.1	341,064.4	361,631.6	80,416.0	88,112.4	105,073.1	87,430.7	81,015.4
Brokers	897,867.6	958,946.8	437,200.9	237,563.0	429,334.5	3,151.6	2,450.4	2,264.4
Spanish organised markets	6,237.8	17,314.9	1,229.4	901.2	912.9	95.6	63.8	157.1
Other Spanish markets	702,731.7	803,742.9	405,199.7	210,317.5	405,160.9	6.7	15.5	16.6
Foreign markets	188,898.1	137,889.0	30,771.8	26,344.3	23,260.7	3,049.3	2,371.1	2,090.7
EQUITY								
Total	630,896.1	1,213,388.9	1,816,691.4	387,429.2	512,419.7	481,027.4	399,610.5	423,633.8
Broker-dealers	600,442.4	1,194,473.3	1,793,180.4	382,524.4	503,328.1	476,513.5	395,365.0	417,973.8
Spanish organised markets	525,648.7	329,666.8	261,188.7	88,826.2	90,300.4	70,683.0	61,868.9	38,336.4
Other Spanish markets	839.1	1,771.0	5,938.7	941.4	1,650.4	1,138.4	1,358.8	1,791.1
Foreign markets	73,954.6	863,035.5	1,526,053.0	292,756.8	411,377.3	404,692.1	332,137.3	377,846.3
Brokers	30,453.7	18,915.6	23,511.0	4,904.8	9,091.6	4,513.9	4,245.5	5,660.0
Spanish organised markets	6,462.5	7,712.5	7,137.8	1,980.0	2,510.1	1,627.2	1,157.4	1,843.1
Other Spanish markets	1,328.5	1,006.8	1,094.9	262.2	454.0	174.8	204.5	261.6
Foreign markets	22,662.7	10,196.3	15,278.3	2,662.6	6,127.5	2,711.9	2,883.6	3,555.3

1 Period accumulated data. Quarterly.

Intermediation of derivative transactions^{1, 2}

Millions of euros

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
Total	10,308,915.0	10,807,586.8	11,557,923.7	3,092,990.7	2,647,243.6	2,333,005.1	2,778,782.7	3,798,892.3
Broker-dealers	10,065,090.4	10,523,995.1	11,261,186.5	2,995,603.4	2,500,341.1	2,312,414.3	2,737,831.0	3,710,600.1
Spanish organised markets	5,457,270.1	5,058,147.9	3,839,450.0	1,398,540.1	1,125,366.5	657,784.1	1,028,024.7	1,028,274.7
Foreign organised markets	3,927,718.5	4,160,941.8	5,884,599.5	1,200,656.7	1,028,475.9	1,349,458.4	1,432,002.8	2,074,662.4
Non-organised markets	680,101.8	1,304,905.4	1,537,137.0	396,406.6	346,498.7	305,171.8	277,803.5	607,663.0
Brokers	243,824.6	283,591.7	296,737.2	97,387.3	146,902.5	20,590.8	40,951.7	88,292.2
Spanish organised markets	30,836.1	29,601.4	12,975.9	6,539.9	4,100.6	2,201.8	2,770.0	3,903.5
Foreign organised markets	105,915.8	116,038.0	195,686.4	35,758.0	59,555.4	16,425.1	37,982.9	81,723.0
Non-organised markets	107,072.7	137,952.3	88,074.9	55,089.4	83,246.5	1,963.9	198.8	2,665.7

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.
 Period accumulated data. Quarterly.

Portfolio management. Number of portfolios and assets under management¹

				2019	2020			
	2018	2019	2020	IV	1	II	III	IV
NUMBER OF PORTFOLIOS								
Total ²	16,172	25,389	44,983	25,389	32,814	38,359	41,911	44,983
Broker-dealers. Total	3,807	3,219	3,585	3,219	3,383	3,291	3,491	3,585
CIS ³	37	40	42	40	40	40	35	42
Other ⁴	3,770	3,179	3,543	3,179	3,343	3,251	3,456	3,543
Brokers. Total	12,364	22,169	41,397	22,169	29,431	35,068	38,420	41,397
CIS ³	83	79	82	79	78	81	81	82
Other ⁴	12,281	22,090	41,315	22,090	29,353	34,987	38,339	41,315
Portfolio management companies. ² Total	1	1	1	1	_	_	_	1
CIS ³	1	1	1	1	_	_	_	1
Other ⁴	0	0	0	0	-	-	-	0
ASSETS UNDER MANAGEMENT								
(thousands of euros)								
Total ²	4,854,719	4,946,670	6,119,284	4,946,670	4,736,945	5,322,476	5,607,558	6,119,284
Broker-dealers. Total	2,216,956	2,266,997	2,687,786	2,266,997	2,221,520	2,419,320	2,527,115	2,687,786
CIS ³	838,379	1,059,718	1,280,966	1,059,718	1,038,540	1,061,277	1,091,841	1,280,966
Other ⁴	1,378,577	1,207,279	1,406,820	1,207,279	1,182,980	1,358,043	1,435,274	1,406,820
Brokers. Total	2,619,297	2,658,674	3,410,772	2,658,674	2,515,425	2,903,156	3,080,443	3,410,772
CIS ³	1,295,580	1,346,615	1,256,276	1,346,615	920,360	1,135,309	1,024,130	1,256,276
Other ⁴	1,323,717	1,312,059	2,154,496	1,312,059	1,595,065	1,767,847	2,056,313	2,154,496
Portfolio management companies. ² Total	18,466	20,999	20,726	20,999	-	-	-	20,726
CIS ³	18,466	20,999	20,726	20,999	_	_	-	20,726

Data at the end of period. Quarterly. 1

Otras⁴

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.

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3 It includes both resident and non-resident CIS management.

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

Financial advice. Number of contracts^{1, 2}

				2019	2020			
	2018	2019	2020	IV	2020	11	III	IV
NUMBER OF CONTRACTS	2010							
Total ³	23,149	26,561	31,169	26,561	29,158	30,262	30,732	31,169
Broker-dealers. Total	5,241	6,163	8,721	6,163	7,647	8,474	8,553	8,721
Retail clients	5,211	6,115	8,670	6,115	7,598	8,424	8,500	8,670
Professional clients	21	31	45	31	47	44	47	45
Eligible counterparties	9	17	6	17	2	6	6	6
Brokers. Total	17,908	20,398	22,448	20,398	21,511	21,788	22,179	22,448
Retail clients	17,654	20,125	22,128	20,125	21,221	21,498	21,878	22,128
Professional clients	199	229	282	229	249	249	258	282
Eligible counterparties	55	44	38	44	41	41	43	38
Portfolio management companies. ³ Total	0	0	0	0	-	-	-	0
Retail clients	0	0	0	0	-	-	-	0
Professional clients	0	0	0	0	-	-	-	0
Eligible counterparties	0	0	0	0	-	-	-	0
Pro memoria: Commission received for financial	advice ⁴ (thous	ands of euro	os)					
Total ⁴	35,287	37,583	39,803	37,583	8,139	13,757	21,650	39,803
Broker-dealers	9,562	23,400	5,813	23,400	1,455	2,809	4,098	5,813
Brokers	25,725	14,183	33,990	14,183	6,684	10,948	17,552	33,990
Portfolio management companies ⁴	0	0	0	0	-	-	-	0

