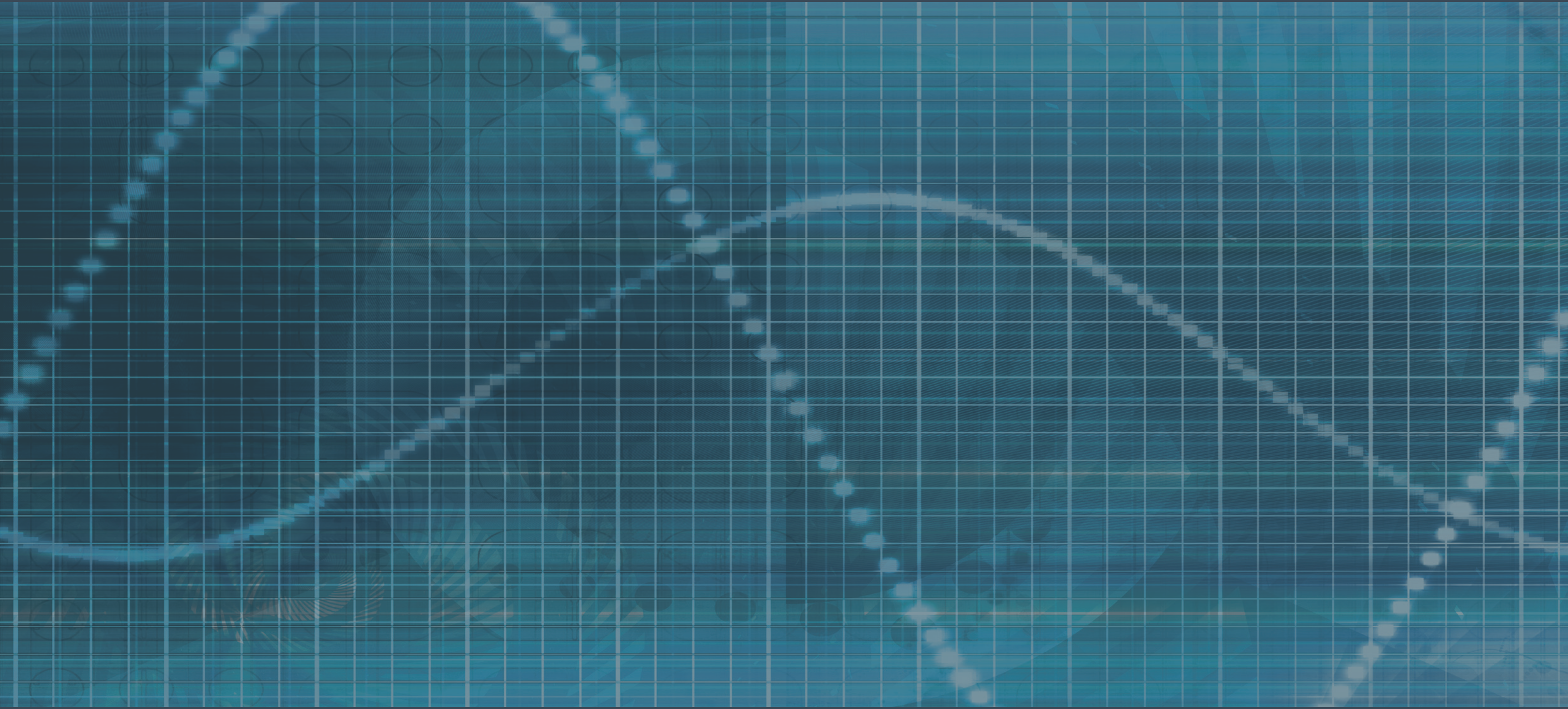
# ANNUAL REPORT

# 2020

AMCESFI | Autoridad Macroprudencial Consejo de Estabilidad Financiera



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# About AMCESFI

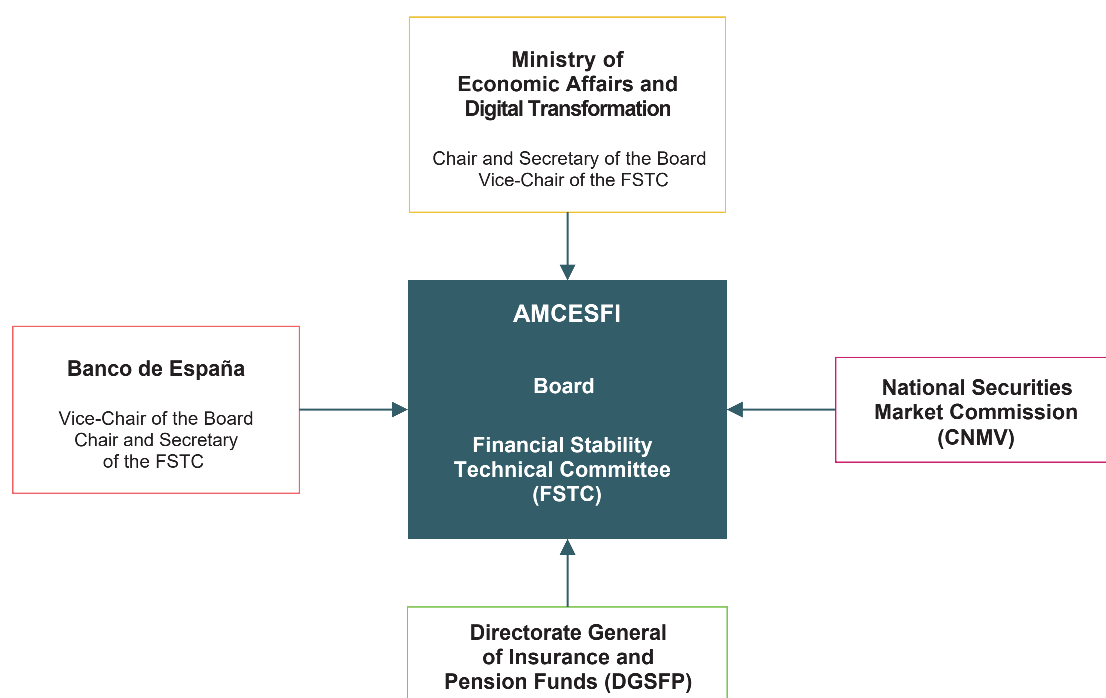
AMCESFI is the macroprudential authority for the Spanish financial system. Set up in 2019, its goal is to contribute to the stability of the financial system as a whole by identifying, preventing and mitigating any circumstances or actions that may give rise to systemic risk. For this purpose, AMCESFI is empowered to issue opinions, warnings and recommendations on matters that could affect financial stability.

AMCESFI is organised as a collegiate body attached to the Ministry of Economic Affairs and Digital Transformation. It also includes representatives of the three Spanish authorities with sectoral responsibilities for the regulation and prudential supervision of the Spanish financial system, namely the Banco de España, the National Securities Market Commission (CNMV) and the Directorate General of Insurance and Pension Funds (DGSFP).

AMCESFI comprises two permanent structures: a Board and a Financial Stability Technical Committee. It has no human, material or financial resources of its own; its activity is underpinned by the technical support it receives from its member institutions.

This Annual Report is published in compliance with the accountability obligation envisaged in Article 19 of Royal Decree 102/2019 of 1 March 2019 whereby

**Figure 1 Structure of AMCESFI**




**SOURCE:** AMCESFI.

AMCESFI was created, its legal framework was established and certain aspects relating to macroprudential tools were implemented.

For more information about AMCESFI, see www.amcesfi.es.

# Introductory letter from the First Deputy Prime Minister and Minister for Economic Affairs and Digital Transformation

Nadia Calviño, AMCESFI Board Chair

Dear reader:

A year ago, when the 2019 Annual Report was published, I was pleased to be able to say that Royal Decree 102/2019 creating AMCESFI – the Spanish macroprudential authority – had been approved. AMCESFI was set up to address the challenge of safeguarding the stability of our financial system and preventing the build-up of systemic risks that could have adverse effects on the real economy. It would soon be given the chance to prove its usefulness and warrant its creation.

In March 2020 the Spanish economy began to feel the first effects of the global COVID-19 pandemic. At that point, having an authority such as AMCESFI, operating at full strength, was – and continues to be – an assurance, enabling us to address the challenges arising from the new situation and to shape the response of the financial authorities as a whole in defence of the general interest and the preservation of financial stability.

AMCESFI has worked intensely, strengthening the coordination between its members and taking on new areas of work, while at the same time maintaining its oversight over all the other aspects with which it has concerned itself since its creation in 2019. To this end, its Board and Financial Stability Technical Committee meetings were considerably more frequent in 2020. At all these meetings, the authorities present shared analyses, identified the most pressing risks and vulnerabilities, and proposed and debated the most appropriate regulatory, economic and financial measures to ensure financial stability, in full coordination with the authorities of the other European Union (EU) countries and, most especially, with our euro area partners. In this respect, in 2020 AMCESFI complied with all the key recommendations issued by the European Systemic Risk Board (ESRB).

The year will long be remembered as one in which we all had to make every effort to combat the economic and social effects of the pandemic. From an individual standpoint, both personally and professionally, but also from the collective standpoint, these were extremely difficult months. At the macroeconomic level, Spain experienced a sudden drop in activity that required a swift and coordinated response from all the authorities. In this respect, AMCESFI proved to be a key forum for addressing the economic challenges that Spain faced throughout the year.

As I mentioned earlier, AMCESFI's founding aim was to prevent systemic problems in the financial sector from crossing over to the real economy. In 2020, the challenge was to prevent problems in the real economy from crossing over to the financial system, and from translating into permanent structural damage. To prevent this and enable a swift and complete recovery, it was essential, first to deploy a safety network for firms and for the public at large, and second to ensure that financing conditions remained favourable and to strengthen the resilience of financial institutions.

To achieve the first aim, since the early stages of the crisis the Government has rolled out measures equivalent to 18% of GDP. From a quantitative standpoint, the most important measures are the public guarantees channelled through the Official Credit Institute (ICO), which have mobilised financing amounting to more than €122 billion through credit institutions, and the public support provided for furlough schemes. No less important are the extraordinary benefits for the self-employed, the banking sector, tax and social security moratoria, and other moratoria and exemptions.

In addition to these safety networks, the solvency measures approved in March 2021 are also key. These will enable us to mobilise a further €11 billion in public funds to protect and support the firms and sectors that have been hardest hit by the pandemic and yet are essentially viable.

To ensure favourable financing conditions, in addition to the guarantee schemes, the decisive response of the EU authorities played an important part, in particular the monetary policy response of the European Central Bank (ECB).

To strengthen the resilience of financial institutions, in 2020 numerous actions coordinated at both the global and the EU level were taken to temporarily ease and make more flexible certain prudential and operational requirements. The European Commission in regulatory matters, the ESRB in the field of macroprudential policy and analysis, and banking supervision by the ECB and the three European supervisory authorities – EBA, EIOPA and ESMA – in the microprudential field, played a fundamental role in promoting and uniformly applying measures in response to COVID-19. Through their regulations, recommendations and guidelines, national supervisory authorities implemented various measures, such as those designed to strengthen financial institutions' capital levels by means of restrictions on dividend pay-outs and more prudent variable remuneration policies.

Other key EU initiatives, which took shape within a short period, were the credit line introduced by the European Stability Mechanism (ESM), the European Commission's employment support instrument (SURE), the Pan-European Guarantee Fund launched by the European Investment Bank (EIB), and the comprehensive European recovery package that includes the Next Generation EU (NGEU) instrument. This swift, firm and decisive response should be interpreted

as confirmation that governments and institutions alike have learnt the lessons of the 2008 global financial crisis and the subsequent euro area sovereign debt crisis.

In addition to the problems arising from COVID-19, other pre-pandemic challenges for financial stability were also present in 2020 and were not overlooked by AMCESFI. Notably, those deriving from the profound transformation of the financial sector as a result of the market entry of new competitors, essentially linked to the technology sector, and from the low interest rate environment, which poses a challenge in terms of profitability for the different financial operators.

AMCESFI's activity during 2020 also reflects a marked interest in the structural transformations currently under way in the financial sector and in their implications for financial stability. This includes the development of cryptocurrencies, the digital euro project and the financial sandbox which has placed Spain at the vanguard of the digital transformation of the financial system. All these and other issues, such as assessment of the climate change-related risk for the Spanish financial sector and policies to combat that risk, will continue to occupy us in the coming years.

# 1 AMCESFI activities in 2020

**AMCESFI's second year of activity was primarily influenced by the COVID-19 pandemic.** The outbreak of the health crisis in March 2020 and the public measures subsequently adopted to contain the pandemic have had a profound and complex impact on the economy in Spain, Europe and globally. In response to the challenges posed by the changes in the macro-financial environment, AMCESFI significantly stepped up its regular activities, refocusing its work priorities and strengthening coordination and information-sharing among its members.

**In 2020, the Board of AMCESFI and its advisory body, the Financial Stability Technical Committee (FSTC), met more frequently in order to closely monitor the situation caused by the pandemic.** The Board and the FSTC held a total of seventeen meetings during the year (compared with six in 2019). At these meetings, and based on the latest available information, they addressed the main systemic risks and vulnerabilities identified, macro-financial developments, the behaviour of the main activity variables, and the profitability and solvency of the financial system, by sector (paying particular attention to banking). The Board and the FSTC jointly addressed numerous regulatory and financial and economic policy initiatives proposed at different institutional levels, such as the support measures adopted by the Spanish government to help the private sector withstand the economic impact of COVID-19, and the actions of sectoral supervisors, carried out in coordination with the authorities of other European countries.

**Through the FSTC, AMCESFI was informed of seven macroprudential policy proposals in 2020.** In compliance with Article 16 of Royal Decree 102/2019 of 1 March 2019,[1] the Banco de España notified AMCESFI of six macroprudential measures relating to credit institutions: four quarterly decisions on the countercyclical capital buffer (CCyB) applicable to credit exposures in Spain and two annual decisions on identifying, and setting capital buffers for, global and domestic systemically important institutions (see Chapter 3.1). In addition, the CNMV notified its decision to temporarily restrict operations involving the creation of, or increase in, net short positions in shares admitted to trading on trading venues for which the CNMV is the competent authority. AMCESFI did not consider it necessary to issue opinions on any of these measures, since those proposed by the Banco de España did not entail any changes relating to the design and calibration of the measures previously in force for such instruments and the measure adopted by the CNMV required immediate implementation.

**In 2020, AMCESFI did not consider it necessary to issue warnings or recommendations on systemic risk factors that could affect financial stability in Spain. However, through its members, it participated in the coordinated**

1 Royal Decree 102/2019 of 1 March 2019 creating the Spanish macroprudential authority (AMCESFI), establishing its legal regime and implementing certain aspects on macroprudential tools.

**response of various international and European bodies and fora.** In the situation induced by the outbreak of COVID-19, macroprudential policy, which essentially aims to prevent and mitigate endogenous crises in the financial system, had very little room for manoeuvre to soften the impact of the shocks caused by the pandemic. These effects were initially felt by non-financial sectors and warranted the use of other types of policies, for example, fiscal or monetary policies, as lines of defence to address the economic crisis. The simultaneous and cross-cutting nature of the shocks triggered by the pandemic across jurisdictions has highlighted the importance of coordinating action and policy responses, such as those promoted[2] globally by the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS),[3] and at the European level, by the European Commission, the ECB, the ESRB,[4] the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA). All AMCESFI's member institutions have been involved in the discussions and preparatory work carried out for the approved initiatives (see Chapters 2 and 3).

**During 2020, AMCESFI followed all the relevant recommendations issued by the ESRB,** which regularly makes recommendations to the national macroprudential authorities of EU Member States. Depending on the matter addressed, some of these recommendations are specifically issued to AMCESFI in Spain, while others are addressed jointly to AMCESFI and one or more sectoral supervisors. On a case-by-case basis, the designated authorities must assess the scope and importance of each recommendation and then decide on the appropriate action required for its implementation. The ESRB must subsequently be informed of these measures. Chapter 5 of this report provides more detailed information on this aspect of AMCESFI's regular work.

**AMCESFI has continued to act as a hub for sharing reports and publications on financial stability and macroprudential policy produced by its members.** The FSTC was duly informed of the publication of the Banco de España's (half-yearly) *Financial Stability Report* and the CNMV's (quarterly) *Financial Stability Notes* (for more details, see Annex 2). AMCESFI also had access to the latest edition of the report that the Banco de España submits every year to the Spanish Parliament on the stress-test exercise conducted at Spanish deposit-taking institutions under its direct supervision.[5]

**In 2020 AMCESFI set up two provisional subcommittees to deal with two areas of work identified as particularly significant.** In November 2020, the Board of

2 For a more detailed description of the macroprudential action agreed at international level and in the European Union, see "The regulatory and supervisory response to the COVID-19 crisis" by R. Anguren, L. Gutiérrez de Rozas, E. Palomeque and C. J. Rodríguez García, *Financial Stability Review,* Issue 39, Autumn 2020.

3 The BCBS is chaired by the Governor of the Banco de España.

4 The ESRB's Advisory Technical Committee is chaired by the Governor of the Banco de España.

5 Report prepared and submitted pursuant to Article 79 of Law 10/2014 on the regulation, supervision and solvency of credit institutions.

AMCESFI, at the proposal of the FSTC, agreed to set up an Interconnections Subcommittee and a COVID-19 Measures Subcommittee, both made up of expert staff from member institutions, to inform the discussions of AMCESFI bodies in two highly technical and specialised work areas.

**AMCESFI's Interconnections Subcommittee** was mandated with analysing the direct and indirect interconnections between subsectors and institutions within the Spanish financial system, focusing particularly on interconnections with systemically important institutions. Chapter 4 of this report describes the work of this subcommittee, led by the Head of the Macroprudential Policy Division at the Banco de España.

**AMCESFI's COVID-19 Measures Subcommittee** was set up to create an analytical framework for assessing the possible financial stability implications of the debt moratoria, public guarantee schemes and other fiscal measures taken to protect the real economy in response to the COVID-19 pandemic. To comply with Recommendation ESRB/2020/8, AMCESFI must report quarterly to the ESRB, providing standardised information on these measures in Spain, and it must regularly monitor key indicators, focusing both on the design and adoption of such measures and on the flow of credit to the real economy and the situation of the financial system. Box 5.1 describes the work of this subcommittee, which is coordinated by the director of the Technical and Financial Analysis Office of the General Secretariat of the Treasury and International Financing.

**AMCESFI also turned its attention to other significant matters in 2020, unrelated to the pandemic.** Other matters discussed by AMCESFI notably included the new developments relating to cryptocurrencies, the financial sandbox, the digital euro project, the replacement of benchmarks in financial contracts, and the main developments in international and EU macroprudential committees and fora in which AMCESFI member institutions take part.