Data at the end of period. Quarterly. 1

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Quarterly data on assets advised are not available since the entry into force of CNMV Circular 3/2014, of 22 October. 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

4 Accumulated data from the beginning of the year to the last day of every quarter. It includes companies removed during the year. TABLE 2.5

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TABLE 2.6

Aggregated income statement. Broker-dealers

TABLE 2.7

Thousands of euros¹

	2020								
	2018	2019	2020	I	II	III	IV	l ²	
I. Interest income	73,969	38,125	35,957	-1,582	12,589	24,500	35,957	-699	
II. Net commission	296,037	279,650	310,868	73,729	140,318	217,674	310,868	29,807	
Commission revenues	414,595	427,813	525,812	126,716	246,775	375,890	525,812	48,826	
Brokering	160,320	164,606	254,307	68,269	120,852	186,917	254,307	21,178	
Placement and underwriting	11,090	8,849	5,279	529	1,270	2,022	5,279	6,904	
Securities deposit and recording	42,958	42,643	39,260	11,696	21,646	29,832	39,260	2,352	
Portfolio management	13,505	15,102	13,128	2,782	5,513	8,463	13,128	1,020	
Design and advice	21,135	34,751	16,282	4,543	8,546	12,178	16,282	1,049	
Stock search and placement	543	1,302	1,960	237	358	591	1,960	6	
Market credit transactions	0	0	0	0	0	0	0	0	
CIS marketing	55,483	53,506	50,985	12,533	24,390	37,102	50,985	4,868	
Other	109,561	107,055	144,611	26,127	64,199	98,786	144,611	11,450	
Commission expenses	118,558	148,163	214,944	52,987	106,457	158,216	214,944	19,019	
III. Financial investment income	27,088	29,452	97,113	12,209	76,359	81,645	97,113	3,135	
IV. Net exchange differences and other operating	16,614	29,066	91,278	15,860	43,553	62,949	91,278	2,663	
products and expenses									
V. Gross income	413,708	376,293	535,216	100,216	272,819	386,768	535,216	34,906	
VI. Operating income	85,837	55,978	124,993	28,917	104,835	118,562	124,993	2,859	
VII. Earnings from continuous activities	91,771	54,528	102,928	25,567	93,627	108,852	102,928	2,833	
VIII. Net earnings from the period	91,771	54,528	102,928	25,567	93,627	108,852	102,928	2,833	

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

Results of proprietary trading. Broker-dealers

TABLE 2.8

Thousands of euros¹

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
TOTAL								
Total	114,751	101,039	221,894	101,039	26,479	132,428	169,792	221,894
Money market assets and public debt	11,193	2,625	23,229	2,625	1,054	20,266	20,480	23,229
Other fixed-income securities	11,842	27,811	18,457	27,811	6,399	2,073	7,299	18,457
Domestic portfolio	8,304	13,186	11,796	13,186	2,581	8,133	9,259	11,796
Foreign portfolio	3,538	14,625	6,661	14,625	3,818	-6,060	-1,960	6,661
Equities	10,844	8,009	21,860	8,009	914	24,095	23,890	21,860
Domestic portfolio	9,901	7,006	22,859	7,006	1,250	24,344	24,124	22,859
Foreign portfolio	943	1,003	-999	1,003	-336	-249	-234	-999
Derivatives	-1,167	-3,873	28,367	-3,873	4,368	20,341	20,882	28,367
Repurchase agreements	-107	-3,492	-6,851	-3,492	-1,597	-3,106	-4,883	-6,851
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial	3,884	1,084	-6,207	1,084	-303	-2,766	-4,582	-6,207
intermediaries								
Net exchange differences	283	118	-981	118	158	-340	-563	-981
Other operating products and expenses	16,330	28,949	92,259	28,949	15,703	43,893	63,512	92,259
Other transactions	61,649	39,808	51,761	39,808	-217	27,972	43,757	51,761
INTEREST INCOME								
Total	73,968	38,127	35,957	38,127	-1,582	12,589	24,501	35,957
Money market assets and public debt	2,036	1,027	922	1,027	147	302	441	922
Other fixed-income securities	1,300	3,319	1,347	3,319	597	832	1,051	1,347
Domestic portfolio	124	734	556	734	341	409	479	556
Foreign portfolio	1,176	2,585	791	2,585	256	423	572	791
Equities	3,673	2,767	962	2,767	48	827	927	962
Domestic portfolio	2,892	2,456	766	2,456	30	657	709	766
Foreign portfolio	781	311	196	311	18	170	218	196
Repurchase agreements	-107	-3,492	-6,851	-3,492	-1,597	-3,106	-4,883	-6,851
Market credit transactions	0	0	0	0	0	0	0	0
Deposits and other transactions with financial	3,884	1,084	-6,207	1,084	-303	-2,766	-4,582	-6,207
intermediaries								
Other transactions	63,182	33,422	45,784	33,422	-474	16,500	31,547	45,784
FINANCIAL INVESTMENT INCOME								
Total	27,088	29,451	97,113	29,451	12,212	76,358	81,647	97,113
Money market assets and public debt	9,157	1,598	22,307	1,598	907	19,964	20,039	22,307
Other fixed-income securities	10,542	24,492	17,110	24,492	5,802	1,241	6,248	17,110
Domestic portfolio	8,180	12,452	11,240	12,452	2,240	7,724	8,780	11,240
Foreign portfolio	2,362	12,040	5,870	12,040	3,562	-6,483	-2,532	5,870
Equities	7,171	5,242	20,898	5,242	866	23,268	22,963	20,898
Domestic portfolio	7,009	4,550	22,093	4,550	1,220	23,687	23,415	22,093
Foreign portfolio	162	692	-1,195	692	-354	-419	-452	-1,195
Derivatives	-1,167	-3,873	28,367	-3,873	4,368	20,341	20,882	28,367
Other transactions	1,385	1,992	8,431	1,992	269	11,544	11,515	8,431
EXCHANGE DIFFERENCES AND OTHER ITEMS								
Total	13,695	33,461	88,824	33,461	15,849	43,481	63,644	88,824
Net exchange differences	283	118	-981	118	158	-340	-563	-981
Other operating products and expenses	16,330	28,949	92,259	28,949	15,703	43,893	63,512	92,259
Other transactions	-2.918	4,394	-2 454	4 3 9 4	-12	-72	695	-2.454

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 euros¹

2020								
2018	2019	2020	I	II	III	IV	l ²	
1,583	1,252	932	-4	551	601	932	19	
135,782	130,293	143,162	34,779	65,697	94,756	143,162	11,608	
156,624	150,842	165,094	40,524	75,912	111,082	165,094	13,665	
20,018	23,194	22,035	8,196	14,004	17,508	22,035	1,462	
1,120	580	2,157	979	1,172	1,198	2,157	0	
824	879	754	216	417	618	754	80	
15,412	14,890	14,554	3,404	6,648	10,239	14,554	1,646	
26,446	14,426	34,128	6,705	11,004	17,641	34,128	1,476	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
63,821	62,866	62,134	14,549	29,299	44,738	62,134	6,697	
28,983	34,008	29,331	6,475	13,367	19,137	29,331	2,304	
20,842	20,549	21,932	5,745	10,215	16,326	21,932	2,057	
-51	910	-5,562	-7,366	-6,788	-6,239	-5,562	-50	
-279	1,194	-968	-198	-416	-864	-968	-95	
137,035	133,648	137,564	27,211	59,044	88,254	137,564	11,484	
12,031	9,284	3,339	-5,456	-3,604	-1,018	3,339	93	
7,459	6,163	2,836	-5,109	-1,547	630	2,836	502	
7,459	6,163	2,836	-5,109	-1,547	630	2,836	512	
	2018 1,583 135,782 156,624 20,018 1,120 824 15,412 26,446 0 0 63,821 28,983 20,842 -51 -279 137,035 12,031 7,459 7,459	2018 2019 1,583 1,252 135,782 130,293 156,624 150,842 20,018 23,194 1,120 580 824 879 15,412 14,890 26,446 14,426 0 0 63,821 62,866 28,983 34,008 20,842 20,549 -51 910 -279 1,194 137,035 133,648 12,031 9,284 7,459 6,163 7,459 6,163	2018201920201,5831,252932135,782130,293143,162156,624150,842165,09420,01823,19422,0351,1205802,15782487975415,41214,89014,55426,44614,42634,12800000063,82162,86662,13420,84220,54921,932-51910-5,562-2791,194-968137,035133,648137,56412,0319,2843,3397,4596,1632,8367,4596,1632,836	201820192020201820192020I $1,583$ $1,252$ 932-4 $135,782$ $130,293$ $143,162$ $34,779$ $156,624$ $150,842$ $165,094$ $40,524$ $20,018$ $23,194$ $22,035$ $8,196$ $1,120$ 580 $2,157$ 979 824 879 754 216 $15,412$ $14,890$ $14,554$ $3,404$ $26,446$ $14,426$ $34,128$ $6,705$ 0 0 0 0 0 0 0 0 0 0 0 0 $28,983$ $34,008$ $29,331$ $6,475$ $20,842$ $20,549$ $21,932$ $5,745$ -51 910 $-5,562$ $-7,366$ -279 $1,194$ -968 -198 $137,035$ $133,648$ $137,564$ $27,211$ $12,031$ $9,284$ $3,339$ $-5,456$ $7,459$ $6,163$ $2,836$ $-5,109$ $7,459$ $6,163$ $2,836$ $-5,109$	201820192020I $1,583$ $1,252$ 932 -4 551 $135,782$ $130,293$ $143,162$ $34,779$ $65,697$ $156,624$ $150,842$ $165,094$ $40,524$ $75,912$ $20,018$ $23,194$ $22,035$ $8,196$ $14,004$ $1,120$ 580 $2,157$ 979 $1,172$ 824 879 754 216 417 $15,412$ $14,890$ $14,554$ $3,404$ $6,648$ $26,446$ $14,426$ $34,128$ $6,705$ $11,004$ 0 0 0 0 0 0 0 0 0 0 $63,821$ $62,866$ $62,134$ $14,549$ $29,299$ $28,983$ $34,008$ $29,331$ $6,475$ $13,367$ $20,842$ $20,549$ $21,932$ $5,745$ $10,215$ -51 910 $-5,562$ $-7,366$ $-6,788$ -279 $1,194$ -968 -198 -416 $12,031$ $9,284$ $3,339$ $-5,456$ $-3,604$ $7,459$ $6,163$ $2,836$ $-5,109$ $-1,547$ $7,459$ $6,163$ $2,836$ $-5,109$ $-1,547$	201820182018201820182018201820182018130,293143,16234,77965,69794,756135,782130,293143,16234,77965,69794,756156,624150,842165,09440,52475,912111,08220,01823,19422,0358,19614,00417,5081,1205802,1579791,1721,19882487975421641761815,41214,89014,5543,4046,64810,23926,44614,42634,1286,70511,00417,6410000000000000063,82162,86662,13414,54929,29944,73828,98334,00829,3316,47513,36719,13720,84220,54921,9325,74510,21516,326-51910-5,562-7,366-6,788-6,239-2791,194-968-198-416-86412,0319,2843,339-5,456-3,604-1,0187,4596,1632,836-5,109-1,5476307,4596,1632,836-5,109-1,547630	2020201820192020IIIIIIIV $1,583$ $1,252$ 932 -4 551 601 9322 $135,782$ $130,293$ $143,162$ $34,779$ $65,697$ $94,756$ $143,162$ $156,624$ $150,842$ $165,094$ $40,524$ $75,912$ $111,082$ $165,094$ $20,018$ $23,194$ $22,035$ $8,196$ $14,004$ $17,508$ $22,035$ $1,120$ 580 $2,157$ 979 $1,172$ $1,198$ $2,157$ 824 879 754 216 417 618 754 $15,412$ $14,890$ $14,554$ $3,404$ $6,648$ $10,239$ $14,554$ $26,446$ $14,426$ $34,128$ $6,705$ $11,004$ $17,641$ $34,128$ 0 $15,412$ 62	

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

Aggregated income statement. Portfolio management companies¹

TABLE 2.10

Thousands of euros²

2016	2017	2018	2019	2020
83	23	6	5	1
6,617	1,543	350	404	376
6,617	1,543	350	404	376
4,228	1,095	350	404	376
354	59	0	0	0
2,035	390	0	0	0
0	0	0	0	0
-1	6	-25	13	-25
-126	-52	-20	-20	-20
6,573	1,520	311	402	332
3,172	623	-2	52	-16
2,222	439	-2	37	-16
2,222	439	-2	37	-16
	2016 83 6,617 6,617 4,228 354 2,035 0 -1 -126 6,573 3,172 2,222 2,222	2016 2017 83 23 6,617 1,543 6,617 1,543 4,228 1,095 354 59 2,035 390 0 0 -1 6 -126 -52 6,573 1,520 3,172 623 2,222 439 2,222 439	2016 2017 2018 83 23 6 6,617 1,543 350 6,617 1,543 350 4,228 1,095 350 354 59 0 2,035 390 0 0 0 0 -1 6 -25 -126 -52 -20 6,573 1,520 311 3,172 623 -2 2,222 439 -2 2,222 439 -2	2016 2017 2018 2019 83 23 6 5 6,617 1,543 350 404 6,617 1,543 350 404 4,228 1,095 350 404 354 59 0 0 2,035 390 0 0 -11 6 -25 13 -126 -52 -20 -20 6,573 1,520 311 402 3,172 623 -2 52 2,222 439 -2 37 2,222 439 -2 37