**AMCESFI also addressed internal governance issues.** 2020 saw the conclusion of the preparatory work on internal regulations implementing basic rules for the organisation and functioning of the Board and the FSTC, pursuant to Article 3(8) of Royal Decree 102/2019, such as notice of, and attendance at, meetings and specific aspects of document management. AMCESFI's internal rules of procedure shall be reviewed every three years.

**In 2020 there were a number of changes in the membership of AMCESFI's bodies.** In December 2020, Rodrigo Buenaventura[6] (until then the CNMV's Director General of Markets and member of the FSTC) was appointed Chair of the CNMV, thus becoming a member of AMCESFI's Board, replacing Sebastián

6 Royal Decree 1137/2020 of 15 December 2020 appointing Rodrigo Buenaventura Canino Chair of the National Securities Market Commission.

**Table 1.1 Composition of AMCESFI's Board at 31 December 2020**

| Organisation | Position | Name | Position on the Board |
|---|---|---|---|
| Ministry of Economic Affairs and Digital Transformation | Third Deputy Prime Minister and Minister | Nadia María Calviño Santamaría | Chair |
| Banco de España | Governor | Pablo Hernández de Cos | Vice-Chair |
| National Securities Market Commission | Chair | Rodrigo Buenaventura Canino | Member |
| Banco de España | Deputy Governor | Margarita Delgado Tejero | Member |
| National Securities Market Commission | Vice-Chair | Montserrat Martínez Parera | Member |
| Ministry of Economic Affairs and Digital Transformation | Secretary of State for Economic Affairs and Support to Enterprise | Ana de la Cueva Fernández | Member |
| Ministry of Economic Affairs and Digital Transformation | Director General of Insurance and Pensions Funds | Sergio Álvarez Camiña | Member |
| Ministry of Economic Affairs and Digital Transformation | General Secretary of the Treasury and International Financing | Carlos San Basilio Pardo | Secretary |

**SOURCE:** AMCESFI.

Albella. At the same time, the new Vice-Chair of the CNMV, Montserrat Martínez,[7] took the place of Ana Martínez-Pina as member of AMCESFI's Board and FSTC. Previously, with the entry into force of Royal Decree 403/2020 of 25 February 2020,[8] Carlos San Basilio, General Secretary of the Treasury and International Financing, had been appointed secretary to the Board of AMCESFI, succeeding José Luis Gomara, central government lawyer at the General Secretariat of the Treasury and International Financing. Also in February, Ángel Estrada, following his appointment[9] as Director General Financial Stability, Regulation and Resolution of the Banco de España, took over from Jesús Saurina as member and secretary of the FSTC. The last change in 2020 was that of Jorge Pereiro, (acting) Director General of Markets at the CNMV since December, who joined the FSTC, replacing Rodrigo Buenaventura.

**In 2020, AMCESFI published its first Annual Report, referring to 2019, which was presented to Parliament as required by law.** AMCESFI published its *Annual Report 2019* on 31 July 2020, on its new website (www.amcesfi.es), launched on the same day. In compliance with Article 20 of Royal Decree 102/2019 of 1 March 2019, on 3 September 2020 the chair of AMCESFI's Board presented the Annual Report to the Parliamentary Committee on Economic Affairs and Digital

7 Royal Decree 1138/2020 of 15 December 2020 appointing Montserrat Martínez Parera Vice-Chair of the National Securities Market Commission.

8 Royal Decree 403/2020 of 25 February 2020 implementing the basic organisational structure of the Ministry of Economic Affairs and Digital Transformation.

9 "Ángel Estrada, new Director General Financial Stability, Regulation and Resolution", Banco de España press release dated 24 February 2020.

### Table 1.2 Composition of AMCESFI's FSTC at 31 December 2020

| Organisation | Position | Name | Position on the Committee |
|---|---|---|---|
| Banco de España | Deputy Governor | Margarita Delgado Tejero | Chair |
| Ministry of Economic Affairs and Digital Transformation | General Secretary of the Treasury and International Financing | Carlos San Basilio Pardo | Vice-Chair |
| National Securities Market Commission | Vice-Chair | Montserrat Martínez Parera | Member |
| Ministry of Economic Affairs and Digital Transformation | Director General of the Treasury and Financial Policy | Pablo de Ramón-Laca Clausen | Member |
| Ministry of Economic Affairs and Digital Transformation | Director General of Insurance and Pension Funds | Sergio Álvarez Camiña | Member |
| Banco de España | Director General Financial Stability, Regulation and Resolution | Ángel Estrada García | Member and Secretary |
| Banco de España | Director General Banking Supervision | Mercedes Olano Librán | Member |
| National Securities Market Commission | Director General of Policy and International Affairs | Víctor Rodríguez Quejido | Member |
| National Securities Market Commission | (Acting) Director General of Markets | Jorge Pereiro Couceiro | Member |
| National Securities Market Commission | Director General of Institutions | José María Marcos Bermejo | Member |

**SOURCE:** AMCESFI.

Transformation. The English-language version[10] was published on AMCESFI's website on 25 September 2020.

**In the short and medium term, AMCESFI's work priorities shall continue to focus on closely monitoring the macro-financial situation.** The financial stability implications of the support measures implemented in response to COVID-19 are a key area for shared analysis by all EU national macroprudential authorities. In addition, AMCESFI remains committed to issues relating to climate change and its impact on the financial system, and will help coordinate the work of the Banco de España, the CNMV and the DGSFP in the preparation of a joint two-yearly report, as provided for in Law 7/2021 of 20 May 2021 on climate change and energy transition.[11]

10 AMCESFI *Annual Report 2019*.

11 Article 33(1) stipulates that "the Banco de España, the National Securities Market Commission and the Directorate General of Insurance and Pension Funds, within their respective areas of competence, shall jointly prepare, every two years, a report on the degree of alignment with the climate change goals set out in the Paris Agreement and in EU legislation based on future scenarios and on the assessment of risk for the Spanish financial system arising from climate change and the policies adopted to combat it, which shall be coordinated by the Spanish macroprudential authority (AMCESFI). The report shall include any proposals it may consider necessary for mitigating this risk, and shall be published and submitted to the Congress of Deputies and the Senate".

# 2 Macro-financial environment

## Main macro-aggregates

**The economy, globally and in Spain, contracted sharply in 2020.** The pandemic dashed all growth expectations, leading to the biggest downturn in the world economy since World War II. Global GDP fell by 3.3% in 2020, according to the International Monetary Fund (IMF), following growth of 2.8% in 2019, signalling a slowdown for the second consecutive year. The decline was more pronounced in the developed economies (-4.7%) than in the developing and emerging economies (-2.2%), with marked differences, however, in the latter group: from -7% in Latin America and the Caribbean (the hardest hit region) to growth of 2.3% in China. The pandemic had a very significant impact on the euro area, with GDP contracting by 6.6%, following growth of 1.3% in 2019. In Spain, the impact was even more acutely felt, with GDP falling by 10.8%, after posting growth of 2% in 2019, above the euro area average (see Chart A.1.1 of Annex 1).

**In Spain, the unemployment rate ceased to decline.** As a result of the pandemic, the unemployment rate in Spain stood at 16.1% at end-2020, slightly below the Q3 figure, but higher than that at which it ended 2019 (13.8%). The measures to support the economy and the labour market alleviated the pandemic's impact on employment. Furlough schemes (ERTEs) provided greater flexibility for the firms hardest hit by the health crisis. At end-December 2020, 4.7% of salaried workers were on furlough. Productivity declined by close to 3.7% in 2020, in contrast to its only slightly negative performance in 2019. Inflation, according to the harmonised index of consumer prices (HICP), held at negative levels for much of the year (from April) and stood at -0.6% at end-2020 (compared with 0.8% in December of the previous year).

**Spain's lending position stood at 1.1% of GDP in 2020.** The lending position has been positive since 2012 Q4. Developments in recent years have mitigated one of the main vulnerabilities of the Spanish economy: the negative net international investment position, which had gradually declined to 71.4% of GDP by the end of 2020 Q1. However, it has since increased, standing at 84.4% at end-2020.

**The budget deficit in Spain stood at 11% of GDP at end-2020.** This reflected a sharp increase on the prior year (2.9%), as a result of the pandemic and the measures approved to counter its adverse effects on the Spanish economy. Consequently, the downward trend of the government debt-to-GDP ratio, which had started in 2015, was interrupted, increasing from 95.5% in 2019 to 120% in 2020. The situation was similar worldwide, owing to the measures implemented by governments to tackle the effects of the pandemic. The budget deficit globally rose to 12.1% of GDP (2.9% in 2019), and government debt is estimated to have increased to around 100% of GDP, i.e. 14 percentage points (pp) up on 2019.

## Equity markets

**2020 was a turbulent year for stock markets, with mixed performances at year-end in Europe and the United States.** Although stock markets made a good start in 2020, the spread of COVID-19 led to heavy losses in equity markets between mid-February and mid-March. From then on, stock markets began to recover and the renewed downward pressures triggered by the second wave of the virus and the concerns about fresh restrictions were offset by the launch of vaccination programmes and other positive developments, such as the agreement reached with the United Kingdom for its future relations with the EU and the approval by the United States of a new $900 billion stimulus package.

**In any event, overall 2020 was negative for Europe, the DAX on the Frankfurt stock exchange being the only index which managed to end the year with gains, reaching a record high.** Even though the main selective Spanish and Italian stock market indices were those with the highest gains in Europe as at 19 February 2020, when the first cases of COVID-19 were detected they experienced sharper falls than the rest of the European indices. The considerable weight of the banking sector (particularly hard hit by the pandemic) in both stock market indices, the low interest rates, the restrictions on dividend distribution and the all-time low government bond yields, along with the low representativeness of big tech stocks and the presence of tourism stocks, would all explain the decline in both the MIB and the IBEX 35, which closed the year with a fall of more than 15%, at below 8,100 points. By sector, those hardest hit by the pandemic in Europe (STOXX Europe 600) were leisure and tourism (-16%) and banking (-23%), whereas big tech stocks (+14%) and utilities (+8%) performed better.

**US stock markets ended 2020 at their highest ever and, except for Hong Kong, Asian stock markets closed the year with gains.** The approval of a new fiscal stimulus package was a boost to the main US indices at the turn of the year, most notably the Nasdaq, with rises of more than 43%, driven by the strong momentum of big techs. The Nikkei climbed 16% (reaching levels not seen in the last three decades), with Shanghai rising by close to 12% and Seoul by more than 30%. The Hong Kong stock exchange was adversely affected by a report affirming that the Chinese authorities were to investigate the company Alibaba over “monopolistic conduct”.

## Bond markets

**Sovereign bond yields in the euro area decreased very significantly in 2020.** The yield on the 10-year German Bund fell 40 basis points (bp), closing the year at -0.59%. At end-2020, the 10-year Spanish bond stood at 0.06% (-41 bp), and the 10-year Italian bond at 0.54% (-89 bp), with all-time lows recorded in most countries. There were three distinct periods in 2020. The early weeks of the year saw an across-the-

board decline in European yields, owing to the emergence of the coronavirus in China. In March, the outbreak of the pandemic in Europe and the approval of restrictions on economic activity led to a rise in risk premia, which was more pronounced in southern European countries, given the expectations of a considerable increase in their levels of indebtedness. The subsequent measures adopted by the ECB succeeded in tempering the behaviour of yields, bolstered by the European Council's support for the Recovery Plan in April 2020, which prompted a downward trend that held for the rest of the year and was also underpinned by the progress of medical research on vaccines and the foreseeable launch of vaccination campaigns.

**At end-2020, the Spanish spread fell slightly with respect to the pre-pandemic level.** In the year as a whole, it narrowed by 2 bp to 64 bp, offsetting the increase recorded at the onset of the pandemic. The fall in yields in the core euro area countries was also negligible. Conversely, sovereign spreads in Greece and Italy narrowed significantly (down 40 bp to 124 bp in Greece and 49 bp to 113 bp in Italy), as a result of the ECB's asset purchase programmes.

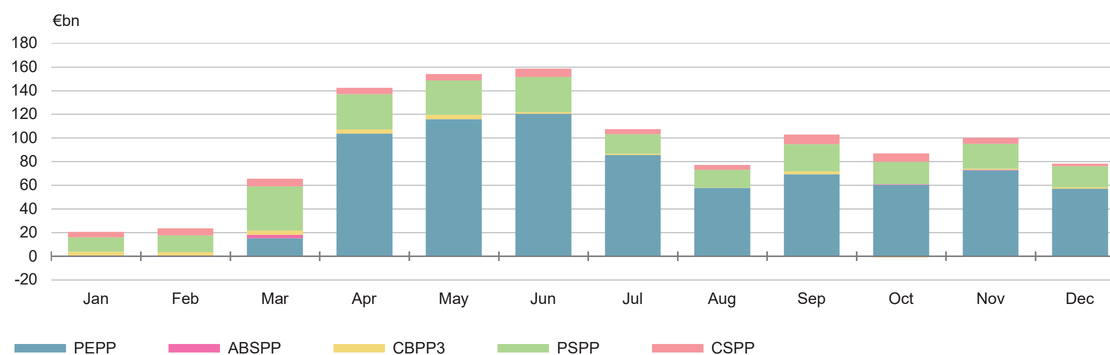
**Corporate debt was also affected by the shocks triggered by the coronavirus.** As with sovereign debt, corporate debt interest rate developments can be broken down into three periods: i) a downward trend in early 2020 owing to the search for yield; ii) a spike in March, due to the uncertainty arising from the outbreak of COVID-19, with bulk sales triggering a strong upturn in yields (600 bp in speculative grade debt); and iii) a gradual reversal from end-March, due to the support provided by the ECB's monetary policy actions. Yields fell to record lows, driven by the entry of new investors in the search for yield.

**2020 saw new record figures for euro-denominated non-financial corporate debt issuance.** Despite the halt in euro-denominated issuance by non-financial corporations (NFCs) caused by the outbreak of the pandemic, placements began to pick up in April, owing both to the improved conditions in the secondary market and to the greater liquidity needs resulting from the pandemic. In Spain, all-time highs were also reached in issuance by NFCs, although, in terms of overall issuance by non-financial corporations and financial institutions, the total was lower than that of other years.

## Money and bank intermediation markets

**In 2020, the ECB expanded its non-standard monetary policy measures.** Specifically, net asset purchases under the asset purchase programme (APP), which continued at a monthly pace of €20 billion, were supplemented in March by a temporary pandemic emergency purchase programme (PEPP), with an initial envelope of €750 billion until end-2020 (see Chart 2.1). Purchases under the PEPP, unlike those made under the APP, are conducted in a flexible manner, allowing them to be distributed flexibly over time, across jurisdictions and asset

**Chart 2.1 Monthly volume of asset purchases by the ECB under the different monetary policy programmes in 2020**




**SOURCE:** ECB.

classes. In June 2020, the envelope was increased by €600 billion until June 2021, and in December 2020, the ECB announced a further extension of the PEPP until at least end-March 2022, with an additional €500 billion, bringing the total to €1.85 trillion.[12] Thus, having spent just over €750 billion in 2020, the PEPP started 2021 with a spending capacity of almost €1.1 trillion still remaining.

**The ECB also approved other stimulus measures in 2020.** These included new rounds of TLTRO III liquidity injections in 2021, with more favourable conditions. As regards euro area interest rates, the ECB kept them unchanged for its main refinancing operations (0%), the deposit facility rate held at -0.50% and that of the marginal lending facility, at 0.25%. At end-2020, the ECB's total liabilities amounted to €6,979 billion, 49% more than in 2019. In addition, the ECB made its collateral framework more flexible.

## Foreign exchange and commodities markets

**In 2020 the euro appreciated against the US dollar, the yen and the pound sterling.** During 2020 the euro appreciated 8.95% against the US dollar. The euro's performance was marked by the pandemic and the high levels of uncertainty. Thus, in 2020 H1, the euro depreciated against the US dollar, reflecting the impact of the pandemic in Europe, but this trend was reversed in the latter half of the year, in a setting of less uncertainty and risk aversion, which eased the upward pressure on the dollar.

**During 2020 the price per barrel of West Texas Intermediate was in negative territory for the first time ever.** Oil prices fluctuated greatly in 2020, owing to the

12 In February 2021, the ECB extended the PEPP programme until end-2023.

sharp fall in demand resulting from the restrictions in place to tackle the pandemic. Consequently, the price per barrel of West Texas decreased by 20.5% to $48.7, while that of Brent fell by 21.9% to $51.8. Moreover, West Texas notably plummeted to -$37.6/barrel, as a result of surplus production and stocks in April.

# 3 Financial sector developments

## 3.1 Banking sector

**In 2020, the Spanish banking sector was significantly affected by the COVID-19 pandemic, although with the support of various economic policy measures it displayed notable aggregate resilience.** In contrast to the downward trend in recent years, bank lending to the private sector in Spain grew in 2020, driven in particular by the public guarantee scheme for business lending. Profitability was negative last year, partly as a result of the decline in economic activity, but mainly due to extraordinary factors (for example, goodwill impairment) which had no impact on regulatory capital. Indeed, solvency ratios increased, largely underpinned by various economic policy measures, such as the reform of European capital requirements and the restrictions on dividend distributions. As regards macroprudential policy decisions, the sharp decline in GDP as a result of the pandemic has altered the interpretation of the various systemic risk indicators. However, there are some clear signs (in particular a large negative output gap) that make it advisable to keep the countercyclical capital buffer at 0%.

### Changes in lending in Spain

**Outstanding credit to the resident private sector in Spain increased again in 2020, although its growth dipped in the second half of the year.** The year-on-year rate of change stood at 3.5%,[13] the first annual increase since 2008 (see Chart 3.1.1). The growth in credit reflected the banking sector's ability to respond to the demand of households and firms for liquidity, largely caused by the disruption to their incomes as a result of the COVID-19 pandemic. This ability was significantly bolstered by the economic policy measures taken to alleviate the effects of the pandemic. Indeed, the public guarantees granted by the ICO, which facilitated new lending to NFCs and sole proprietors, contributed notably to this increase in outstanding credit.

**The non-performing loans (NPLs) of business in Spain declined, although by less than in previous years.** The economic effects of the pandemic translated into lower NPL recoveries and write-offs, including a smaller number of sales. Even so, this outflow offset the inflow of new NPLs, which fell slightly with respect to 2019. Year-on-year, the stock of NPLs fell by 3.8% in 2020, as compared with a decline of 19.1% in 2019 (see Chart 3.1.1). The NPL ratio continued to decline, to stand at 4.5%, partly due to the above-mentioned growth in lending (increase in the denominator).