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

Capital adequacy and capital ratio¹

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
TOTAL ²								
Total capital ratio ³	42.36	46.92	30.21	46.92	37.13	38.13	35.49	30.21
Own fund surplus (thousands of euros)	915,383	1,165,707	1,026,935	1,165,707	1,098,487	1,140,625	1,117,882	1,026,935
Surplus (%) ⁴	429.49	486.52	277.59	486.52	364.11	376.61	343.63	277.59
No. of companies according to surplus percentage								
≤ 100%	20	23	26	23	25	26	23	26
> 100-≤ 300%	29	31	30	31	27	26	29	30
> 300-≤ 500%	10	10	12	10	12	10	11	12
> 500%	15	13	10	13	13	14	14	10
BROKER-DEALERS								
Total capital ratio ³	45.16	49.63	30.81	49.63	39.05	39.90	36.83	30.81
Own fund surplus (thousands of euros)	874,235	1,118,273	960,720	1,118,273	1,037,871	1,076,361	1,052,796	960,720
Surplus (%) ⁴	464.51	520.42	285.14	520.42	388.12	398.73	360.35	285.14
No. of companies according to surplus percentage								
≤ 100%	7	7	9	7	6	8	8	9
> 100-≤ 300%	10	14	11	14	13	13	13	11
> 300-≤ 500%	7	4	8	4	6	4	4	8
> 500%	14	11	8	11	11	12	12	8
BROKERS								
Total capital ratio ³	21.17	23.34	24.06	23.34	22.14	23.62	23.71	24.06
Own fund surplus (thousands of euros)	40,952	47,249	66,051	47,249	60,616	64,264	65,086	66,051
Surplus (%) ⁴	164.84	191.77	200.79	191.77	176.80	195.24	196.32	200.79
No. of companies according to surplus percentage								
≤ 100%	13	16	17	16	19	18	15	17
> 100-≤ 300%	18	16	18	16	14	13	16	18
> 300-≤ 500%	3	6	4	6	6	6	7	4
> 500%	1	2	2	2	2	2	2	2
PORTFOLIO MANAGEMENT COMPANIES ²								
Total capital ratio ³	29.68	25.72	22.15	25.72	_	_	-	22.15
Own fund surplus (thousands of euros)	196	185	164	185	-	-	_	164
Surplus (%) ⁴	272.22	221.50	176.82	221.50	-	-	_	176.82
No. of companies according to surplus percentage								
≤ 100%	0	0	0	0	_	_	_	0
> 100-≤ 300%	1	1	1	1	-	-	-	1
> 300-≤ 500%	0	0	0	0	-	-	-	0
> 500%	0	0	0	0	_	_	-	0

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. 1

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. 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. 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 3

4 contains the required equity in an average company.

TABLE 2.11

Return on equity (ROE) before taxes¹

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				2019	2020			
	2018	2019	2020	IV	I	II	111	IV
TOTAL ²								
Average (%) ³	12.27	9.23	18.71	9.23	10.41	25.53	19.58	18.71
Number of companies according to annualised retu	ırn							
Losses	40	32	33	32	44	39	42	33
0-≤ 15%	22	22	15	22	13	10	10	15
> 15-≤ 45%	10	19	20	19	17	15	18	20
> 45-≤ 75%	6	7	9	7	3	8	6	9
> 75%	14	12	15	12	15	19	17	15
BROKER-DEALERS								
Average (%) ³	12.16	8.87	19.72	8.87	14.25	27.89	21.16	19.72
Number of companies according to annualised retu	ırn							
Losses	18	13	12	13	17	15	20	12
0-≤ 15%	12	13	6	13	6	6	2	6
> 15-≤ 45%	5	7	9	7	10	7	9	9
> 45-≤ 75%	2	1	6	1	1	6	2	6
> 75%	2	2	2	2	2	3	4	2
BROKERS								
Average (%) ³	13.24	12.05	12.48	12.05	-13.84	9.77	9.37	12.48
Number of companies according to annualised retu	ırn							
Losses	21	19	20	19	27	24	22	20
0-≤ 15%	10	9	9	9	7	4	8	9
> 15-≤ 45%	5	11	11	11	7	8	9	11
> 45-≤ 75%	4	6	3	6	2	2	4	3
> 75%	12	10	13	10	13	16	13	13
PORTFOLIO MANAGEMENT COMPANIES ²								
Average (%) ³	-0.84	19.74	-6.51	19.74	-	-	-	-6.51
Number of companies according to annualised retu	ırn							
Losses	1	0	1	0	-	-	-	1
0-≤ 15%	0	0	0	0	-	-	-	0
> 15-≤ 45%	0	1	0	1	-	-	-	0
> 45-≤ 75%	0	0	0	0	_	_	_	0
> 75%	0	0	0	0	-	-	-	0

1 ROE has been calculated as:

Earnings before taxes (annualized) ROE =

Own Funds

Own funds= Share capital + Paid-in surplus + Reserves – Own shares + Prior year profits and retained earnings – Interim dividend. 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. Average weighted by equity, %. 2

3

Financial advisory firms. Main figures¹

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). 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. 2 3

Accumulated data from the beginning of the year.

TABLE 2.13

Collective Investment Schemes (CIS)^a 3

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

				2020				2021
	2018	2019	2020	I	II	III	IV	¹
Total financial CIS	4,386	4,233	4,018	4,182	4,152	4,092	4,018	3,989
Mutual funds	1,617	1,595	1,515	1,578	1,562	1,534	1,515	1,510
Investment companies	2,713	2,569	2,427	2,535	2,518	2,484	2,427	2,400
Funds of hedge funds	7	7	7	7	7	7	7	8
Hedge funds	49	62	69	62	65	67	69	71
Total real estate CIS	7	5	5	5	5	5	5	4
Real estate mutual funds	3	2	2	2	2	2	2	2
Real estate investment companies	4	3	3	3	3	3	3	2
Total foreign CIS marketed in Spain	1,024	1,033	1,048	1,035	1,042	1,042	1,048	1,040
Foreign funds marketed in Spain	429	399	407	402	402	402	407	417
Foreign companies marketed in Spain	595	634	641	633	640	640	641	623
Management companies	119	123	123	124	124	125	123	122
CIS depositories	37	36	35	36	36	36	35	35

1 Available data: February 2021.

Number of CIS investors and shareholders

				2020				2021
	2018	2019	2020	I	II	III	IV	¹
Total financial CIS ²	11,627,118	12,132,581	13,014,437	12,142,357	12,324,766	12,613,450	13,014,437	13,199,651
Mutual funds	11,213,482	11,734,029	12,653,985	11,746,642	11,939,407	12,232,861	12,653,985	12,841,420
Investment companies	413,636	398,552	360,452	395,715	385,359	380,589	360,452	358,231
Total real estate CIS ²	905	799	798	796	795	795	798	694
Real estate mutual funds	483	483	483	483	483	483	483	486
Real estate investment companies	422	316	315	313	312	312	315	208
Total foreign CIS marketed in Spain ^{3, 4}	3,172,682	3,361,901	4,312,340	3,421,733	3,839,528	3,939,998	4,312,340	_
Foreign funds marketed in Spain	547,517	521,648	592,053	531,035	573,316	568,132	592,053	_
Foreign companies marketed in Spain	2,625,165	2,840,253	3,720,287	2,890,698	3,266,212	3,371,866	3,720,287	_

Available data: January 2021.

Investors and shareholders who invest in many sub-funds from the same CIS have only been taken into account once. For this reason, investors and shareholders 2 may be different from those in Tables 3.6 and 3.7.

3

Only data on UCITS are included. Data on Exchange Traded Funds (ETFs) are not included until IV-2017. From I-2018 onwards, data are estimated. On 1 January 2018 CNMV Circular 2/2017, of 25 October, entered into force, which has increased the entities subject to reporting requirements; therefore, data may not be comparable with previous information. 4

TABLE 3.2

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

CIS total net assets

Millions of euros

			2020					2021
	2018	2019	2020	I	II	III	IV	l ¹
Total financial CIS	286,930.9	308,170.1	306,604.2	274,633.1	289,847.9	293,159.3	306,604.2	307,655.8
Mutual funds ²	259,095.0	279,377.4	279,668.0	250,126.3	263,619.4	267,084.6	279,668.0	280,890.7
Investment companies	27,835.9	28,792.7	26,936.2	24,506.9	26,228.5	26,074.7	26,936.2	26,765.1
Total real estate CIS	1,058.2	1,072.9	1,218.0	1,076.8	1,205.1	1,210.2	1,218.0	1,205.1
Real estate mutual funds	309.4	309.4	310.8	309.7	309.7	310.6	310.8	310.8
Real estate investment companies	748.8	763.5	907.1	767.1	895.4	899.5	907.1	894.3
Total foreign CIS marketed in Spain ^{3, 4}	162,701.9	178,841.5	199,419.3	167,800.5	186,002.0	190,324.3	199,419.3	_
Foreign funds marketed in Spain	34,237.1	30,843.4	27,355.5	29,844.4	30,056.0	26,815.7	27,355.5	_
Foreign companies marketed in Spain	128,464.9	147,998.1	172,063.8	137,956.1	155,945.9	163,508.6	172,063.8	-

1 Available data: January 2021.

2 3 4

Available data: January 2021. Mutual funds investment in financial mutual funds of the same management company reached €7,771.9 million in December 2020. Only data on UCITS are included. Data on Exchange Traded Funds (ETFs) are not included until IV-2017. From I-2018 onwards, data are estimated. On 1 January 2018, CNMV Circular 2/2017, of 25 October, entered into force, which has increased the entities subject to reporting requirements; therefore, data may not be comparable with previous information.

Asset allocation of mutual funds

TABLE 3.4

Millions of euros

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
Asset	259,095.0	279,377.4	279,668.0	279,377.4	250,126.3	263,619.4	267,084.6	279,668.0
Portfolio investment	241,016.2	256,750.7	256,231.8	256,750.7	225,972.0	240,056.3	244,025.4	256,231.8
Domestic securities	74,486.1	66,520.4	54,630.1	66,520.4	55,616.4	55,564.9	53,561.9	54,630.1
Debt securities	50,537.5	44,637.7	38,430.9	44,637.7	38,960.2	39,528.1	38,418.7	38,430.9
Shares	10,868.4	9,047.9	6,185.3	9,047.9	5,696.7	5,810.0	5,283.9	6,185.3
Collective investment schemes	6,984.9	8,581.9	8,516.9	8,581.9	7,729.5	8,019.8	8,081.5	8,516.9
Deposits in credit institutions	5,854.8	4,004.8	1,341.5	4,004.8	3,103.6	2,067.2	1,645.0	1,341.5
Derivatives	235.4	243.2	140.9	243.2	114.8	126.9	120.7	140.9
Other	5.2	4.9	14.6	4.9	11.7	12.8	12.1	14.6
Foreign securities	166,522.5	190,224.5	201,597.2	190,224.5	170,350.5	184,486.8	190,459.0	201,597.2
Debt securities	74,079.1	83,817.5	86,109.8	83,817.5	82,667.6	83,963.6	86,819.1	86,109.8
Shares	26,660.8	33,115.9	33,886.1	33,115.9	25,407.5	29,738.0	30,293.6	33,886.1
Collective investment schemes	65,624.3	73,054.4	81,332.2	73,054.4	62,442.1	70,616.8	73,159.4	81,332.2
Deposits in credit institutions	21.1	4.5	0.1	4.5	4.5	11.1	9.7	0.1
Derivatives	136.0	231.3	268.0	231.3	-172.1	156.4	176.4	268.0
Other	1.2	0.9	0.8	0.9	0.9	0.9	0.9	0.8
Doubtful assets and matured investments	7.6	5.8	4.6	5.8	5.0	4.6	4.5	4.6
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	22,201.9	21,735.1	21,319.0	21,651.0	21,373.8	22,201.9
Net balance (Debtors - Creditors)	1,181.7	891.6	1,234.2	891.6	2,835.3	1,912.1	1,685.4	1,234.2

Asset allocation of investment companies

Millions of euros

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
Asset	27,835.9	28,792.7	26,936.2	28,792.7	24,506.9	26,228.5	26,074.7	26,936.2
Portfolio investment	24,840.8	25,940.3	24,522.5	25,940.3	21,490.8	23,583.5	23,439.5	24,522.5
Domestic securities	5,031.5	4,588.3	3,416.5	4,588.3	3,622.1	3,438.0	3,293.7	3,416.5
Debt securities	1,433.8	1,217.1	733.8	1,217.1	1,155.8	885.1	878.1	733.8
Shares	2,193.7	1,982.8	1,601.2	1,982.8	1,440.5	1,497.5	1,381.3	1,601.2
Collective investment schemes	1,193.8	1,232.2	967.7	1,232.2	892.6	927.5	921.8	967.7
Deposits in credit institutions	164.3	98.6	44.7	98.6	79.8	73.0	57.9	44.7
Derivatives	-0.2	0.8	3.2	0.8	-3.0	-3.0	-4.0	3.2
Other	46.2	56.8	66.0	56.8	56.5	58.0	58.7	66.0
Foreign securities	19,803.8	21,348.2	21,102.7	21,348.2	17,864.4	20,142.0	20,142.4	21,102.7
Debt securities	4,241.6	4,617.7	3,242.6	4,617.7	4,030.2	4,075.8	3,860.2	3,242.6
Shares	5,979.1	6,133.8	6,548.1	6,133.8	4,998.1	6,022.3	5,915.0	6,548.1
Collective investment schemes	9,540.9	10,549.0	11,275.6	10,549.0	8,781.9	9,988.5	10,315.4	11,275.6
Deposits in credit institutions	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0
Derivatives	27.6	34.1	23.8	34.1	41.9	42.1	38.6	23.8
Other	14.5	12.5	12.6	12.5	12.3	13.2	13.1	12.6
Doubtful assets and matured investments	5.6	3.8	3.2	3.8	4.3	3.5	3.4	3.2
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	2,222.4	2,659.8	2,707.5	2,396.2	2,404.0	2,222.4
Net balance (Debtors - Creditors)	262.6	192.1	190.8	192.1	308.0	248.3	230.6	190.8
Financial mutual funds: Number, investors and total net assets by category^{1, 2}