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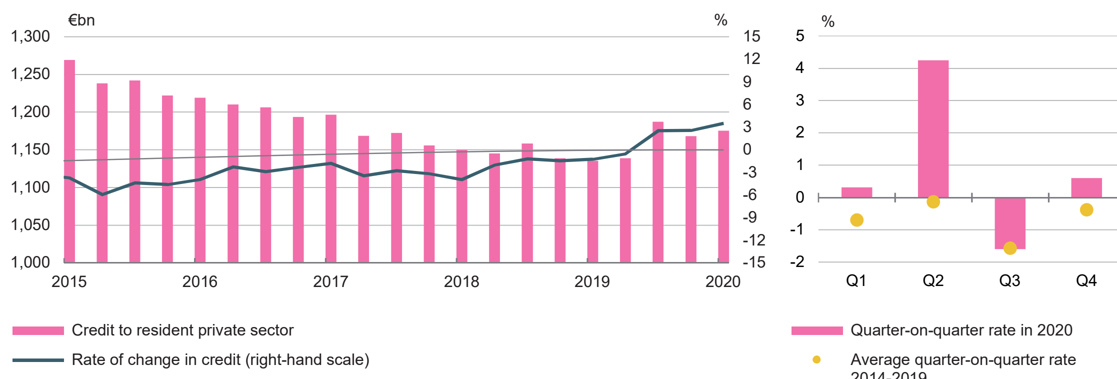
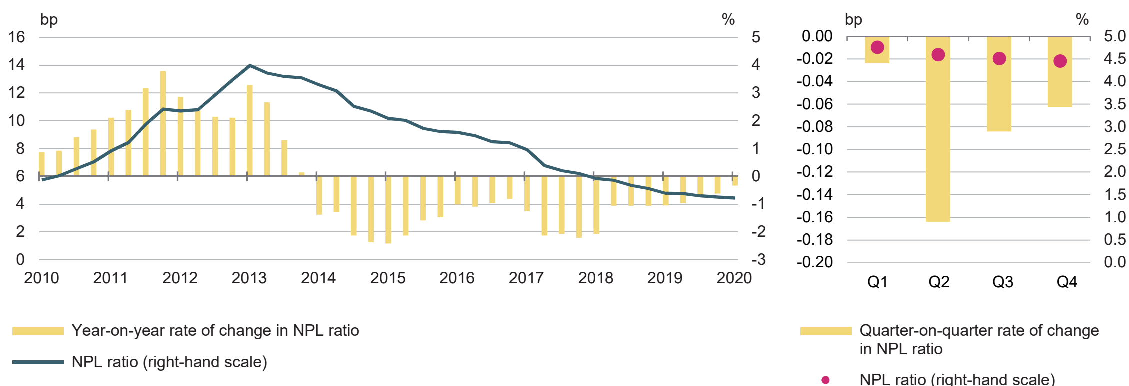
13 Growth in December 2020 was affected by the absorption of a specialised lending institution by a significant bank. Excluding this transaction, growth in 2020 as a whole was 2.9%.

## Chart 3.1.1 Lending and NPL ratio, resident private sector

1 Volume of credit and year-on-year rate of change. Business in Spain, bank-level data




2 NPL ratio




**SOURCE:** Banco de España.

**The economic policy measures adopted to mitigate the effects of the pandemic contributed to the relatively favourable performance of troubled assets in 2020, although various indicators suggest that the latent risk is high.** Indeed, some signs of deterioration in credit quality were observed last year, including a significant increase in the annual rate of change of Stage 2 loans (24.4%, as against 0.3% in 2019), an acceleration in the growth of consumer NPLs (23%, as against 12.5% in 2019) and a smaller annual decline in forborne exposures (-9.3%, as against -18.4% in 2019).

**Loans granted in 2020 with an ICO guarantee contributed significantly to the growth of lending to the business sector, providing abundant liquidity and mitigating potential problems of default by NFCs and sole proprietors in the short term.** Royal Decree-Law 8/2020 authorised a public guarantee facility of up to €100 billion,[14] to ensure that firms could cover their liquidity requirements and pay

**14** Subsequently, Royal Decree-Law 25/2020 authorised a second facility to cover the funding of new investment and Royal Decree-Law 34/2020 extended the deadline for applications under the existing guarantee facilities and improved their terms and conditions.

their debts during the pandemic, and thus avoid the disappearance of viable firms. The increase in the total volume of credit drawn down by NFCs and sole proprietors between the beginning of the pandemic and December 2020 (around €30 billion) was largely a result of the guarantee scheme, which contributed in particular to credit growth in the sector in 2020 Q2 (see Box 5.1). The guarantee scheme has mainly been directed at the most vulnerable firms, which, in its absence, would foreseeably have had considerable difficulty obtaining financing on favourable conditions. In the second half of the year, the granting of further credit under the guarantee scheme and other new lending were not sufficient to offset repayments and write-offs, so that the stock of credit to this sector fell (see Chart 3.1.2).

**The moratorium schemes have also contributed to mitigating the negative impact of the pandemic on the most severely affected households, reducing a significant volume of their short-term payment obligations.** Five different types of credit moratoria have been approved: four of them are legislative schemes that must be applied to all borrowers who satisfy their requirements (e.g. being financially vulnerable or belonging to a particular sector), and the other is a conventional scheme,[15] promoting sectoral framework agreements that encourage borrowers and lenders to agree moratoria. The amount of credit subject to these moratoria amounted to €56 billion in 2020, equivalent to 8% of all the credit in portfolios eligible for moratoria at December 2020. Last year there were also reductions in the amount of credit subject to moratoria (owing to discharges, repayments and cancellations) totalling some €22 billion, so that the outstanding volume of loans subject to moratoria at December 2020 amounted to around €34 billion, 95% of which corresponded to conventional moratoria and the rest to legislative moratoria (see Chart 3.1.2). Of the volume of loans still subject to moratoria at end-2020, 85% will expire in the first six months of 2021. Meanwhile, of the volume of loans whose moratoria have already expired, 10% has been classified as non-performing and 20% as Stage 2.

**The sectors most severely affected[16] by the pandemic in Spain recorded the largest increases in credit in 2020, and also the largest growth in non-performing loans** (see Chart 3.1.3). The outstanding amount of credit extended to the sectors hardest hit by the pandemic rose by 21.5% year-on-year in 2020, a much larger increase than in the preceding year (1.3%). Concurrently, non-performing loans to these sectors grew by 11.9% (as compared with a fall of 21.7% in 2019).

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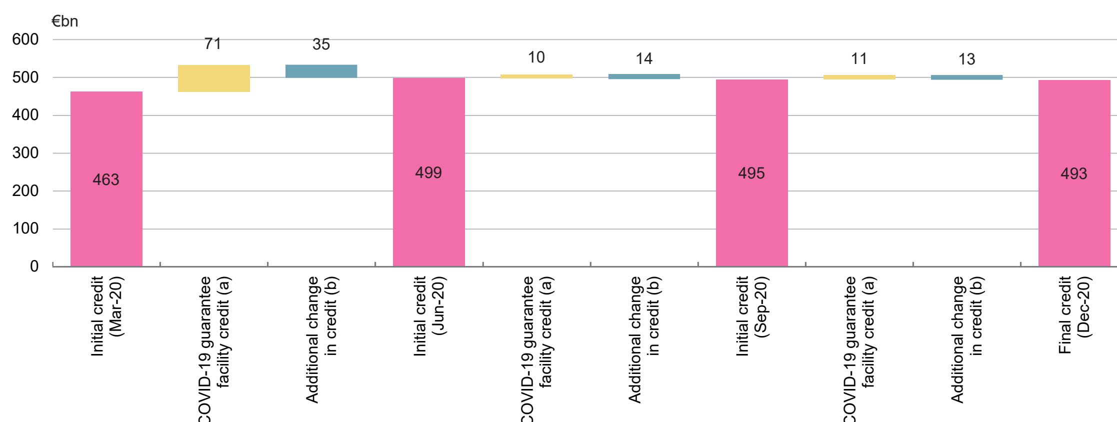
**15** Royal Decree-Law 8/2020 on extraordinary urgent measures to address the economic and social impact of COVID-19 established the legislative moratorium for personal mortgage loans. Royal Decree-Law 11/2020 introduced the moratorium for non-mortgage loan agreements (including consumer credit). Royal Decree-Law 19/2020 established a special regime for sectoral framework agreements for the deferral of customer financing transactions concluded between lender institutions and their customers through their representative associations. For their part, Royal Decree-Law 25/2020 and Royal Decree-Law 26/2020 established two new moratoria, which apply to loans to the tourist industry and to the public goods transport and charter bus industry, respectively.

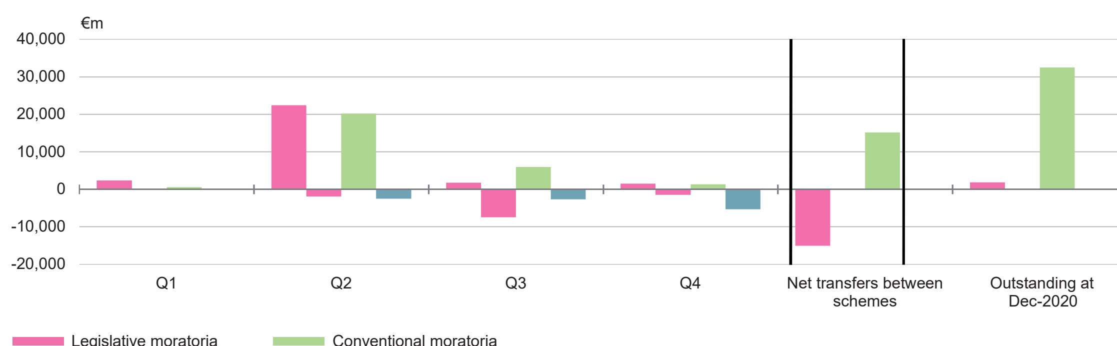
**16** The extent to which sectors are affected is measured in terms of the decline in their sales in 2020. See the footnote to Chart 3.1.3 for the list of sectors considered and Chapter 3 of the Banco de España's *Annual Report 2020* for a more thorough analysis of the economic impact of the pandemic on the non-financial business sector in Spain.

## Chart 3.1.2 Guarantees and moratoria in bank credit to the resident private sector

1 Change in bank credit to non-financial corporations and sole proprietors between March and September 2020. Business in Spain, bank-level data




2 Flow of credit to/from moratoria and outstanding volume of moratoria at December 2020 (c) (d)




**SOURCES:** ICO and Banco de España.

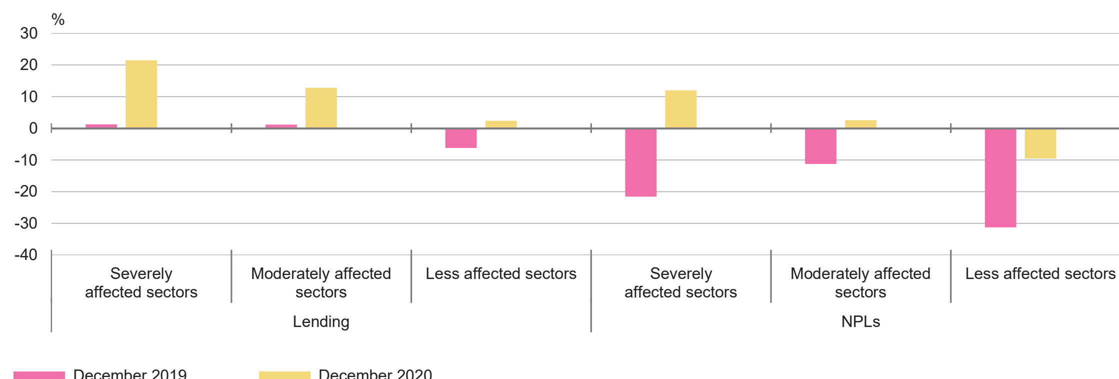
- **a** COVID-19 guarantee facility under Royal Decree-Law 8/2020 up to a total of €100 billion, extended by a further €40 billion under Royal Decree-Law 25/20. The total guaranteed credit granted up to December 2020 amounted to €116 billion, with €93 billion actually drawn down by non-financial corporations and sole proprietors. The difference corresponds to undrawn credit (e.g. credit facilties) with an ICO guarantee.
- **b** The additional change in credit to non-financial corporations and sole proprietors reflects the change in the stock of credit not explained by the implementation of the COVID-19 guarantee scheme, which corresponds to the net difference between new lending outside the guarantee scheme and repayments and write-offs.
- **c** The data on outflows are for the period to November, to be consistent with the criterion used to compute the moratoria outstanding at December (expiry is not considered to occur until the end of the month, even if it occurs during the month).
- **d** The inflow of credit to moratoria (positive bar) and the outflow of credit from moratoria (negative bar) are shown for each quarter. Also, the (positive or negative) net flow of transfers of credit volume received by each type of scheme from the other is shown for the year as a whole. The last two bars depict the stocks at December 2020 as a result of these two types of flow.

**The volume of foreign lending of the main Spanish banks declined in 2020, especially in emerging countries, largely as a result of the appreciation of the euro.** The fall in the volume of foreign lending[17] was most marked in Mexico,

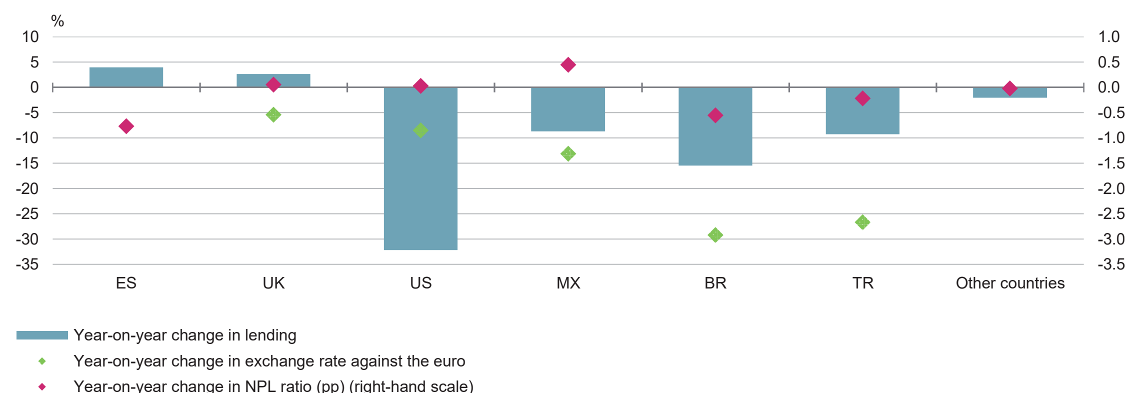
17 In 2020, foreign loans accounted for approximately 50% of the entire loan exposure of Spanish banks. The countries in which Spanish banks have the largest volume of loans, in order of size of exposure, are the United Kingdom, the United States, Mexico, Brazil and Turkey. They also lend to other countries, particularly in Latin America and Europe.

## Chart 3.1.3 Bank lending by sector of economic activity and country

1 Year-on-year rate of change in lending and NPLs by economic sector (a)
Business in Spain, bank-level data




2 Lending and NPL ratio in Spain and abroad (b)
Year-on-year rate of change. Consolidated data. December 2020




**SOURCE:** Banco de España.

**a** Severely affected sectors (in terms of fall in sales in 2020): accommodation and food services; manufacture of refined petroleum products; human health and social work activities; arts, entertainment and recreation activities; transportation and storage; and manufacture of transport equipment. Moderately affected sectors: manufacture of basic metals and fabricated metal products; manufacture of machinery and equipment; electrical equipment, electronic and optical products; other manufacturing; professional, scientific and technical activities; administrative and support service activities; wholesale and retail trade; and repair of motor vehicles. Less affected sectors: all other activities.
**b** ES - Spain, UK - United Kingdom, US - United States, MX - Mexico, BR - Brazil, TR - Turkey.

Brazil and Turkey, essentially owing to the greater depreciation of their currencies (in local currency terms lending continued to grow). The sharp fall in lending in the United States is attributable, however, to the divestment of a Spanish banking group in this country (see Chart 3.1.3). The NPL ratio declined in 2020 in most of the countries in which the main Spanish banks have a presence, except in Mexico.

## Financing and liquidity conditions in Spain and abroad

**The cost of liabilities of Spanish banks held relatively steady in 2020.** The cost of new euro-denominated debt issues held steady, in the case of senior debt, and

declined, especially in the case of subordinated debt eligible as Tier 2 capital and secured debt. Deposit rates remained at historically low levels close to zero. Maintenance of these favourable financing conditions for banks is underpinned by the monetary policy action of central banks, and in particular by the ECB's stimulus measures, such as the new asset purchase programmes and the extension of existing ones. The liquidity coverage ratio (LCR) of Spanish banks stood, at December 2020, at around 194% (as compared with 167% in 2019).

**Central bank financing increased as a proportion of the consolidated liabilities of banks in 2020.** At consolidated level, private sector deposits grew by 3.5% in 2020, although as a proportion of total financing in the form of deposits and issued debt they fell by 0.3 pp, to stand at 66.8% at December 2020. This is attributable to higher growth in other liabilities. In particular, the share of deposits from central banks grew by 4.4 pp, to 10.6% at December 2020. The increase in private sector deposits may be partly explained by precautionary motives on the part of households and firms, given the uncertainty arising from the crisis. As a result of the higher overall recourse to these different sources of financing, the consolidated assets of Spanish banks grew by 4.7% year-on-year in 2020.

## Profitability

**In 2020 the Spanish banking system recorded a net consolidated loss of around €8 billion, largely as a result of negative extraordinary factors.** Profits declined in 2020 by almost €26.5 billion, with respect to 2019. This translated into lower profitability: ROA fell to -0.21% (see Chart 3.1.4) and ROE to -3.1%. Excluding the negative extraordinary adjustments applied during the year at three of Spain's main banks,[18] and other positive extraordinary items, the sector's profitability[19] would be positive, although significantly lower than in 2019: at December 2020, ROA would be 0.3% and ROE 4.3%.

**Apart from the negative extraordinary adjustments, the main determinants of the sharp fall in profits were the decrease in net interest income and fees and commissions and the increase in impairment losses.** Part of the decline in net interest income and fees and commissions owes to currency depreciation in the main countries in which Spanish banks have a significant presence, in particular, the emerging countries. Conversely, the increase in net gains on financial assets and liabilities and, in particular, the decline in operating expenses helped boost income for the year. Impairment losses, in anticipation of the foreseeable growth in banks' NPLs, rose by more than 50% in 2020, although most of this increase was recorded in the first half of the year, with the rate of provisioning slowing from June.