TABLE 3.6

				2020				2021
	2018	2019	2020	I	II	III	IV	³
NO. OF FUNDS								
Total financial mutual funds	1,725	1,710	1,643	1,697	1,692	1,654	1,643	1,645
Fixed income ⁴	279	281	276	283	283	276	276	275
Mixed fixed income ⁵	168	173	174	173	175	170	174	177
Mixed equity ⁶	184	185	186	187	186	183	186	188
Euro equity	113	113	104	112	110	108	104	104
Foreign equity	236	263	276	272	275	279	276	280
Guaranteed fixed income	67	66	55	66	63	57	55	55
Guaranteed equity ⁷	163	155	133	147	145	136	133	132
Global funds	242	255	247	254	247	250	247	246
Passive management ⁸	172	133	118	119	125	117	118	117
Absolute return	99	84	72	82	81	76	72	69
INVESTORS								
Total financial mutual funds	11,217,569	11,739,183	12,659,943	11,751,437	11,944,057	12,237,441	12,659,943	12,847,187
Fixed income ⁴	2,709,547	3,668,324	4,135,294	3,660,775	3,793,867	4,002,906	4,135,294	4,205,150
Mixed fixed income ⁵	1,188,157	1,087,881	1,203,280	1,203,900	1,204,871	1,184,715	1,203,280	1,269,072
Mixed equity ⁶	624,290	707,159	745,112	707,919	715,404	737,674	745,112	763,083
Euro equity	831,115	598,901	530,107	532,060	500,778	487,843	530,107	531,679
Foreign equity	2,225,366	2,655,123	3,043,542	2,732,902	2,775,877	2,914,093	3,043,542	3,106,039
Guaranteed fixed income	165,913	154,980	135,320	148,317	145,787	141,812	135,320	134,982
Guaranteed equity ⁷	494,660	428,470	356,439	391,235	383,372	368,979	356,439	352,562
Global funds	1,501,730	1,359,915	1,409,599	1,355,885	1,376,316	1,355,646	1,409,599	1,431,538
Passive management ⁸	543,192	429,428	511,251	396,398	435,035	438,709	511,251	518,716
Absolute return	930,641	646,042	587,040	619,085	609,793	602,106	587,040	531,409
TOTAL NET ASSETS (millions of eu	ros)							
Total financial mutual funds	259,095.0	279,377.4	279,668.0	250,126.3	263,619.4	267,084.6	279,668.0	280,890.7
Fixed income ⁴	66,889.3	78,583.2	81,015.9	73,475.8	76,179.4	78,775.6	81,015.9	81,134.9
Mixed fixed income ⁵	40,471.0	40,819.9	43,200.4	41,312.7	42,581.8	41,957.1	43,200.4	44,874.9
Mixed equity ⁶	23,256.0	28,775.8	30,432.7	25,829.7	27,511.7	29,019.2	30,432.7	30,719.8
Euro equity	12,177.7	10,145.1	7,091.1	6,618.2	7,027.7	6,399.0	7,091.1	7,001.8
Foreign equity	24,404.9	34,078.9	37,722.5	27,636.0	31,757.0	32,763.6	37,722.5	38,355.4
Guaranteed fixed income	4,887.4	4,809.3	4,177.0	4,505.2	4,517.4	4,397.6	4,177.0	4,151.4
Guaranteed equity ⁷	14,556.0	13,229.1	11,037.1	11,684.0	11,626.5	11,328.0	11,037.1	10,880.5
Global funds	42,137.2	43,041.9	40,918.0	37,120.7	39,071.8	39,057.4	40,918.0	41,127.9
Passive management ⁸	16,138.6	14,073.8	14,014.3	11,708.7	13,054.6	13,223.8	14,014.3	13,858.5
Absolute return	14,172.5	11,818.3	10,057.4	10,233.0	10,289.6	10,161.5	10,057.4	8,784.1

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: January 2021.

Until I-2019 it 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 short-term MMFs. 4

Mixed euro fixed income and foreign mixed fixed income. 5

6 Mixed euro equity and foreign mixed equity.

Guaranteed equity and partial guarantee.
Until I-2019 it includes: passive management CIS. From II-2019 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

				2020			2021		
	2018	2019	2020	I	II	111	IV	l ¹	
INVESTORS									
Total financial mutual funds	11,217,569	11,739,183	12,659,943	11,751,437	11,944,057	12,237,441	12,659,943	12,847,187	
Natural persons	11,008,977	11,534,957	12,437,808	11,551,161	11,738,396	12,028,712	12,437,808	12,621,171	
Residents	10,917,387	11,440,086	12,339,684	11,456,061	11,642,328	11,931,340	12,339,684	12,522,517	
Non-residents	91,590	94,871	98,124	95,100	96,068	97,372	98,124	98,654	
Legal persons	208,592	204,226	222,135	200,276	205,661	208,729	222,135	226,016	
Credit institutions	655	1,928	1,403	1,415	1,435	1,444	1,403	1,456	
Other resident institutions	207,073	201,408	219,838	198,000	203,379	206,431	219,838	223,670	
Non-resident institutions	864	890	894	861	847	854	894	890	
TOTAL NET ASSETS (millions of euros)									
Total financial mutual funds	259,095.0	279,377.4	279,668.0	250,126.3	263,619.4	267,084.6	279,668.0	280,890.7	
Natural persons	215,785.0	231,434.8	230,547.8	207,225.4	218,464.1	221,134.7	230,547.8	231,265.7	
Residents	212,758.3	228,214.4	227,418.5	204,390.5	215,479.5	218,133.5	227,418.5	228,131.5	
Non-residents	3,026.7	3,220.4	3,129.3	2,834.9	2,984.6	3,001.2	3,129.3	3,134.2	
Legal persons	43,310.0	47,942.6	49,120.2	42,900.8	45,155.3	45,949.8	49,120.2	49,625.1	
Credit institutions	384.1	523.7	480.0	412.4	440.1	447.1	480.0	510.7	
Other resident institutions	41,967.9	46,628.9	47,994.7	41,913.2	44,127.4	44,892.0	47,994.7	48,480.3	
Non-resident institutions	957.9	790.0	645.4	575.2	587.8	610.7	645.4	634.1	

1 Available data: January 2021.

Subscriptions and redemptions of financial mutual funds by category^{1, 2}

TABLE 3.8

Millions of euros

				2019	2020			
	2018	2019	2020	IV		II	III	IV
SUBSCRIPTIONS								
Total financial mutual funds	130,577.0	156,702.7	113,265.7	34,009.0	40,155.8	22,418.1	22,788.8	27,903.2
Fixed income	53,165.8	91,050.8	51,487.7	15,896.8	17,098.9	10,772.7	10,912.9	12,703.3
Mixed fixed income	14,823.4	14,154.1	15,496.2	4,623.9	7,341.1	1,628.1	3,347.8	3,179.3
Mixed equity	10,406.8	11,156.0	8,861.2	3,665.9	3,238.3	1,160.3	2,385.2	2,077.5
Euro equity	7,024.3	2,998.4	2,232.1	769.0	714.8	664.9	252.2	600.2
Foreign equity	13,265.2	16,864.0	15,974.8	3,843.4	5,649.8	3,758.1	2,584.2	3,982.7
Guaranteed fixed income	796.0	854.1	424.7	8.4	45.5	204.7	173.0	1.4
Guaranteed equity	2,116.8	898.2	74.2	22.4	15.4	8.9	24.7	25.2
Global funds	20,455.3	12,713.7	11,391.1	3,628.0	4,395.4	1,978.3	1,646.2	3,371.2
Passive management	3,014.3	2,261.9	4,944.6	476.8	928.1	1,541.1	1,015.1	1,460.4
Passive management	5,493.3	3,751.5	2,379.0	1,074.5	728.4	701.2	447.5	501.9
REDEMPTIONS								
Total financial mutual funds	122,669.5	154,273.0	112,634.4	31,757.6	42,240.3	22,286.0	22,129.0	25,979.4
Fixed income	55,823.7	80,046.4	47,611.0	14,948.6	18,569.8	9,413.2	8,611.4	11,016.6
Mixed fixed income	16,685.2	16,004.2	14,974.6	3,049.7	5,333.4	2,072.5	4,517.1	3,051.5
Mixed equity	7,344.0	7,943.7	7,667.5	2,970.6	2,962.3	1,142.5	1,566.0	1,996.7
Euro equity	5,246.8	6,540.2	4,205.3	1,235.0	1,536.8	1,037.7	711.5	919.3
Foreign equity	9,476.0	12,963.1	13,449.4	2,352.9	3,911.7	4,160.7	2,471.0	2,906.0
Guaranteed fixed income	1,202.9	1,136.7	1,030.6	287.3	306.9	203.8	272.5	247.4
Guaranteed equity	2,582.6	2,739.2	2,245.2	1,101.5	1,302.8	222.0	350.5	370.0
Global funds	11,301.6	15,133.7	12,743.7	3,133.4	4,841.6	2,187.2	2,227.3	3,487.6
Passive management	5,776.3	5,272.0	4,985.6	1,757.8	2,027.1	817.8	930.7	1,210.0
Absolute return	7,230.5	6,493.7	3,721.4	920.8	1,447.8	1,028.4	471.0	774.2