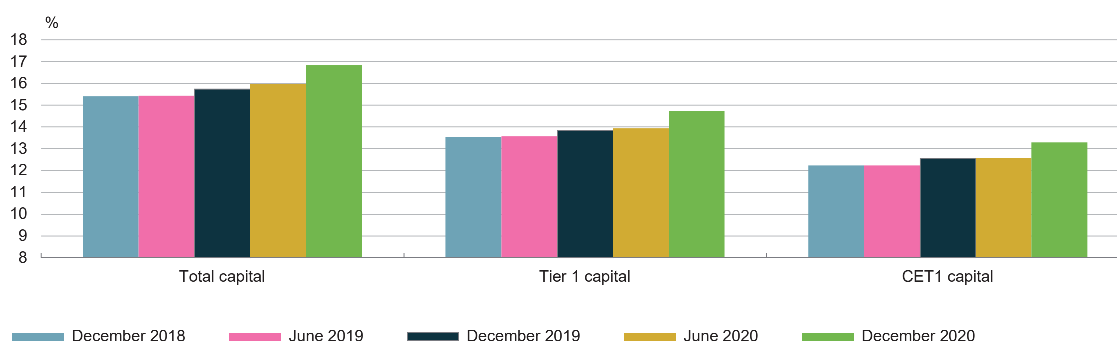
18 In particular, the two largest banks recorded adjustments to goodwill in excess of €12 billion in 2020 H1, as well as other adjustments linked to tax assets. Also, as a result of the approval of its merger, another bank recorded a fair value adjustment of more than €5.5 billion in its year-end accounts, in accordance with International Financial Reporting Standard 5 (IFRS 5).

19 For an international comparison, see the Banco de España's *Spring 2021 Financial Stability Report*.

### Chart 3.1.4 Bank profitability and solvency

1 Breakdown of the change in profit. Net consolidated profit as a % of ATA (a)

2 Capital ratios




**SOURCE:** Banco de España.

a In Chart 3.1.4.1 the green (pink) bars denote a positive (negative) contribution by the corresponding item to the change in consolidated profit at December 2020 compared with December 2019. The black diamonds show the ROA excluding both the adjustments to goodwill recorded in 2019 (-€2.8 billion) and 2020 (-€12.2 billion) and the deferred tax asset adjustment recorded in 2020 (-€2.5 billion). The yellow diamond shows the ROA in 2020 excluding, in addition to the aforementioned adjustments, the impairment as a result of accounting reclassification (-€5.6 billion) and the net extraordinary income recorded in 2020 (€1.2 billion).

## Solvency

**In 2020, despite the outbreak of the pandemic, the CET1 ratio of the Spanish banking system increased by 71 bp, to 13.3%.** The Tier 1 capital ratio and the total capital ratio both followed the same upward trend, which was especially significant in the second half of the year, reaching 14.7% and 16.8%, respectively (see Chart 3.1.4). In this respect, it should be noted that the extraordinary items that caused the sector to record losses in 2020, such as goodwill amortisation, affect balance sheet items that are not included in banks' prudential capital. Thus, although the volume of CET1 capital (the numerator of the ratio) increased, underpinned by the restrictions on dividend distributions and variable remuneration, the rise in the ratio was mainly driven by the decline in risk-weighted assets (RWAs). The flexible interpretation of the Capital Requirements Directive (the "quick fix"), the decline in RWAs linked to business lending (secured credit has a risk weighting of 0%) and the dividend

distribution restrictions were the main factors accounting for the improvement in the solvency ratios.

## Macroprudential analysis and measures

**In 2020 the Banco de España held the countercyclical capital buffer (CCyB) rate at the minimum level of 0%.** The CCyB is a capital requirement for banks, designed to be built up during financial cycle upswings and released in the downswings.[20] Given the intensity of the crisis following the outbreak of COVID-19 in March 2020 and the attendant uncertainty, the Banco de España stated its intention of holding the CCyB rate at 0% for a lengthy period, until the main economic and financial effects of the pandemic had dissipated.[21] This CCyB guidance, coordinated with other authorities, sought to contribute to sustaining the flow of credit, affording banks greater certainty regarding capital requirements, and thus to support the economic recovery, while avoiding procyclical effects.[22]

**The pandemic posed methodological challenges for the CCyB.** The indicators normally analysed when setting the CCyB lost some of their informative value as they were not intended to be used in situations such as those arising from the pandemic, i.e. with shocks exogenous to the financial system. On account of the sudden sharp fall in activity from March 2020 the GDP-related indicators showed abrupt changes that were not a result of a build-up of systemic cyclical vulnerabilities.

**The interpretation of the credit-to-GDP gap changed in 2020 and lost its relevance for decision-making.** This indicator (the difference between the economy's aggregate level of debt, measured in terms of the ratio of total credit to annual GDP, and a long-run trend path estimated by statistical procedures) exceeded the 2 pp threshold from 2020 Q2 (see Chart 3.1.5). Beyond this threshold, the indicator would be signalling systemic risk that suggests activating the CCyB. Nevertheless, the increase in the credit-to-GDP gap cannot be interpreted as an automatic alert requiring the activation of the CCyB. The growth in the credit-to-GDP gap in 2020 was primarily caused by an unprecedented fall in economic activity and, to a much lesser extent, by favourable bank lending behaviour. Specifically, lending was sustained largely thanks to the public stimulus programmes implemented (such as guarantees and moratoria), which were launched precisely in response to the fall in GDP caused by the pandemic.

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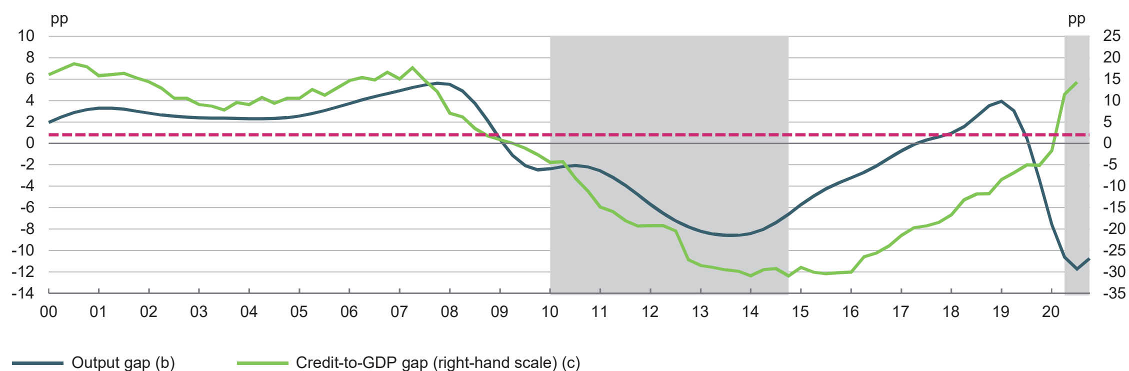
**20** See J. Mencía and J. Saurina (2016), "Macroprudential policy: objectives, instruments and indicators", *Occasional Paper* No 1601, Banco de España.

**21** See the press releases on the CCyB decisions published by the Banco de España since March 2020.

**22** Macroprudential policy tightening could have procyclical effects in downturns like the present one: by hampering the provision of financing to the economy, it could in turn exacerbate economic conditions.

**Chart 3.1.5 Output gap and credit-to-GDP gap, 2000-2020** (a)




**SOURCE:** Banco de España.

a The shaded areas denote two crisis periods: the last systemic banking crisis (2009 Q1 to 2013 Q4) and the crisis triggered by COVID-19. The horizontal dotted line denotes the CCyB activation threshold equal to 2 pp of the credit-to-GDP gap.

b The output gap represents the percentage difference between recorded GDP and its potential value. Values calculated at 2010 constant prices (for more details, see P. Cuadrado and E. Moral-Benito (2016), "Potential growth of the Spanish economy", *Occasional Paper* No 1603, Banco de España).

c The credit-to-GDP gap is calculated as the percentage point difference between the ratio recorded and its long-run trend calculated using a one-sided Hodrick-Prescott filter with a smoothing parameter equal to 25,000. This calculation method aims to fit the financial cycles historically observed in Spain (for more details, see J. E. Galán (2019), "Measuring credit-to-GDP gaps. The Hodrick-Prescott filter revisited", *Occasional Paper* No 1906, Banco de España).

**Against the backdrop of risk materialisation in 2020, indicators of the degree of financial and macroeconomic stress became more relevant for CCyB decision-making.** In the context of a shock such as that triggered by the pandemic, risk aversion and volatility usually increase significantly in the financial markets when the shock materialises.[23] This sharp negative impact subsequently passes through to the real economy with some delay. Financial market risk indicators[24] showed very marked increases in March and April 2020, during the first wave of the pandemic, suggesting that it was advisable to reduce macroprudential requirements or keep them relaxed. Although the financial stress has eased subsequently, the macroeconomic indicators still show signs that make it advisable to hold the CCyB rate at 0%.

**The output gap is currently the most relevant indicator for CCyB decision-making, and its markedly negative level suggests holding the buffer rate at 0%.** This indicator (which measures the deviation of the actual level of GDP from the level that could be reached without increasing inflation) reflected a sharp decline in the macroeconomic environment in 2020: having been in positive territory before the pandemic, it recorded its largest negative value in absolute terms since the start of its time series (see Chart 3.1.5). The analysis is completed

23 Metrics like the Systemic Risk Indicator (SRI), which aggregates twelve individual indicators of the stress in different segments of the Spanish financial system, rose in the months following the outbreak of the pandemic. See press release of 29 June 2020, "The Banco de España holds the countercyclical capital buffer at 0%".

24 See Chart A.7.6 in Annex 1.

**Table 3.1.1 Capital buffers for systemically important institutions in 2020**

| Legal Entity Identifier (LEI) | Institution | Designation | Capital buffer requirement in 2020 (%) |
|---|---|---|---|
| 5493006QMFDDMYWIAM13 | Banco Santander, S.A. | G-SII and O-SII | 1.00 |
| K8MS7FD7N5Z2WQ51AZ71 | Banco Bilbao Vizcaya Argentaria, S.A. | O-SII | 0.75 |
| 7CUNS533WID6K7DGFI87 | CaixaBank, S.A. | O-SII | 0.25 |
| SI5RG2M0WQQLZCXKRM20 | Banco Sabadell, S.A. | O-SII | 0.25 |
| 549300GT0XFTFHGOIS94 | BFA Tenedora de Acciones, S.A.U. (Bankia, S.A.) | O-SII | 0.25 |

**SOURCE:** Banco de España.

with other indicators of credit and real estate sector price imbalances, which were somewhat stable after moving towards equilibrium, or absence of alerts, over the last few years.[25]

**The Banco de España identifies systemically important institutions and sets their macroprudential capital buffers annually.** The Banco de España identifies "global systemically important institutions" (G-SIIs) and domestic systemically important institutions, dubbed "other systemically important institutions" (O-SIIs). The systemic importance of each institution is analysed on the basis of various aspects of its activity.[26] Each institution identified must meet an additional capital requirement to strengthen its resilience, mitigate the adverse effects that it might cause to the global or domestic financial system and encourage a more prudent assumption of risks.

**In 2020 the list of systemically important Spanish banks remained unchanged.** In November 2020 the Banco de España[27] announced that it continued to classify one institution as a G-SII for 2022 and five institutions as O-SIIs for 2021 and set their respective buffer rates for 2021 (see Table 3.1.1).

**25** The set of quantitative indicators guiding decisions on the CCyB includes indicators of credit imbalances, real estate sector price imbalances, debt servicing, external imbalances and the macroeconomic environment. For further details, see C. Castro, Á. Estrada and J. Martínez (2016), "The Countercyclical Capital Buffer in Spain: An Analysis of Key Guiding Indicators", *Working Paper* No 1601, Banco de España. For a historical perspective on the cyclical performance of bank lending in Spain, see M. Bedayo, Á. Estrada and J. Saurina (2018), "Bank Capital, Lending Booms and Busts. Evidence from Spain in the last 150 years", *Working Paper* No 1847, Banco de España.

**26** Indicators are used that relate to: balance sheet size; interconnectedness with the banking and non-banking financial system; substitutability of the services provided by the institution; complexity of activities; and volume of cross-border activity. Similar indicators are used by the methodologies for identifying G-SIIs and O-SIIs.

**27** See press release of 27 November 2020, "Banco de España updates the list of systemically important institutions and sets their capital buffers".

**In 2020 the Banco de España continued to work on a circular on new macroprudential tools applicable to banks**. This new set of instruments[28] comprises: i) limits on credit conditions for loans and other transactions; ii) limits on sector concentration; and iii) the sectoral CCyB. The work led to a draft circular (amending Circular 2/2016 of 2 February 2016 to credit institutions on supervision and solvency), which the Banco de España submitted to public consultation in February 2021.

## 3.2 Securities markets

**In Spain, as in the rest of the world, financial market developments in 2020 were driven by the pandemic and its impact on the economy and the activity of economic agents.** However, the impact on equity markets was notably greater in Spain than in other European countries, with significant price falls on Spanish markets (the IBEX 35 fell by 15.5%), exceeding those on other international markets. This greater impact stems from the different composition of Spain's stock market indices, which to a certain extent reflect the structure of the Spanish economy, with services, one of the sectors most severely affected by the pandemic, having a larger share. Volatility on the Spanish market, as on other international markets, increased significantly with the outbreak of the pandemic, although it moderated in the second half of the year,[29] to stand at less than 20% at year-end; average volatility in 2020 was 28.4%, its highest level for a decade.

**At the start of the pandemic, against a backdrop of heightened uncertainty, prices on equity markets fell sharply and volatility surged, the majority of securities being affected by these developments.** This led various European securities authorities (including the CNMV) to introduce restrictions on short selling[30] to prevent the damage to financial stability that this type of activity may cause in a highly volatile environment. These restrictions were gradually lifted as the situation on the markets returned to normal. The CNMV analysed the consequences of

**28** These tools were granted by means of Royal Decree-Law 22/2018 and Royal Decree 102/2019.

**29** In November, the announcement of vaccines boosted expectations of normalisation of economic activity leading to a rise in securities prices, especially in the case of those that had fared worst since the start of the pandemic.

**30** For the purposes of Regulation (EU) No 236/2012, a position resulting from either of the following shall be considered to be a short position relating to issued share capital or issued sovereign debt: (a) a short sale of a share issued by a company or of a debt instrument issued by a sovereign issuer; (b) entering into a transaction which creates or relates to a financial instrument other than an instrument referred to in point (a) where the effect or one of the effects of the transaction is to confer a financial advantage on the natural or legal person entering into that transaction in the event of a decrease in the price or value of the share or debt instrument. A short sale in relation to a share or debt instrument means any sale of the share or debt instrument which the seller does not own at the time of entering into the agreement to sell including such a sale where at the time of entering into the agreement to sell the seller has borrowed or agreed to borrow the share or debt instrument for delivery at settlement. Restrictions can be placed on these types of operations when circumstances arise which constitute a serious threat to financial stability. The CNMV approved the restrictions in mid-March 2020 and they remained in force until May 2020, with the approval of ESMA.

this measure,[31] considering a number of relevant market variables (liquidity, volatility, trading volumes, prices and risk premia of the securities concerned). It concluded that there had only been a slight decline in the liquidity of the securities affected that had, nonetheless, tended to gradually decrease.

**Trading in Spanish equities declined by 3.2% in 2020, to €780 billion.** During the year, trading continued to shift from the Spanish regulated market (with a fall of 9.1%, to €418 billion) to other competing trading venues and markets, where trading in these securities grew by almost 5%, to reach a volume of almost €362 billion, an all-time high. These trading venues now have a market share of more than 46% in the trading of Spanish equities.

**Domestic government and corporate bond markets also experienced the effect of the uncertainty arising from the pandemic.** Following an initial stage of upticks in rates and risk premia, at the peak of the crisis, debt yields gradually fell (as in other European economies) thanks to the monetary policy measures taken by the ECB.[32] In the case of government bonds, interest rates reached all-time lows at the end of the year: up to the nine-year maturity they were in negative territory, while the rate on the 10-year benchmark was around zero (0.05%). For its part, the sovereign risk premium, which recorded temporary spikes during 2020, reaching a high of 156 bp in April, ended the year at 63 bp, below its end-2019 level (66 bp). In contrast, corporate risk premia, which had also spiked at the times of greatest stress, ended the year somewhat above their pre-crisis levels.

**Activity on primary debt markets increased notably in 2020, both for financial institutions and non-financial corporations, which decided, against a backdrop of heightened uncertainty, to build up liquidity to cover potential future requirements.** Specifically, the volume of bond issuance recorded at the CNMV increased by 46.5%, to €132,121 million, the highest level since 2016, owing to the growth of asset-backed bonds, public-sector covered bonds and commercial paper. By contrast, bond issuance on other markets declined for the first time in recent years, by 10%, to stand at €90,201 million. At the same time, issuance of green, social and sustainable bonds grew notably, to €15 billion, of which somewhat more than €9 billion corresponded to green bonds.

**In the area of market infrastructures, the central counterparty (CCP), the most systemic item of Spanish infrastructure, showed resilience in the face of the unusual market volatility.** In the context of the crisis, the guarantee calculation parameters were redefined and extraordinary guarantee requests were increased and were fully met by the clearing members. From the back tests[33] performed it was concluded that the financial resources of the CCP (individual guarantees,

**31** See R. Losada and A. Martínez (2020), *Analysis of the effect of restrictions on net short positions on Spanish shares between March and May 2020,* CNMV.

**32** The ECB launched the pandemic emergency purchase programme (PEPP), with an envelope that was gradually increased up to €1.85 trillion.

**33** Simulations of the financial behaviour of the CCP using historical data.

mutualised guarantees and capital) would have been sufficient to cover the losses arising from the simultaneous failure of the two largest clearing members during the most turbulent sessions. Recommendation ESRB/2020/6 of 25 May 2020 on liquidity risks arising from margin calls should be noted in this respect. Recognising the benefits of central clearing, the recommendation indicates that the externalities resulting from significant market movements and the corresponding margin calls may jeopardise the stability of the financial system.[34] On 1 December 2020 the CNMV issued a statement referring to this recommendation, indicating that it shares the ESRB's concern about the impact of margin calls, and that it would take into consideration the ESRB's recommendations in its supervisory activities relating to central counterparties, as well as with regard to the exchange of margins between financial and non-financial counterparties defined in Article 2(8) and (9) of the European Market Infrastructure Regulation (EMIR), in derivatives contracts not cleared by CCPs and in their activities as clearing members on behalf of clients.[35]

**In 2020 the most important risks identified in the financial markets continued to be concentrated in search-for-yield strategies, as a consequence of the low level of interest rates and the increase in the financial vulnerability of firms and households owing to the deterioration of the economic situation.** The continued pursuit of search-for-yield strategies leads investors to invest in assets with higher expected returns and highlights the rising cost of liquidity and risk-free asset positions. These investments should be accompanied by a suitable assessment of the increase in risk associated with such strategies in terms of volatility (equities, emerging markets and cryptocurrencies), credit risk (debt with poorer credit ratings, such as subordinated and high-yield debt) and liquidity (subordinated and high-yield debt, private equity funds and real estate assets). In this setting, any shock affecting asset valuations may lead to downward price corrections on the markets, which tend to be more pronounced for these types of asset; thus, negative contagion spirals may be seen that could have an impact on the financial institutions holding such assets.

## 3.3 Non-bank financial intermediation

**Non-bank financial intermediation (NBFI) is a valuable alternative to bank-based financing, with benefits both for the parties involved and for the economy as a whole.** However, delimiting the NBFI sector is not an easy task, as both its activities and its component institutions have been changing and developing over recent years. This has even affected the name of the sector, which was initially known as shadow banking. There is, therefore, no single definition of

34 This recommendation is implemented in various sub-recommendations which affect central counterparties, their clearing members and the counterparties of contracts not cleared by a CCP.

35 See the CNMV note, *Recommendations of the ESRB on liquidity risks arising from margin calls requested by central counterparties (CCPs), their clearing members and counterparties of contracts not cleared by a CCP,* of 1 December 2020.

the NBFI sector: the ESRB includes all other financial institutions (OFIs), while the FSB takes a non-bank aggregate and makes a series of adjustments to obtain a more accurate approximation of the size of the sector. In general terms, this section will follow the FSB approach.

**In 2020, NBFI activity in Spain, as defined by the narrow measure,[36] amounted to €310 billion, similar to the 2019 figure.[37] However, the share of NBFI activity fell in the year, from 6.7% in 2019 to 6.1% in 2020, as a result of the notable increase in the size of the banking sector.** In addition, the share of NBFI activity in Spain remains smaller than in other jurisdictions.[38] The absolute figure is obtained by excluding from the assets of the non-bank financial sector (€1.35 trillion) those pertaining to institutions that pursue none of the economic functions (EFs) envisaged by the FSB.[39] This gives a broad measure of NBFI activity as amounting to €510 billion, which is a decrease of just over €3 billion compared with the 2019 figure. Lastly, to obtain the narrow measure mentioned above, the assets consolidated in banking groups (approximately €200 billion) are deducted.

**According to the different economic functions, the key components of NBFI in Spain in 2020 were investment funds[40] (EF1), which account for 85.5% of the total, slightly down on the 2019 figure (86.1%).** Securitisation special purpose entities (SPEs) (EF5) are in second place, with 8.9% of the total, similar to the 2019 figure, followed by specialised lending institutions (EF2) (3.1%) and lastly, with a relatively small share, by securities dealers (EF3) and mutual guarantee schemes (EF4). However, the figures are quite different if the data are analysed before excluding institutions consolidated into banking groups. In this case, as Chart 3.3.1.2 shows, EF1 accounts for 52.1% of the total (there is no banking consolidation here), while EF5 accounts for a much larger share (36.3%). By contrast, among the non-bank financial intermediaries, securitisation SPEs have the highest level of interconnectedness with the banking system.

**The ultimate aim of delimiting narrow measure non-bank financial intermediaries is to identify and monitor the potential risks they may pose to financial stability.** Investment funds pose the most risk, on account of their size and especially as regards their asset liquidity, their leverage, and also their credit risk exposure. Securitisation SPEs should also be analysed, on account of their size and also their high level of interconnectedness with other parts of the financial system, with the most important risk in their case being maturity transformation. In

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36 The broad NBFI measure is understood to include all institutions that perform one of the economic functions described by the FSB; the narrow measure is obtained by excluding institutions consolidated into banking groups.

37 For more details, see the CNMV's regular publication *Non-bank financial intermediation in Spain*.

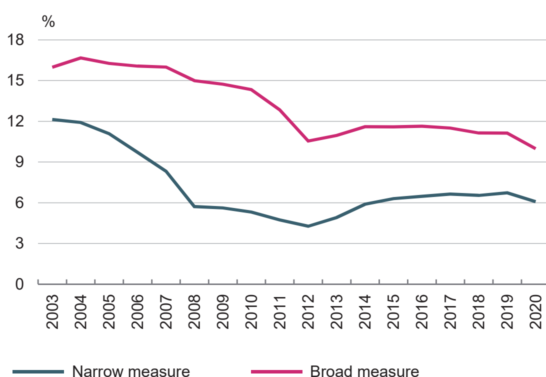
38 As a reference, NBFI activity in the sample of countries analysed by the FSB in its *Global Monitoring Report on Non-Bank Financial Intermediation 2020* accounts for 14.2% of the global financial system.

39 See FSB (2013), *Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities.*

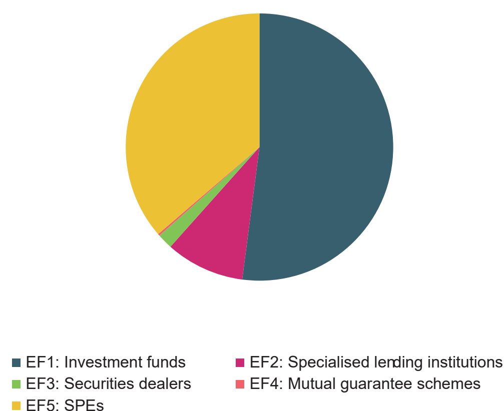
40 According to the FSB's definition, money market funds, fixed income funds, mixed funds, hedge funds and open-end investment companies are deemed to belong to this economic function.

### Chart 3.3.1 Non-bank financial intermediation (2020)

1 Share of NBFI in financial system




2 Economic functions (broad measure)




**SOURCE:** CNMV and Banco de España.

Spain maturity transformation risk is not particularly high, since most securitised assets and securities issued (liabilities) stem from long-term – mainly mortgage – loans or credits with a lower maturity transformation risk; in 2020, short-term assets and liabilities accounted for just 22% and 14%, respectively, of the balance sheet.

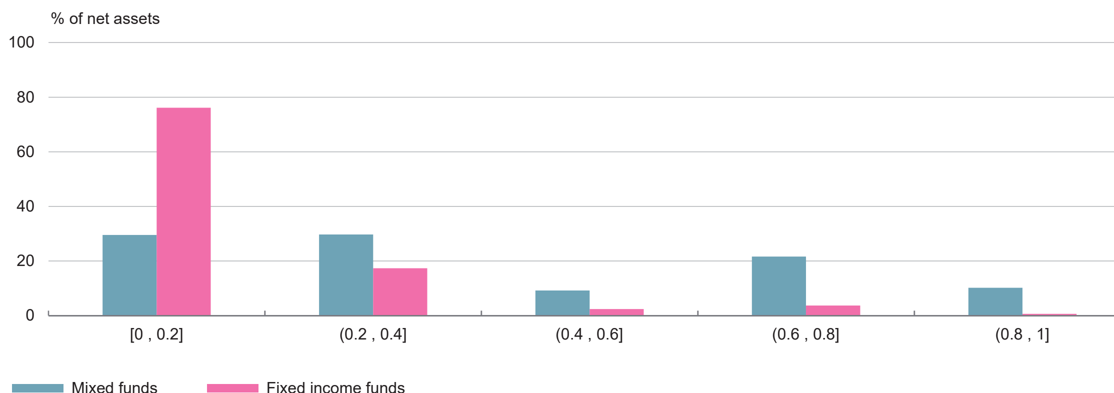
**In Spanish investment funds, the contribution of derivatives to systemic risk is very limited.** In this case, the leverage analysis focuses on the level of indirect leverage, via derivatives, since borrowing (direct leverage) is severely restricted by regulations.[41] An assessment of the collective investment undertakings (CIUs) belonging to the NBFI sector that satisfy the requirements established in Directive 2009/65/EC, and that perform their calculations using the commitment approach (96% of the total),[42] shows that market risk exposure, calculated on the basis of the equivalent cash investment, amounted to 28.6% of their net assets at end-2020, well below the maximum permitted by current legislation (100% of net assets). As Chart 3.3.2 shows, an individualised analysis of fixed income and mixed funds[43] reveals that market risk exposure was below 40% in over 90% of fixed income funds and in almost 60% of mixed funds (in terms of net assets), while only 0.6% and 10.1% of their net assets corresponded to funds with relatively high levels of exposure to market risk (between 80% and 100% of net assets).

41 Directive 2009/65/EC – the UCITS Directive – limits borrowing to no more than 10% of net assets to resolve temporary cash difficulties.

42 The other 4% corresponds to CIUs whose credit risk exposure is calculated using the VaR approach (1.4%), or CIUs which, albeit subject in general to UCITS regulations, are able to use derivatives in certain areas, affording them greater flexibility, and may exceed the 100% limit for exposure to market risk.

43 Mixed funds and fixed income funds account for a large proportion of EF1, specifically 56.4% and 30.4%, respectively.

**Chart 3.3.2 Leverage of fixed income and mixed funds (2020)** (a)




**SOURCE:** CNMV.

**a** Distribution of funds according to their exposure to market risk via the use of derivatives.

**Liquidity risk assessment is particularly important in the case of investment funds, given that the majority permit daily redemptions.** The proportion of less liquid assets in investment funds' portfolios has risen slightly, but their liquidity is deemed satisfactory, as demonstrated by the fact that they were able to meet the increase in redemptions in March and April 2020 – at the peak of the crisis – with no significant incidents. Mixed funds show the largest increase in the proportion of less liquid assets (see Chart 3.3.3.1). This is explained by the shift in the composition of their assets, marked by sales (or the maturing) of government bonds (liquid assets) and investment in corporate bonds which, in the present interest rate environment, can provide them with higher returns. An individualised analysis of mixed funds and fixed income funds using an alternative metric that incorporates the credit rating of their high-quality liquid assets (HQLAs)[44] reveals that they hold a high proportion of HQLAs: in terms of net assets, in over 65% of fixed income and mixed funds liquid assets account for more than 40% of the total portfolio. However, there are investment funds, albeit a small proportion, where liquid assets account for less than 20%: specifically, 1.2% of fixed income funds and 8.4% of mixed funds (in terms of net assets).

**In its analysis of liquidity risk management, the CNMV performs half-yearly stress tests on investment funds.** These exercises simulate one (or several) market shocks and assess the degree of resilience of investment funds. They are performed on UCITS and non-harmonised UCITS, in line with the methodology proposed by ESMA (STRESI framework)[45] and subsequently broadened by the

44 See note (b), Chart 3.3.3.

45 See ESMA (2019), "Stress simulation for investment funds", *Economic Report*.

## BOX 3.3.1 Analysis of leverage of Spanish alternative investment funds

Under Article 25 of the Alternative Investment Fund Managers Directive (AIFMD), national competent authorities (NCAs) are required to periodically monitor the level of leverage employed by alternative investment funds (AIFs) in order to assess its possible effect on financial stability, i.e. its importance as a possible source of systemic risk. While the date of the first monitoring exercise will foreseeably be 31 December 2021, the CNMV has conducted an initial analysis using 2019 data, applying the ESMA guidelines published at the end of last year. In Spain, the investment funds deemed AIFs comprise four categories of collective investment undertaking (CIU): i) non-harmonised UCITS CIUs, which satisfy most of the requirements applicable to UCITS; ii) hedge funds; iii) real-estate CIUs; and iv) venture capital firms and closed-end collective investment undertakings.

The CNMV's analysis highlights that Spanish AIFs have a low degree of leverage and that only a few small undertakings are somewhat more highly leveraged. Therefore, no significant vulnerability vis-à-vis the generation of systemic risk is identified. By way of an example, the analysis describes the figures for the first two categories of undertakings, which account for 77.3% of AIFs' net asset value. In the case of non-harmonised UCITS CIUs, a gross average leverage (obtained from the sum of the face value of the derivatives contracts) of 59.5% is estimated. This is a relatively low figure considering that 85% of these undertakings are subject to the 100% limit applicable to UCITS. Hedge funds are not highly leveraged either. These CIUs are not subject to limits on leverage via derivatives; however, their direct leverage via financial debt is limited to five times their net asset value. The estimated gross average leverage is 98% for hedge funds and 68% for funds of hedge funds, far below the average figures for hedge funds managed in the European Union.

**Table 3.3.1 Non-harmonised UCITS: leverage indicators**

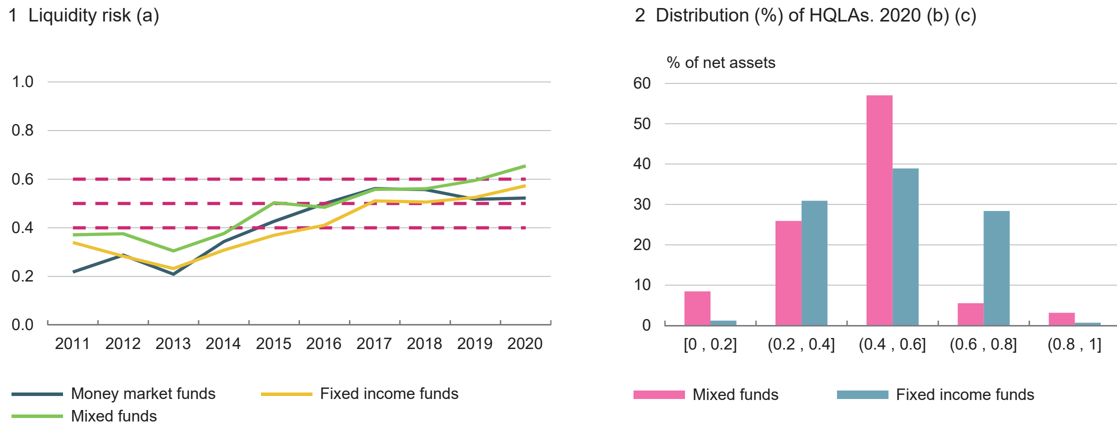
| Limits on use of derivatives | Net assets (€m) | Average gross leverage (%) | Average net leverage (%) |
|---|---|---|---|
| No investment in derivatives | 2,610 | 0.0 | 0.0 |
| Net leverage < 100% | 39,890 | 59.3 | 23.2 |
| VaR limits | 147 | 83.0 | N/A |
| May exceed UCITS limits | 4,543 | 90.3 | N/A |
| **Total** | **47,189** | **59.5** | **-** |

**SOURCE:** CNMV.

CNMV.[46] The results of the latest stress tests, with data at December 2020, which envisage different shock scenarios for the different fund categories, show that the investment fund market is generally resilient to the scenarios considered. Only a

46 See J. Ojea Ferreiro (2020), "Quantifying uncertainty in adverse liquidity scenarios for investment funds", *CNMV Bulletin,* Quarter II 2020.

## Chart 3.3.3 Liquidity risk by investment fund type




**SOURCE:** CNMV.
NOTE: The broken lines denote the thresholds that determine the shift from low to moderate risk, from moderate to medium risk, and from medium to high risk.

a Measured in terms of less liquid assets as a proportion of total assets, considering liquid assets to be deposits, government bonds, guaranteed issues, repos and 50% of equity portfolio value.
b Considering high quality liquid assets (HQLAs) to be all cash and deposits, 50% of equity portfolio value and variable percentages of government bonds, corporate bonds and asset-backed securities according to their credit rating. Thus, the percentage considered liquid ranges between 0% and 100% for government bonds, between 0% and 85% for corporate bonds, and between 0% and 65% for asset-backed securities.
c This analysis does not include all EF1 investment funds, as those that have restrictions on redemptions (such as guaranteed funds) and those that invest mostly in other investment funds have been excluded.

small number of funds are identified – in the high-yield corporate bond category and in global and absolute return funds – that might have liquidity problems in the extreme redemption scenarios considered. In the most extreme scenario, nine funds in the first group (8.2% of net assets in the category) and two funds in the second group (14.2% of net assets) are identified as having potential liquidity problems meeting the simulated increase in redemptions.

**Investment funds' liquidity management tools have functioned satisfactorily in the most critical stages of the crisis.** No fund managers were identified as having had difficulties meeting the higher volume of redemptions in March and April 2020. These redemptions, which did not exceed 2% of funds' net assets, were notably lower than in other European countries and were offset by net subscriptions in subsequent months (in the year overall, net subscriptions totalled €631 million). In the context of the COVID-19 crisis, no Spanish fund has had to activate any extraordinary liquidity measure (such as the suspension of redemptions or creation of side pockets), although five have had to make partial redemptions. In this setting, the CNMV increased its communication with fund managers, recommending that they make appropriate use of the liquidity tools available and, in particular, of those aimed at ensuring that the remaining unit-holders suffer no harm from the increase in redemptions. Specifically, the CNMV recommended that assets be valued at bid price and that swing pricing mechanisms be used.

## 3.4 Insurance undertakings and pension funds

### Persistently low interest rates and the impact of COVID-19

**The Spanish insurance sector has a sound and comfortable capital buffer.** This buffer has notably helped insurance undertakings withstand the severe initial market impact of the COVID-19 crisis. At end-2020 the insurance sector remained highly capitalised, with a solvency ratio over 230%, albeit slightly down on the 2019 figure (235%). Additionally, profit from premiums rose significantly in 2020 compared with the previous year (9.2%, versus 7.6% in 2019). This increase was due to the exceptional situation throughout the year, in which healthy non-life technical income, stemming from a decline in the number of claims in highly significant branches, was more than sufficient to offset the decline in technical income from life insurance activities (see Annex 1, Charts A.6.5 to A.6.7).

**However, uncertainty remains about the scale of the economic shock caused by COVID-19 in the sector.** Insurers may face challenging conditions, with a potential impact both on their profitability and their solvency. One of the main possible sources of a decline in profitability and solvency is the continuation of the low interest rate environment. Given the impact of this environment on assets and liabilities, profit and reinvestment, the effects on assets and on financial position and solvency are significant.

**The low interest rate environment has a different impact on life and non-life insurance.** In the case of life insurance, the effect is more pronounced, given the technical interest rate guarantees in long-term obligations. In this setting, the management actions taken by insurance companies to match their assets and liabilities have effectively and significantly mitigated the interest rate impact. Nevertheless, there is a significant volume of unmatched liabilities, and the supervisor considers it extremely important that these cases be closely monitored. Accordingly, it is imperative that current regulations on the need to carry out forward-looking profit sufficiency analyses are observed, to allow correct capital management policies to be designed and the technical provisions of policies not included in matched portfolios to be correctly calculated.

**Helping to mitigate the adverse impacts of COVID-19 on insurance business has been a fundamental objective for the supervisor.** In this respect, the following actions should be highlighted:

– Implementation of processes to perform more continuous, intense and close monitoring of insurers' solvency and liquidity.

– Publication of notes on dividend pay-outs and other capital distributions

to achieve correct and prudent capital management, given the uncertainty and volatility arising from COVID-19.

– Broadening of the exceptional liquidity assumptions relating to vested rights in pension schemes, to mitigate the effects of the crisis on individuals.[47]

**Mention must also be made of the support measures for credit insurance implemented through the Insurance Compensation Consortium** (CCS), given the importance of credit insurance as an essential support mechanism for trade transactions and business activity in Spain.[48]

In the case of **pension funds,** both the position account and the assets managed have increased, by 1.68% and 1.93%, to €117,119 million and €117,893 million, respectively, at 31 December 2020. The sharp fall in profitability in 2020 Q1 (-8.9%), as a result of the economic crisis triggered by COVID-19, eased in the following quarters of the year. The global economic, and in particular market, uncertainty caused by the pandemic affected pension fund investments, although by end-2020 the 2019 investment levels had been recovered and even exceeded.