1 Estimated data.

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

Statistics Annex

TABLE 3.7

Change in assets in financial mutual funds by category: Net subscriptions/redemptions and return on assets^{1, 2}

TABLE 3.9

Millions of euros

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
NET SUBSCRIPTIONS/REDEMPTIONS								
Total financial mutual funds	7,841.8	2,467.5	621.4	2,247.9	-2,103.9	145.6	680.6	1,899.2
Fixed income	-2,766.0	10,732.6	2,062.6	914.1	-3,186.6	1,393.8	2,141.4	1,714.0
Mixed fixed income	-1,063.7	-1,506.1	2,606.2	1,618.4	3,742.5	-353.7	-988.9	206.2
Mixed equity	2,485.9	3,288.8	1,601.4	693.1	411.2	6.8	1,036.4	147.0
Euro equity	1,848.7	-3,588.2	-2,007.8	-466.0	-836.8	-366.0	-485.7	-319.3
Foreign equity	3,864.1	4,113.8	2,633.1	1,492.7	1,735.7	-355.5	174.0	1,078.9
Guaranteed fixed income	-575.8	-282.6	-707.4	-278.9	-261.3	-43.8	-156.9	-245.4
Guaranteed equity	-667.2	-1,857.0	-2,254.2	-1,078.6	-1,313.7	-213.0	-347.2	-380.2
Global funds	9,448.9	-2,553.9	-1,526.6	495.4	-574.7	-253.4	-580.3	-118.1
Passive management	-2,790.4	-3,026.8	-23.8	-1,295.8	-1,099.7	737.5	158.5	179.9
Absolute return	-1,899.6	-2,852.9	-1,761.9	153.5	-720.6	-407.0	-270.7	-363.5
RETURN ON ASSETS								
Total financial mutual funds	-13,919.3	18,002.8	-298.2	4,197.3	-27,140.2	13,353.6	2,796.2	10,692.2
Fixed income	-908.5	961.9	371.5	-202.0	-1,920.7	1,309.9	455.6	526.6
Mixed fixed income	-1,865.1	1,866.9	-206.7	248.0	-3,245.8	1,627.0	369.4	1,042.7
Mixed equity	-1,616.6	2,231.0	55.5	469.4	-3,357.3	1,675.2	471.1	1,266.6
Euro equity	-1,871.2	1,556.4	-1,044.8	577.1	-2,690.2	776.0	-142.5	1,011.9
Foreign equity	-3,522.6	5,561.1	1,012.7	2,139.2	-8,178.5	4,477.5	832.6	3,881.1
Guaranteed fixed income	6.6	204.4	75.2	-54.9	-42.8	56.1	37.1	24.8
Guaranteed equity	-194.2	530.0	62.2	-87.3	-231.3	155.6	48.7	89.3
Global funds	-2,602.1	3,460.8	-596.3	844.5	-5,345.9	2,204.0	566.4	1,979.2
Passive management	-537.5	1,133.2	-28.7	176.4	-1,262.9	608.4	15.2	610.6
Absolute return	-796.6	498.7	1.7	87.2	-864.8	464.4	142.7	259.3

Data on side-pocket sub-funds are only included in aggregate figures, and not in each individual category.
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 category¹

TABLE 3.10

% of daily average total net assets

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
MANAGEMENT YIELDS								
Total financial mutual funds	-4.19	7.67	0.85	1.77	-9.74	5.44	1.31	4.18
Fixed income	-0.79	1.83	0.99	-0.14	-2.39	1.89	0.72	0.79
Mixed fixed income	-3.25	5.75	0.50	0.87	-7.22	4.11	1.15	2.70
Mixed equity	-5.46	9.79	1.60	2.03	-11.38	6.58	1.99	4.64
Euro equity	-11.98	16.01	-12.72	6.20	-30.24	11.68	-1.71	15.60
Foreign equity	-11.89	21.00	4.76	7.10	-25.19	15.31	3.01	11.53
Guaranteed fixed income	0.56	4.52	2.18	-1.01	-0.82	1.42	1.04	0.70
Guaranteed equity	-0.80	4.20	1.00	-0.56	-1.77	1.46	0.56	0.90
Global funds	-5.11	9.24	-0.30	2.32	-12.50	6.04	1.74	5.29
Passive management	-2.55	7.88	0.29	1.36	-9.82	5.29	0.27	4.61
Absolute return	-4.01	4.93	0.87	0.98	-7.37	4.74	1.61	2.81
EXPENSES. MANAGEMENT FEE								
Total financial mutual funds	0.86	0.85	0.83	0.21	0.20	0.20	0.21	0.22
Fixed income	0.45	0.44	0.42	0.11	0.10	0.10	0.11	0.11
Mixed fixed income	0.96	0.92	0.88	0.23	0.21	0.22	0.22	0.23
Mixed equity	1.26	1.29	1.28	0.33	0.31	0.31	0.32	0.34
Euro equity	1.47	1.49	1.45	0.38	0.36	0.36	0.37	0.37
Foreign equity	1.41	1.41	1.31	0.35	0.32	0.31	0.32	0.36
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	0.26	0.26	0.27	0.28
Passive management	0.48	0.42	0.41	0.10	0.10	0.10	0.11	0.09
Absolute return	0.79	0.81	0.78	0.21	0.20	0.19	0.19	0.20
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	0.02
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	0.02

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

Quarterly returns of mutual funds. Breakdown by category¹

TABLE 3.11

In 04

IN %								
				2020				2021
	2018	2019	2020	I	11	III	IV	²
Total financial mutual funds	-4.89	7.12	0.78	-9.30	5.56	1.08	4.14	-0.12
Fixed income	-1.44	1.38	0.62	-2.43	1.82	0.60	0.68	-0.08
Mixed fixed income	-4.27	4.75	-0.03	-6.97	3.96	0.90	2.45	-0.25
Mixed equity	-6.45	9.25	0.59	-11.06	6.54	1.71	4.38	-0.24
Euro equity	-13.01	14.27	-8.75	-28.48	11.94	-2.25	16.61	-2.20
Foreign equity	-12.34	22.18	2.83	-23.11	16.43	2.62	11.93	0.48
Guaranteed fixed income	0.09	3.98	1.68	-0.94	1.20	0.83	0.59	-0.22
Guaranteed equity	-1.33	3.62	0.70	-1.86	1.35	0.43	0.81	-0.24
Global funds	-5.69	8.45	-0.31	-12.00	6.15	1.46	5.19	0.03
Passive management	-3.16	7.45	0.44	-9.29	5.54	0.10	4.81	-0.69
Absolute return	-4.81	3.94	0.94	-7.50	4.66	1.42	2.80	-0.09