## Supervision of the insurance sector in the face of the challenge posed by the review of biometric risks

**In 2020 a milestone was achieved in the process of addressing the challenge of the treatment of biometric risk[49] from a sectoral standpoint.** This is a holistic process that includes all facets of biometrics, in their qualitative and quantitative aspects, covering both microprudential and macroprudential aspects.

This comprehensive reform process is driven by various components: changes in longevity; the need for a welfare system that complements that provided by Social Security with stability and solvency guarantees; the previous existence of biometric reference tables that did not allow appropriate compliance with the accounting and solvency regulatory framework; the problems that the existing framework caused for correct management of longevity risk; and last but not least, the need to ensure that the biometric tables adopted are tailored correctly to protect the rights of policyholders and insurers, taking into account, inter alia, the principles of equity, non-discrimination and fair treatment.

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**47** Twentieth additional provision of Royal Decree-Law 11/2020 of 31 March 2020 adopting urgent complementary social and economic measures to address COVID-19; Royal Decree-Law 11/2020 of 31 March 2020 and Article 23 of Royal Decree-Law 15/2020 of 21 April 2020 on urgent complementary measures to support the economy and employment.

**48** Article 7 of Royal Decree-Law 15/2020 of 21 April 2020 on urgent complementary measures to support the economy and employment allowed the CCS to reinsure the trade credit risk assumed by insurance companies authorised to operate in trade credit insurance, given its importance for the pursuit of economic activity. On 4 December 2020, the European Commission authorised this measure (State Aid SA. 58458 (2020/N) – Spain COVID-19: Trade credit reinsurance scheme).

**49** Biometric risk is understood as the positive or negative deviation from the calculation methods and behaviour patterns used to estimate mortality and survival among a group or an insurance portfolio.

**The analyses performed have enabled a new comprehensive regulatory framework for biometric assumptions to be defined, characterised by:**

a **Recognition of the existence and importance of longevity risk.** For this purpose it is essential to ensure that pension schemes and insurance policies have addressed the costs of alignment with current life expectancy expectations, using mortality assumptions that are based on key and recent data and take into account expected future mortality trends.

b **Active risk management.** Regulations need to encourage and facilitate the measurement and mitigation of longevity risk. This latter objective is unattainable unless the first objective is achieved. Longevity risk cannot be accurately measured nor correctly managed unless mortality assumptions are consistent with reasonable expectations of future trends.

c **A similar conceptual structure** to that established in the European solvency framework for insurers (Solvency II) in the accounting area, i.e. the international financial reporting standard for insurance contracts (IFRS 17), covering quantitative and qualitative aspects.

d **Suitability of the biometric tables for setting premiums and calculating the technical provisions** for life insurance with longevity risk and for insurance with exposure to mortality risk, including prepaid funeral plans.

In the case of **insurance covering survival risk,** it is necessary to determine whether life expectancy and the expected improvements calibrated in the commonly used tables realistically reflect the future behaviour of policyholders and the commitments entered into with them. This is essential to ensure the sufficiency of the technical provisions and appropriate capital management, and ultimately the present and future solvency of the insurance sector.

The biometric tables used to date in **life insurance and prepaid funeral plans** no longer fully reflect the confirmed reduction in mortality in recent years and the current trend. Updating these tables is essential to ensure a transparent technical basis for insurance pricing that is proportional to the risks assumed.

e **Establishment of a quality-based framework,** including good governance, transparency with third parties and appropriate market conduct.

f **Appropriate data governance.** From a microeconomic standpoint, sound and realistic biometric statistics, based on reliable data on exposure to

risk, insured events and the main economic magnitudes, are required to achieve appropriate biometric risk management. From a sectoral standpoint, biometric statistics based on sufficiently uniform methodologies are required from each insurer to perform reliable and quality monitoring of the longevity of all policyholders.

g **Frequent review of the assumptions used.** Mortality tables must be updated regularly and must be based on the latest experience to ensure that the estimates used are an accurate reflection of the current mortality level, checking whether or not that experience matches expectations. The aim is to avoid having to make significant exceptional increases in the technical provisions as a consequence of sporadic updating of assumptions, ensuring that any such changes in expectations are implemented more gradually.

h **Creation of an institutional mechanism to monitor longevity,** comprising representatives from the actuarial profession, insurance companies, academia and the supervisory authority. This mechanism, which will take the form of a technical committee, will be entrusted with drawing up and proposing future sectoral biometric statistics that are uniform, reliable and technically robust, to facilitate correct updated biometric risk management, from the standpoint of each individual insurer and of the sector overall, together with analysis of new challenges that may arise in this connection.

**Within this regulatory process, in 2020 the DGSFP approved two resolutions, with the following objectives:** to determine the admissibility of new tables and the non-admissibility of other previous tables for the purposes indicated in each case; establish the supervisory criteria for the biometric tables; and issue recommendations to promote the compilation of uniform, robust and realistic biometric statistics in the insurance sector.

In turn, the general principles and criteria for preparation of the tables were laid down in amendments to the regulations on the supervision of private insurance, which were tabled in 2020 and finally approved in 2021.[50] These amendments are supplemented by a DGSFP Circular, currently in preparation, on the quantitative and qualitative aspects needed to ensure that the biometric assumptions used are appropriate and that own experience tables are correctly drawn up. The Circular regulates, among other matters, the effect of the updating of the new biometric tables in the transitory periods of the solvency regulations.

50 Royal Decree 288/2021 of 20 April 2021 was passed, amending Royal Decree 1060/2015 of 20 November 2015 on the regulation, supervision and solvency of insurers and reinsurers; Article 34 of the Regulations on the organisation and supervision of private insurance, approved by Royal Decree 2486/1998 of 20 November 1998, was redrafted; and the implementing regulations of Agricultural Insurance Law 87/1978 of 28 December 1978, approved by Royal Decree 2329/1979 of 14 September 1979, were amended.

## Review of the European solvency framework for insurers (Solvency II)

**The Solvency Directive applicable to insurance companies in the European Union – Solvency II – has its own review mechanism.** Under the applicable regulations, the European Commission should present its proposal to the European Parliament and the Council by end-2020. To prepare that proposal, in February 2019 the Commission asked EIOPA to provide technical advice on almost all the elements that make up Solvency II. The request notably included macroprudential policy questions.

**In its Opinion,[51] published in December 2020, EIOPA dedicates a complete chapter to macroprudential policy questions.** In its view, the Solvency II framework currently lacks a set of macroprudential instruments, even though some of its supervisory tools, such as the volatility adjustment, symmetric adjustment to the equity risk charge or matching adjustment, may be used as macroprudential tools. For that reason, EIOPA recommends introducing a macroprudential framework and a set of macroprudential tools, with the main aim being to limit or mitigate systemic risks and preserve financial stability in the insurance sector.

The Opinion suggests a wide range of options, to be regulated according to principles that would grant supervisors flexibility in their application. These options include:

- The possibility of restricting or suspending dividend or other payments to shareholders and the purchase of own shares.
- Applying soft asset concentration thresholds.
- Expanding the scope of the Own Risk and Solvency Assessment (ORSA) report to include the macroprudential perspective.
- Expanding the prudent person principle to take into account macroprudential concerns.
- Pre-emptive recovery and resolution planning and systemic or liquidity risk management plans.
- Temporary suspension of policyholders' rights to surrender their life insurance contracts.

**Along the same lines, in 2020 the ESRB published a report[52] with proposals to serve as a basis for the macroprudential review of the Solvency II framework.**

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**51** EIOPA (2020), *Opinion on the 2020 review of Solvency II*.
**52** ESRB (2020), *Enhancing the macroprudential dimension of Solvency II* (February).

Specifically, the ESRB envisaged three types of solvency tools that should be available to supervisory authorities:

— Solvency tools to prevent and mitigate procyclical investment behaviour by insurers.

— Liquidity tools to address risks associated with specific activities, such as derivatives hedging or the sale of certain insurance products.

— Tools to address the risks associated with mortgage origination or investments in corporate bonds, to ensure consistent macroprudential treatment across the different financial sectors.

## Environmental questions

**Environmental risks affect insurance companies – as they do the rest of the financial sector – in their investment business.** But the insurance sector is also exposed on the liabilities side of its balance sheet, through its underwriting business, as some of the risks it assumes may be climate change related.

**The energy transition affects insurance companies in their capacity as long-term investors.** Sustainability criteria are gradually being introduced in the insurance sector. The inclusion of these criteria in insurers' portfolios can take a variety of forms, including less-carbon-intensive investments, portfolio structuring in line with the Paris Agreement objectives, or thematic and lower impact investments.

Work has continued in this area in the European Union with the recent publication of Regulation (EU) 2020/852 of the European Parliament and of the Council. More commonly known as the Taxonomy Regulation, it aims to create a harmonised framework to facilitate sustainable investment and is central to progress being made to adapt the European financial system to encourage sustainable investment.

# 4 Financial system interconnectedness

**Financial system institutions are interconnected through direct exposures; this is an important channel for transmission of potential systemic shocks.** In the course of their business, financial system institutions establish direct links with each other, for example, through asset holdings or loans extended within the system. These exposures have mostly positive effects, as they help improve the distribution of funds between financial institutions that need financing and those that have surplus liquidity, thus achieving a better allocation of resources. But there is also a downside to these interconnections, as they can serve as channels for the rapid transmission of systemic shocks. Accordingly, it is important to analyse the structure of the Spanish financial system and identify the main direct interconnections.

**The direct interconnections within the Spanish resident financial system demonstrate the essential role played by systemic banks.** The direct interconnection network between the different sectors of the Spanish resident financial system has been analysed. Given that the Spanish economy is heavily banked, the banking sector has been broken down into three categories: i) systemic institutions;[53] ii) non-systemic but significant institutions from the standpoint of the Single Supervisory Mechanism (SSM); and iii) less significant institutions.[54] The results of this analysis show that systemic banks account for a significantly higher share[55] than the other sectors or sub-sectors of financial institutions identified (see Figure 4.1). Additionally, direct interconnections with systemic banks are usually larger in quantitative terms. Systemic banks are generally net receivers of funding from the other sectors of the Spanish financial system, especially from insurers and collective investment undertakings. Treasury holdings account for a large portion of the financing that systemic banks receive from collective investment undertakings, so these holdings may, therefore, be more volatile than other investment holdings.

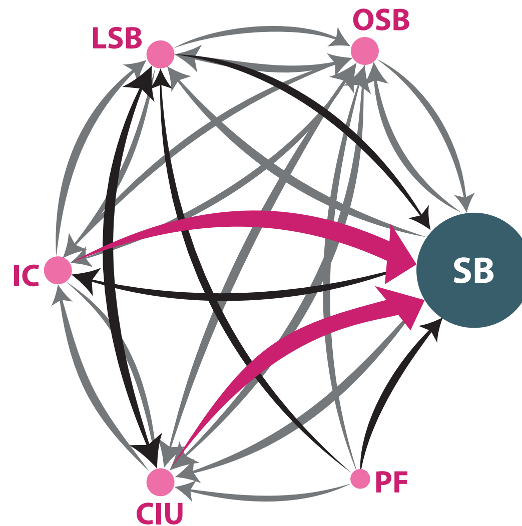
**Indirect interconnections are other channels through which financial institutions may be exposed to common risks, for example, through their connections with the economic sectors most vulnerable to the effects of the pandemic.** Indirect interconnections between financial institutions may arise as a consequence of common exposures to the same assets, or of changes in the value of other exposures that are not common but whose prices are correlated.

53 "Systemic institutions" are those identified by the Banco de España as global systemically important institutions (G-SIIs) or other systemically important institutions (O-SIIs). For the purposes of this analysis, this first category considers O-SIIs, since the only Spanish G-SII is also an O-SII. For more details, see "Banco de España updates the list of systemically important institutions and sets their macroprudential capital buffers" (press release, 27 November 2020).

54 For a complete list of Spanish significant and less significant credit institutions, see the ECB's List of supervised entities.

55 In Spain, the total financial assets of the resident financial system amounted to more than €4 trillion at December 2020; systemic banks account for 48% of this total.

## Figure 4.1 Direct interconnections




**SOURCES:** Banco de España, CNMV and DGSFP.

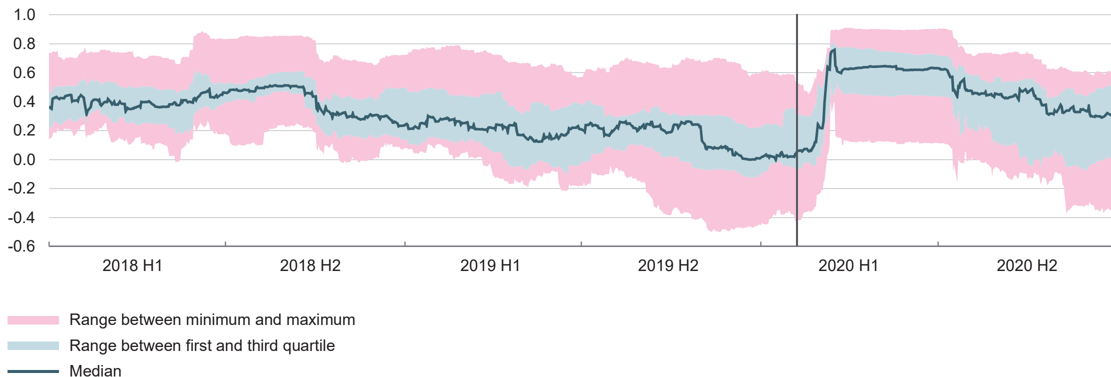
NOTE: The abbreviations denote systemic banks (SB), other significant banks (OSB), less significant banks (LSB), insurance companies (IC), collective investment undertakings (CIU) and pension funds (PF). The direct interconnections are calculated taking no account of consolidations between the different financial sectors. The size of the circles is proportional to the total financial assets of each sector or sub-sector. The colour of the arrows denotes the size of the direct exposure: grey, under €5 billion; black, €5 billion to €15 billion; and pink, over €15 billion. All data as at December 2020.

Both types of indirect interconnections would mean that a shock in a specific economic sector would swiftly and simultaneously affect all financial institutions with exposure to that sector.

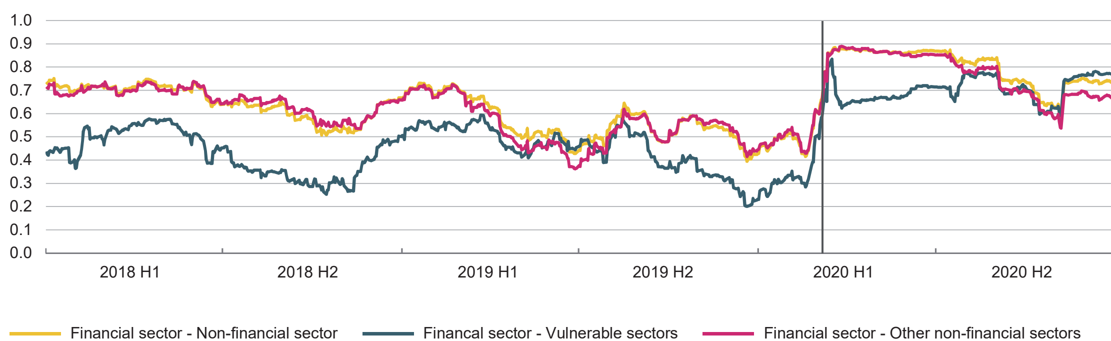
**The emergence of COVID-19 highlights the importance of indirect interconnections with vulnerable economic sectors.** The economic sectors identified as being most vulnerable to the effects of the pandemic are: i) accommodation and food services (hospitality); ii) arts, entertainment and recreation services; and iii) transportation and storage. Estimation of the impact of the pandemic on the different economic sectors and identification of those deemed "vulnerable sectors" have been made drawing on activity and employment data. Specifically, for each economic sector, defined using the 2009 Spanish National Classification of Economic Activities (CNAE, by its Spanish abbreviation), the following three variables have been considered: i) the change in their contribution to GDP (specifically, the change in their share of gross added value (GVA)); ii) the percentage of furloughed workers in the sector compared with the total furloughed workers in the economy; and iii) the impact on social security registrations, compared with the change in social security registrations in the economy overall. In general, on these data, the firms in the sectors identified as "vulnerable" are chiefly small medium-sized enterprises that have limited access to the capital markets, even in normal circumstances.

## Chart 4.1 Analysis of indirect interconnections through correlations between prices of listed financial assets

1 Indicator of correlation between asset classes (a)




2 Indicators of correlation between the financial and the non-financial sector (b)



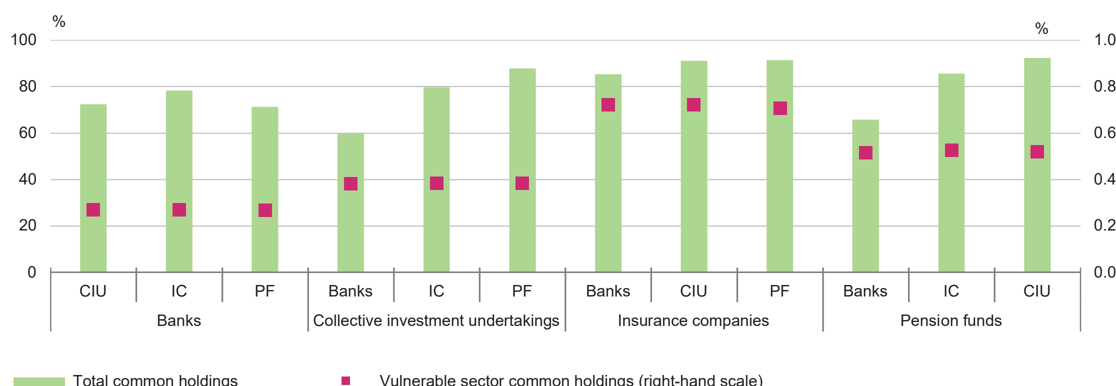

**SOURCE:** CNMV.

**a** The indicator of correlation between asset classes takes correlation pairs calculated drawing on daily data in 3-month windows. The asset classes are sovereign debt, corporate bonds of financial and non-financial institutions and equity securities of financial institutions, utilities and all other sectors. The vertical line marks early March and the start of the market turmoil owing to the health crisis.

**b** The indicators of correlation between the financial and the non-financial sector take correlation pairs calculated drawing on daily data in 3-month windows. The assets considered for the calculation are listed equity securities of the financial and the non-financial sector. In addition, the latter has been split into two groups: i) the sectors most vulnerable to the effects of the COVID-19 pandemic, and ii) all other non-financial sectors. The vertical line marks early March and the start of the market turmoil owing to the health crisis.

**Correlations between the different financial asset classes have risen sharply during the pandemic and remain above the pre-pandemic level, despite declining gradually since spring 2020.** In the early months of 2020, the price correlation between equities and debt securities issued by Spanish financial institutions was minimum, approaching values close to 0. However, from late February 2020, this correlation rose abruptly, owing to the onset of the COVID-19 pandemic, reaching its peak in mid-March 2020 (see Chart 4.1.1). This widespread increase in the correlation between the different financial asset classes is normal in the face of a large adverse economic shock. Since mid-March 2020 there has been a gradual improvement, largely owing to the economic support measures introduced by the fiscal authorities and

## Chart 4.2 Common holdings of marketable securities as a % of the total portfolio. December 2020




**SOURCE:** ECB (Securities Holdings Statistics by Sector).
NOTE: The abbreviations IC, CIU and PF denote insurance companies, collective investment undertakings and pension funds. The chart depicts common holdings of marketable securities, i.e. holdings of securities issued by the same issuer. For example, taking their market value, the common holdings between banks and collective investment undertakings account for 73% of bank portfolios and for 60% of collective investment undertaking portfolios.

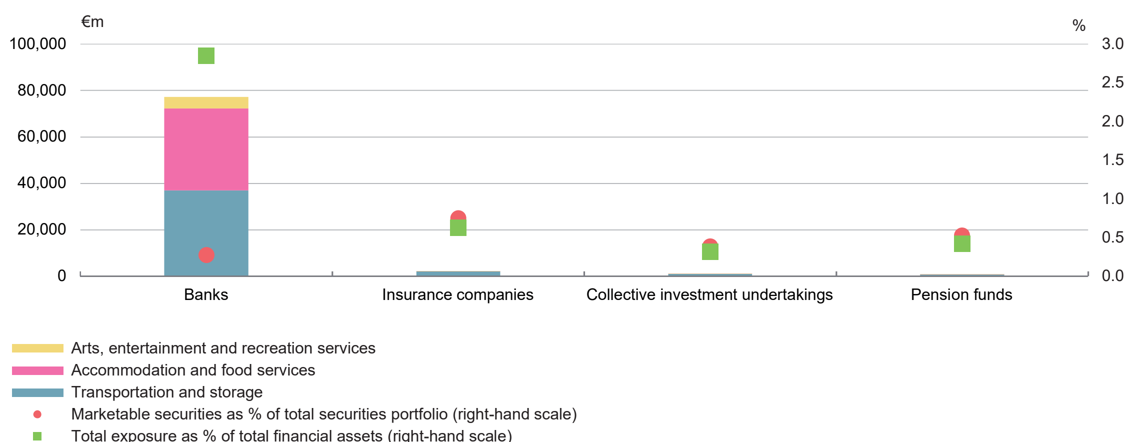
central banks. Nevertheless, in late 2020, this series remained above its pre-pandemic levels.

**The correlation between financial sector assets and non-financial sector assets overall also increased sharply when the pandemic emerged and have subsequently gradually declined, although in this case a pick-up was observed following the second wave** (see Chart 4.1.2). The correlation between financial sector and vulnerable sector assets remained significantly below the general correlation with the (non-financial) economic sectors overall pre-pandemic, although in this case the pick-up following the onset of the pandemic was relatively higher. This process seemed to intensify after the second wave, as in late 2020, and for the first time, correlations between financial sector assets and the more vulnerable sector assets were greater than those between financial sector and economic sector assets overall.

**Indirect interconnections through common holdings of financial assets are high, and are largely due to common holdings of sovereign debt.** By analysing the marketable securities portfolios of the different financial sectors, issuers whose securities have been acquired by more than one sector and their share of all common holdings can be identified. By volume, the banking sector has the most common holdings with other sectors, as it is also the sector with the largest securities portfolio. However, in relative terms, the percentages are similar to the common holdings of the other sectors (see Chart 4.2).[56] Holdings of government debt (especially that issued by Spanish public sector entities) account

56 At December 2020, the banking sector portfolio amounted to some €660 billion at market price, while the non-bank financial sector portfolios were much smaller: €276 billion for insurance companies, €263 billion for investment funds and €119 billion for pension funds.

**Chart 4.3 Total exposures to vulnerable economic sectors. December 2020**






**SOURCE:** ECB (Securities Holdings Statistics by Sector).

for a large part of the common holdings. In the case of banks, more than 50% of all common holdings with the other financial sectors are government debt holdings, while for insurance companies this percentage amounts to around 70%. In the case of collective investment undertakings and pension funds, between 30% and 45% of their common holdings with the other financial sectors are also government debt securities. Common holdings of securities issued by firms in sectors classified as vulnerable are relatively low for all financial sectors, with insurance companies and banks holding the highest volume (below 1% in all cases).

**The banking sector has particularly high credit exposure to firms in the sectors vulnerable to the effects of the pandemic through financing granted, whereas insurance companies have more limited exposure.** Common holdings of marketable securities can be used to analyse interconnections stemming from the (generally large) firms that issue these securities on the financial markets. Although the above-mentioned share of indirect interconnections is quite low, this does not necessarily mean that the associated credit exposure is also low. Indeed, the banking sector has considerable credit exposure to the sectors vulnerable to the effects of the pandemic, on account of loans granted to firms in these sectors, which house a sizeable proportion of small and medium-sized enterprises (SMEs) (see Chart 4.3). Considering the total volume, large enterprises receive 46% of bank lending to vulnerable sectors, while the remaining 54% is distributed between all other borrowers (sole proprietors, microenterprises and SMEs). By contrast, insurance companies' credit exposure to vulnerable sector firms is comparatively limited. Their direct exposure to these sectors increases on account of risks assumed in the areas of credit and suretyship insurance and miscellaneous financial loss.[57]

57 However, the gross written premiums of these branches of insurance account for less than 4% of total premiums and only a portion thereof correspond to exposures to vulnerable sectors.

# 5 European Systemic Risk Board Recommendations relevant to AMCESFI

**AMCESFI, in its capacity as the macroprudential authority for the Spanish financial system, is a regular addressee of ESRB recommendations.** The ESRB has the power to issue recommendations to prompt macroprudential actions at the EU level – or, in specific cases, at the level of a Member State – to prevent or mitigate identified systemic vulnerability or risk. The ESRB usually addresses its recommendations to the relevant authorities of the EU Member States, including the sectoral supervisory authorities, the cross-sectoral macroprudential authority and even the resolution authority. The ESRB also addresses recommendations to the ECB (in its capacity as the banking supervisory authority), and occasionally to the European Commission (in matters requiring regulatory initiative), the Single Resolution Board (SRB) and the European banking, securities and markets, and insurance and occupational pensions authorities (EBA, ESMA and EIOPA, respectively).

**ESRB recommendations are not binding and the degree of compliance is at the discretion of the addressee authorities,** which (whether or not ESRB members)[58] base their compliance on a general "comply or explain" principle. The national follow-up strategy for each recommendation depends largely on the materiality of the issue addressed, which can vary greatly across the European Union. The timeline set in the recommendations for justifying compliance also varies, ranging from a few weeks to over a year. The ESRB conducts multi-year assessment exercises for each of its recommendations, to determine whether authorities are complying with them fully, partly or insufficiently.

**Since the establishment of AMCESFI in March 2019, the ESRB has issued nine recommendations affecting the Spanish authorities.** These recommendations were addressed to all EU countries. Six of them directly concern AMCESFI, in its capacity as the national macroprudential authority,[59] as defined by Recommendation ESRB/2011/3 (see Table 5.1). In most cases, the recommendations affecting AMCESFI also involve the Banco de España or all the sectoral supervisors.

**AMCESFI assesses the recommendations under its remit, relying on the other national authorities to ensure compliance.** The functions and powers

58 The Banco de España, the CNMV and the DGSFP are the three Spanish authorities represented on the ESRB. They participate in its General Board (the decision-making body) and its Advisory Technical Committee (the preparatory body), where the ESRB's proposed recommendations are discussed.

59 Recommendation ESRB/2011/3 on the macro-prudential mandate of national authorities.

**Table 5.1 Key ESRB Recommendations for the Spanish authorities in 2019 and 2020**

| ESRB Recommendation | AMCESFI | Banco de España | CNMV | DGSFP | FROB |
|---|---|---|---|---|---|
| Recommendation ESRB/2020/16 of 22 December 2020 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures | | ■ | | | |
| Recommendation ESRB/2020/15 of 15 December 2020 amending Recommendation ESRB/2020/7 on restriction of distributions during the COVID-19 pandemic | ■ | ■ | ■ | ■ | |
| Recommendation ESRB/2020/12 of 24 September 2020 on identifying legal entities | ■ | ■ | ■ | ■ | ■ |
| Recommendation ESRB/2020/9 of 2 June 2020 amending Recommendation ESRB/2015/2 on the assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures | | ■ | | | |
| Recommendation ESRB/2020/8 of 27 May 2020 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic | ■ | | | | |
| Recommendation ESRB/2020/7 of 27 May 2020 on restriction of distributions during the COVID-19 pandemic | ■ | ■ | ■ | ■ | |
| Recommendation ESRB/2020/6 of 25 May 2020 on liquidity risks arising from margin calls | | ■ | ■ | ■ | |
| Recommendation ESRB/2019/18 of 26 September 2019 on exchange and collection of information for macroprudential purposes on branches of credit institutions having their head office in another Member State or in a third country | ■ | ■ | | | |
| Recommendation ESRB/2019/3 of 21 March 2019 amending Recommendation ESRB/2016/14 on closing real estate data gaps | ■ | | | | |

**SOURCE:** AMCESFI.
NOTE: The blue shading denotes the authority(ies) to which each Recommendation is addressed.

conferred on the national macroprudential authorities differ significantly across countries. In Spain, AMCESFI is entrusted mainly with advisory tasks and the coordination of the sectoral supervisors, which are responsible for formulating, approving and implementing macroprudential policy measures. This institutional architecture means that AMCESFI follows a delegated approach in the conduct

of its macroprudential actions, such as those arising from compliance with ESRB recommendations.[60]

**In 2020 the ESRB issued Recommendation ESRB/2020/7 and Recommendation ESRB/2020/15 on restriction of distributions during the COVID-19 pandemic.** As part of a broader set of ESRB recommendations to address the impact of COVID-19, the ESRB recommended that capital distributions be fully restricted until 31 December 2020, and that they be restricted on a limited but flexible basis until 30 September 2021. The aim was to ensure that financial institutions across the European Union maintain a sufficient level of capital and loss-absorbing capacity to mitigate the effects of the pandemic-induced crisis, thus contributing to economic recovery. These recommendations affect various types of financial institutions across the European Union, such as banks, investment firms, central counterparties and insurers, complementing and supporting very similar sectoral initiatives launched by the ECB, EBA, ESMA, EIOPA and national authorities. In Spain, the Banco de España, CNMV and DGSFP have ensured appropriate compliance with these recommendations in their respective sectoral areas, with no direct intervention by AMCESFI required.

**In 2019 the ESRB issued Recommendation ESRB/2019/18 on exchange and collection of information for macroprudential purposes on branches of credit institutions having their head office in another Member State or in a third country.** This recommendation aims to enable authorities with macroprudential responsibilities to access certain supervisory information on branches[61] of credit institutions from other Member States or third countries, through voluntary cooperative arrangements and a reasoned request mechanism. The ESRB considers that the branches may be relevant for financial stability in some of the Member States in which they operate. AMCESFI delegates to the Banco de España (which is also an addressee of the Recommendation) the possible establishment of arrangements for exchange of information with other macroprudential authorities. Owing to the structure of the Spanish banking system,[62] no requests for information on branches operating in Spain have been made to date, nor have any requests for information on branches of Spanish banking groups located abroad been received.

**The ESRB also issued Recommendation ESRB/2020/12 on identifying legal entities.** The ESRB has observed a limited and uneven adoption of the legal entity identifier (LEI) in the markets. To remedy this situation, it has invited the European Commission to propose legislation, by June 2023, that incorporates a common Union legal framework governing its use in the European Union. Until

60 AMCESFI does not have the power to make recommendations to supervised financial institutions. Therefore, ESRB recommendations that require interaction with institutions must be implemented by the Banco de España, the CNMV or the DGSFP.

61 “Branch” means a banking establishment dependent on a parent company located in another country.

62 Most banks from other countries with a presence in Spain are established through subsidiaries. Similarly, Spanish banks with international business are established in other jurisdictions essentially through subsidiaries.

then, the ESRB encourages the relevant Member State authorities to: i) require all legal entities involved in financial transactions under their supervisory remit to have an LEI; ii) include in financial reporting obligations an obligation to identify by way of an LEI; and iii) identify, by way of its LEI, any legal entity about which they publicly disclose information. AMCESFI has until the end of 2021 to assess, with the other national authorities, the scope of this issue and to consider possible actions.

**In 2019 the ESRB issued Recommendation ESRB/2019/3 on closing real estate data gaps.** This recommendation amends a previous 2016 ESRB recommendation[63] that called on national macroprudential authorities to implement monitoring frameworks for the residential and commercial real estate market, based on common definitions and indicators. The ESRB identifies the limited availability of information as one of the main obstacles for this purpose, with implications also for comparability across countries. Before the creation of AMCESFI in 2019, the Banco de España assumed responsibility for complying with this recommendation, since it fell within its remit as the supervisory authority empowered to regularly collect from credit institutions the financial information provided for in the ESRB recommendation.

63 Recommendation ESRB/2016/14.

## Box 5.1 The work of AMCESFI in relation to Recommendation ESRB/2020/8[1]

**On 27 May 2020 the ESRB adopted Recommendation ESRB/2020/8 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic.** This recommendation is addressed to the macroprudential authorities of all EU Member States (AMCESFI in the case of Spain). To comply with the objectives of this recommendation, in 2020 AMCESFI created a COVID-19 Measures Subcommittee, which has collected and submitted quarterly information to the ESRB on the measures approved to minimise the impact of the health crisis on the economy. On the basis of this information, the work of the subcommittee has focused on two tasks: first, developing a set of indicators on the characteristics of the measures; and second, studying the impact of these measures on financial stability. This box presents a short summary of the main conclusions reached.

**In the highly complex and uncertain situation brought about by the COVID-19 pandemic, the economic policy response has been geared towards strengthening the resilience of the Spanish economy, minimising the social impact and facilitating a swift economic recovery.** At 31 December 2020, Spain had adopted an ambitious raft of measures for a total of €202,675 million, representing 18% of 2020 GDP. These measures can be classified into two main groups: i) direct support measures, accounting for 4% of 2020 GDP; and ii) liquidity support measures (accounting for 14% of 2020 GDP).

**Notable within the liquidity support measures are bank loan moratoria and public guarantees on loans.** The public guarantees aim to address the liquidity needs of non-financial corporations and the self-employed arising from revenue shortfalls and difficulties cutting costs to the same extent. In total, facilities worth €143 billion have been approved, notably

**Table 5.2 Summary of liquidity measures adopted (in €m)**

| Type of measures | Amount announced | % of 2020 GDP | Amount used (a) | % of 2020 GDP |
|---|---|---|---|---|
| Moratoria | - | - | 54,403 | 4.85 |
| Public guarantees | 143,000 | 12.75 | 89,041 | 7.94 |
| Shareholdings | 10,000 | 0.89 | 475 | 0.04 |
| Tax and social security measures (liquidity) | 4,764 | 0.42 | 4,764 | 0.42 |
| Total liquidity measures | 157,764 | 14.06 | 94,280 | 8.41 |

**SOURCE:** AMCESFI.

**a** The total amount used does not include the moratoria as they are not liquidity measures funded by the public sector.

1 For further details, see “Análisis de las medidas públicas de apoyo adoptadas en España frente al COVID-19 desde el punto de vista de la estabilidad financiera”, AMCESFI *Documento Ocasional,* July 2021.

## Box 5.1 The work of AMCESFI in relation to Recommendation ESRB/2020/8 (cont'd)

**Table 5.3 Summary of expenditure measures adopted (in €m)**

| Type of measures | Amount | % of 2020 GDP |
|---|---|---|
| Subsidies (furlough schemes, temporary disability and suspension of activity) | 21,520 | 1.92 |
| Exemptions from social security contributions for furloughed workers and the self-employed | 7,791 | 0.69 |
| Other COVID-19 expenditure measures | 15,596 | 1.39 |
| Total | 44,907 | 4.00 |

**SOURCE:** AMCESFI.

including the guarantee facilities provided by the ICO, amounting to €100 billion and €40 billion.

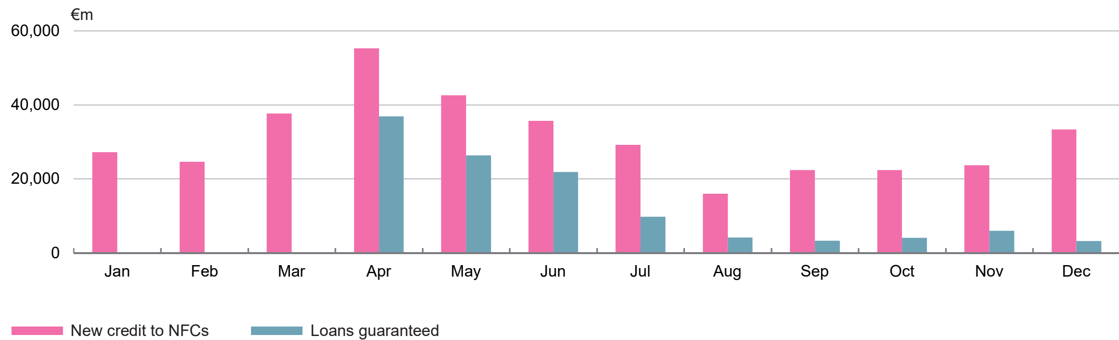
**Four aspects of the impact of the guarantee facilities on financial stability have been analysed: i) the impact on credit developments in Spain; ii) the impact on the terms and conditions of loans granted in Spain; iii) the impact on banks' balance sheets; and iv) the possible risks.** New lending to non-financial corporations grew sharply year-on-year in the period from March to June 2020. Between April and June, over 60% of new bank loans were granted through the ICO public guarantee scheme. The ICO guarantees were therefore instrumental in covering firms' liquidity needs, which increased over this period as a result of the measures implemented to prevent the spread of COVID-19.

**The ICO-guaranteed lending was concentrated on firms facing the greatest difficulties to obtain financing: mainly SMEs and the self-employed (98% of the loans granted) and in the sectors hardest hit by the crisis.** These schemes have enabled firms to access loans with more favourable terms and conditions, on account of the much longer maturities of guaranteed loans compared with traditional ones and their lower costs. The public guarantee schemes have also had a positive impact on banks' balance sheets, because they entail lower capital consumption, as the credit risk of the guaranteed part of the loans has the same preferential regulatory treatment as Spanish sovereign exposures. Also, in the event of default, the bank is covered by the amount of the guarantee.