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

Hedge funds and funds of hedge funds

				2019	2020			
	2018	2019	2020	IV	I	II	Ш	IV
HEDGE FUNDS								
Investors/shareholders	4,444	7,548	7,961	7,548	8,025	8,023	7,968	7,961
Total net assets (millions of euros)	2,262.2	2,832.4	2,912.6	2,832.4	2,523.3	2,704.5	2,695.2	2,912.6
Subscriptions (millions of euros)	500.7	1,290.0	454.5	835.4	215.5	70.8	42.7	125.6
Redemptions (millions of euros)	320.4	937.0	407.2	570.7	86.1	80.9	119.6	120.5
Net subscriptions/redemptions (millions of euros)	180.3	353.0	47.3	264.8	129.3	-10.1	-77.0	5.1
Return on assets (millions of euros)	-153.8	217.2	27.7	100.6	-438.5	191.4	62.5	212.3
Returns (%)	-6.47	10.35	1.77	3.94	-13.75	7.83	1.63	7.66
Management yields (%) ¹	-5.46	9.94	2.35	4.08	-15.76	7.39	2.80	7.93
Management fees (%) ¹	1.70	1.19	1.43	0.25	0.23	0.23	0.44	0.53
Financial expenses (%) ¹	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.02
FUNDS OF HEDGE FUNDS								
Investors/shareholders	2,804	2,859	2,858	2,859	2,855	2,859	2,865	2,858
Total net assets (millions of euros)	468.8	566.7	652.8	566.7	546.8	612.3	622.0	652.8
Subscriptions (millions of euros)	7.2	72.3	32.4	0.0	2.2	12.1	0.0	18.1
Redemptions (millions of euros)	0.6	0.3	3.1	-0.4	0.1	0.4	0.0	2.6
Net subscriptions/redemptions (millions of euros)	6.6	71.4	29.3	-0.4	2.1	11.7	0.0	15.5
Return on assets (millions of euros)	-6.5	26.5	56.8	4.6	-22.0	53.7	9.7	15.3
Returns (%)	-1.28	5.23	3.71	0.83	-3.49	3.26	1.59	2.44
Management yields (%) ²	-3.04	6.32	4.24	1.12	-3.08	2.81	1.75	2.55
Management fees (%) ²	1.64	1.63	1.39	0.36	0.36	0.36	0.34	0.34
Depository fees (%) ²	0.06	0.06	0.06	0.02	0.01	0.02	0.01	0.02

% of monthly average total net assets.
% of daily average total net assets.

Management companies. Number of portfolios and assets under management

2020

	2018	2019	2020	1	11	111	IV	I1
NUMBER OF PORTFOLIOS ²								
Mutual funds	1,617	1,595	1,515	1,578	1,562	1,534	1,515	1,513
Investment companies	2,713	2,560	2,422	2,530	2,512	2,479	2,422	2,404
Funds of hedge funds	7	7	7	7	7	7	7	7
Hedge funds	49	62	69	62	65	67	69	71
Real estate mutual funds	3	2	2	2	2	2	2	2
Real estate investment companies	4	3	3	3	3	3	3	3
ASSETS UNDER MANAGEMENT (millions of euros)								
Mutual funds	259,095.0	279,377.4	279,668.0	250,126.3	263,619.4	267,084.6	279,668.0	280,917.1
Investment companies	27,479.7	28,385.5	26,541.0	24,220.8	25,883.3	25,742.1	26,541.0	26,393.3
Funds of hedge funds ³	468.8	566.7	652.8	546.8	559.9	617.2	652.8	_
Hedge funds ³	2,262.2	2,832.4	2,912.6	2,523.3	2,700.1	2,700.7	2,912.6	_
Real estate mutual funds	309.4	309.4	310.8	309.7	309.7	310.6	310.8	310.8
Real estate investment companies	748.8	763.5	907.1	767.1	895.4	899.5	907.1	894.3

Available data: January 2021.
Data source: Registers of Collective Investment Schemes.
Available data: December 2020.

TABLE 3.12

TABLE 3.13

2021

Foreign Collective Investment Schemes marketed in Spain¹

				2019	2020			
	2018	2019	2020	IV	I	II	III	IV
INVESTMENT VOLUME ^{2, 3} (millions of euros)								
Total	162,335.0	178,841.5	199,419.3	178,841.5	167,800.5	186,002.0	190,324.3	199,419.3
Mutual funds	34,209.6	30,843.4	27,355.5	30,843.4	29,844.4	30,056.0	26,815.7	27,355.5
Investment companies	128,125.5	147,998.1	172,063.8	147,998.1	137,956.1	155,945.9	163,508.6	172,063.8
INVESTORS/SHAREHOLDERS ²								
Total	3,173,245	3,361,901	4,312,340	3,361,901	3,421,733	3,839,528	3,939,998	4,312,340
Mutual funds	547,826	521,648	592,053	521,648	531,035	573,316	568,132	592,053
Investment companies	2,625,419	2,840,253	3,720,287	2,840,253	2,890,698	3,266,212	3,371,866	3,720,287
NUMBER OF SCHEMES ⁴								
Total	1,024	1,033	1,048	1,033	1,035	1,042	1,042	1,048
Mutual funds	429	399	407	399	402	402	404	407
Investment companies	595	634	641	634	633	640	638	641
COUNTRY ⁴								
Luxembourg	447	462	472	462	463	469	468	472
France	263	222	225	222	222	221	224	225
Ireland	200	220	222	220	219	221	221	222
Germany	42	48	45	48	49	49	46	45
United Kingdom	27	23	23	23	23	23	23	23
The Netherlands	2	4	3	4	4	4	4	3
Austria	24	30	32	30	31	31	31	32
Belgium	5	5	5	5	5	5	5	5
Denmark	1	1	1	1	1	1	1	1
Finland	9	11	13	11	11	11	12	13
Liechtenstein	4	4	4	4	4	4	4	4

1 Only data on UCITS are included. On 1 January 2018 CNMV Circular 2/2017, of 25 October, entered into force, which has increased the entities subject to reporting requirements; therefore data may not be comparable with previous information

2 Data on Exchange Traded Funds (ETFs) are not included until IV-2017. From I-2018 onwards, data are estimated.

Investment volume: participations or shares owned by the investors/shareholders at the end of the period valued at that time. 3

4 UCITS (funds and societies) registered at the CNMV.

Real estate investment schemes ¹							T	ABLE 3.15
				2020				2021
	2018	2019	2020	I	II	III	IV	l ²
REAL ESTATE MUTUAL FUNDS								
Number	2	2	2	2	2	2	2	2
Investors	483	483	483	483	483	483	483	486
Assets (millions of euros)	309.4	309.4	310.8	309.7	309.7	310.6	310.8	310.8
Return on assets (%)	0.24	-0.02	0.47	0.09	0.01	0.30	0.06	0.00
REAL ESTATE INVESTMENT COMPANIES								
Number	4	3	3	3	3	3	3	2
Shareholders	422	316	315	313	312	312	315	208
Assets (millions of euros)	748.8	763.5	907.1	767.1	895.4	899.5	907.1	894.3

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

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TABLE 3.14