**The moratoria aim to protect families and people in particularly vulnerable situations and to support firms in the sectors hardest hit by the pandemic.** Five different types of moratoria were introduced: i) legislative mortgage moratoria; ii) legislative moratoria for vulnerable individuals; iii) moratoria provided by the banking sector; iv) moratoria for the tourism sector; and v) moratoria for the public transport of goods and charter bus sector. These five schemes led to a high volume of applications throughout 2020. Specifically, by the end of the year, 1.5 million applications had been submitted, of which more than 90% were granted. The moratoria cushioned the initial impact of the pandemic and allowed the beneficiaries to cover their short-term liquidity needs. These measures must be prudently managed to continue to alleviate

# Box 5.1 The work of AMCESFI in relation to Recommendation ESRB/2020/8 (cont'd)

**Chart 5.1 Credit guaranteed in 2020**




**SOURCE:** AMCESFI.

borrowers' potential liquidity problems while at the same time ensuring appropriate repayment incentives.

**At end-December 2020 the outstanding balance of loans whose payment obligations were temporarily suspended through moratoria schemes amounted to €56,168 million, accounting for 8% of the total credit granted eligible for such schemes.** Almost 56% of all the moratoria granted to the self-employed are concentrated in three sectors that have been especially hard hit by the pandemic (retail, hospitality and other services). These moratoria, together with those granted to professional and scientific activities, transport, construction and manufacturing, account for 80% of the loan moratoria granted in 2020. As for the credit status of the almost €22 billion in loans whose moratoria have expired or been cancelled, almost three-quarters is performing, with no increase in credit risk, almost 20% is classified as Stage 2, and only 6% is non-performing at the start of the year. The loans subject to moratoria most likely to become non-performing are those that were originally subject to legislative moratoria, loans granted to more vulnerable or indebted households, loans whose risk is covered by a guarantee, loans to households with an older reference person and loans to households located in one of the regions most severely affected by the pandemic in terms of employment.

**The measures adopted have had a beneficial effect on the securities markets.** Most of these measures are indirect and, therefore, hard to quantify, while those with a direct impact are more limited in quantitative terms. The contribution of the measures aimed at alleviating the liquidity needs of agents (basically the self-employed, SMEs and employees under furlough schemes) is particularly noteworthy, due to the role that these agents can play as investors. Accordingly, although this effect is difficult to quantify, the measures could have reduced the need for investment fund redemptions. The measures with a direct impact most notably include public guarantees for commercial paper issues, which totalled €470.8 million in 2020 and a further €217.7 million in 2021 Q1.

**Measures have also been approved to strengthen the mechanisms that help the insurance sector maintain its ability to support business activities.** A reinsurance programme has been launched for credit risks of policyholders

## Box 5.1 The work of AMCESFI in relation to Recommendation ESRB/2020/8 (cont'd)

domiciled in Spain. Under this programme, the Insurance Compensation Consortium grants proportional quota share reinsurance coverage of up to 60%, on the same terms and conditions as agreed with the private reinsurers, and extends coverage to a maximum loss for the Consortium of €500 million. The available data suggest that this measure is proving effective, as it supports keeping the supply of credit insurance quite close to previous levels. The possibility of making early drawdowns of vested pension rights was also approved on an exceptional and temporary basis.

# Annex 1 Dashboard of risk indicators

| | |
|---|---|
| **Chart A.1** | **Macroeconomic risk** |
| | 1 Real GDP, quarter-on-quarter rate of change |
| | 2 Unemployment rate according to the LFS |
| | 3 Inflation according to headline HICP |
| | 4 Government debt and deficit |
| | 5 Resident private sector debt, consolidated |
| | 6 Current account balance |
| | 7 Negative net international investment position |
| | 8 Unit labour costs |
| **Chart A.2** | **Market risk** |
| | 1 Equity markets |
| | 2 10-year government bond yield |
| | 3 1-year EURIBOR |
| | 4 International market volatility |
| | 5 IBEX 35 volatility |
| **Chart A.3** | **Credit risk** |
| | 1 NPL ratio, deposit institutions |
| | 2 Coverage ratio, deposit institutions |
| | 3 Spanish 10-year government bond yield spread over Germany |
| | 4 Credit default swap indicators |
| | 5 Credit to the resident private sector |
| | 6 New credit to the resident private sector |
| **Chart A.4** | **Real estate exposure** |
| | 1 Real estate market developments |
| | 2 House price overvaluation estimates |
| | 3 Housing and construction loans |
| | 4 New housing loans |
| **Chart A.5** | **Liquidity and funding risk** |
| | 1 3M LIBOR-OIS spread |
| | 2 Eurosystem monetary policy interest rates |

3 Spain average interest rate spread against the euro area on new loans of up to €1 million extended to firms

4 Bond issuances

5 Equity issuances by Spanish firms

6 Loan-to-deposit ratio, other resident sectors

7 Trading of Spanish equities

8 Bid-ask spreads

**Chart A.6** **Solvency and profitability risk**

**Banks**

1 Return on equity (ROE)

2 Cost-to-income ratio

3 Capital ratios

4 Leverage ratio (phase-in)

**Insurance undertakings**

5 Return on equity (ROE)

6 Gross non-life combined ratio

7 Solvency ratio

**Chart A.7** **Structural risks and interconnectedness**

1 Financial sector assets

2 Assets of other financial intermediaries

3 Investment funds

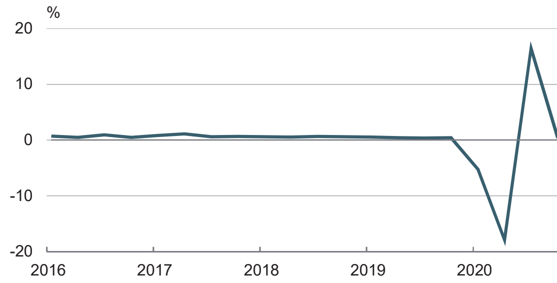
4 Assets of insurers and pension funds

5 Banking sector liabilities, by sector

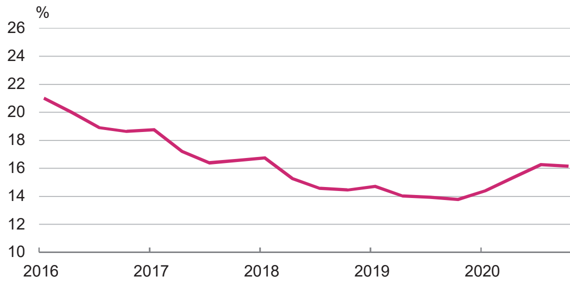
6 Systemic risk indicator

## Chart A.1 Macroeconomic risk

1 Real GDP, quarter-on-quarter rate of change (a)

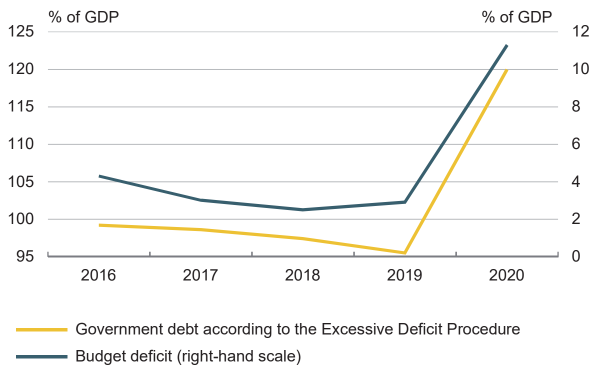



2 Unemployment rate according to the LFS




3 Inflation according to headline HICP (b)

4 Government debt and deficit

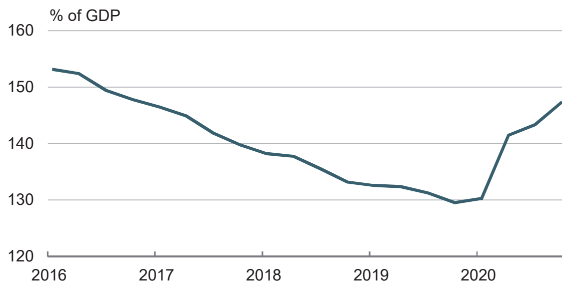



**SOURCE:** Ministerio de Asuntos Económicos y Transformación Digital.

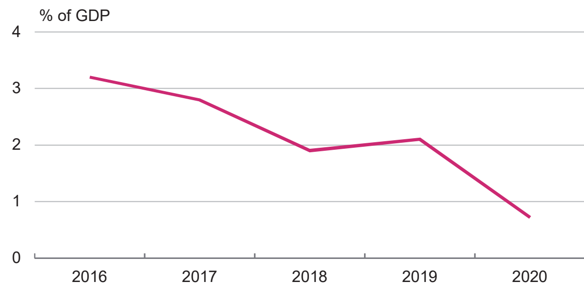
**a** Quarterly rate of change.
**b** Annual rate of change.

## Chart A.1 Macroeconomic risk (cont'd)

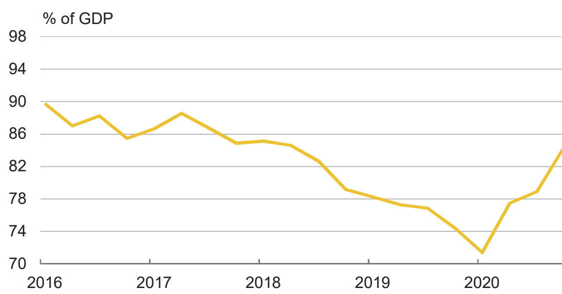
5 Resident private sector debt, consolidated (a)



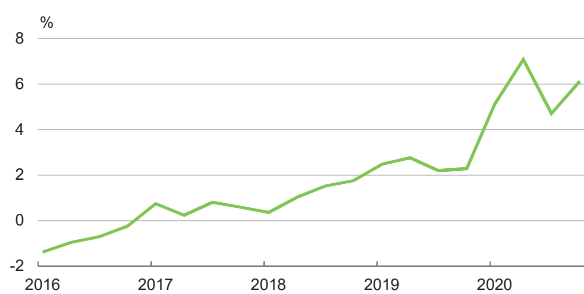

6 Current account balance




7 Negative net international investment position




8 Unit labour costs (ULCs) (b)

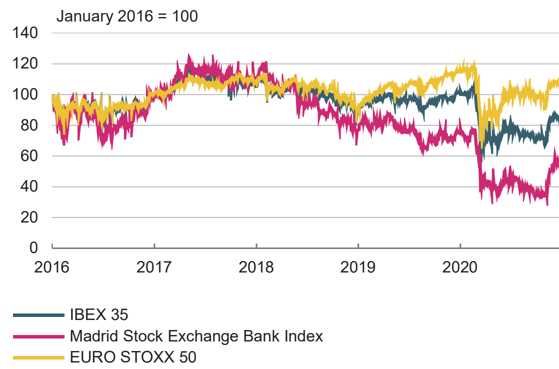



**SOURCE:** Ministerio de Asuntos Económicos y Transformación Digital.

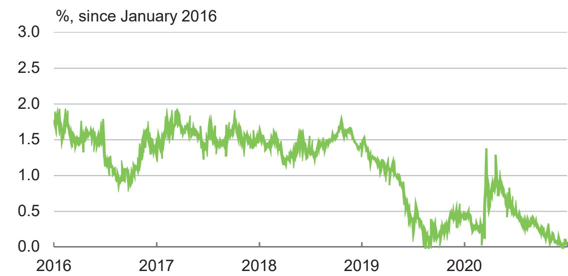
**a** Non-financial corporations and households and non-profit institutions serving households.
**b** Annual rate of change.

## Chart A.2 Market risk

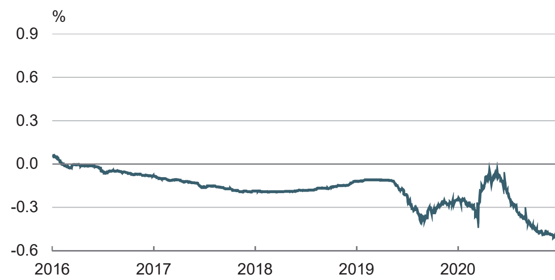
1 Equity markets



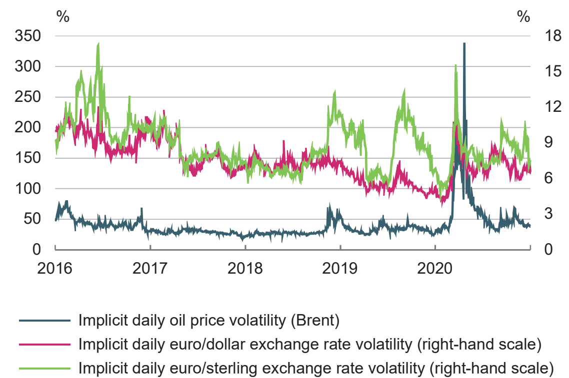

2 10-year government bond yield



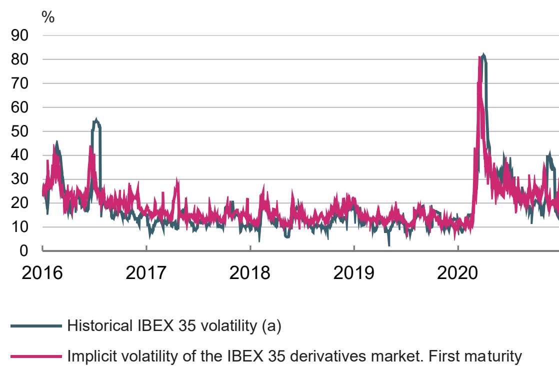

3 1-year EURIBOR




4 International market volatility




5 IBEX 35 volatility

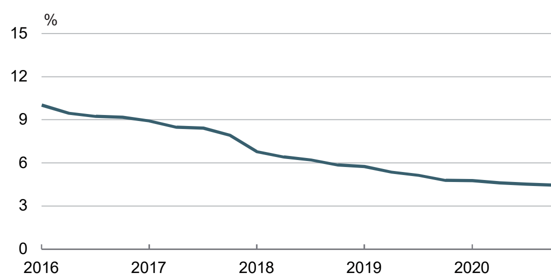



**SOURCE:** Datastream.

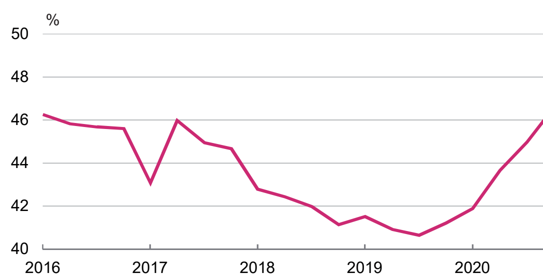
**a** The indicator of historical volatility is calculated as the annualised standard deviation of daily IBEX 35 price changes over 21 days.

## Chart A.3 Credit risk

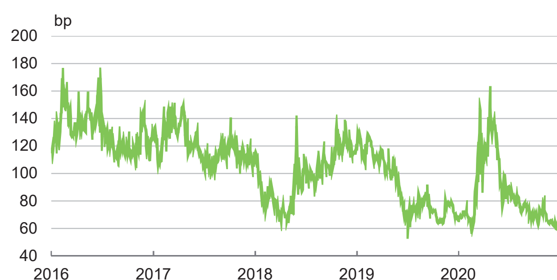
1 NPL ratio, deposit institutions (a)




2 Coverage ratio, deposit institutions (a)

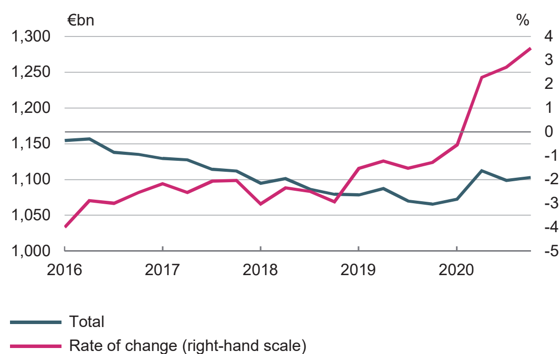



3 Spanish 10-year government bond yield spread over Germany

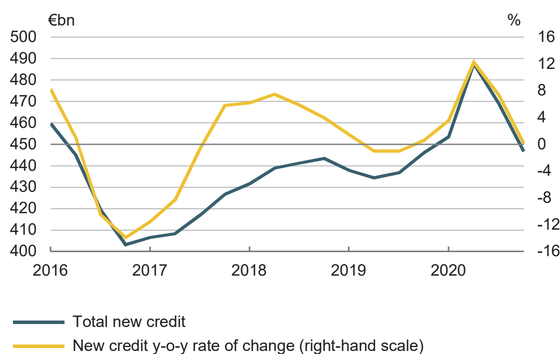



4 Credit default swap indicators (b)

5 Credit to the resident private sector (c)




6 New credit to the resident private sector (d)

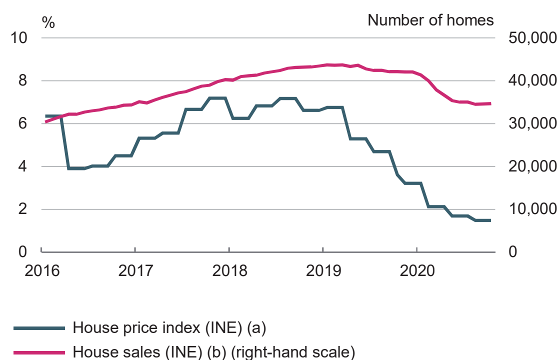



**SOURCE:** Banco de España.

**a** Bank-level data, business in Spain.
**b** Simple average of a sample of IBEX 35 members.
**c** Households and non-financial corporations.
**d** Cumulative 12-month flow.

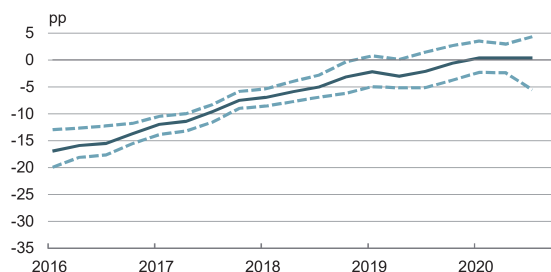
## Chart A.4 Real estate exposure

1 Real estate market developments

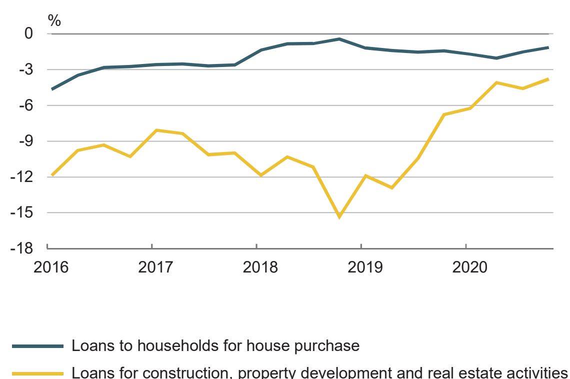



House price index (INE) (a)
House sales (INE) (b) (right-hand scale)

2 House price overvaluation estimates (c)

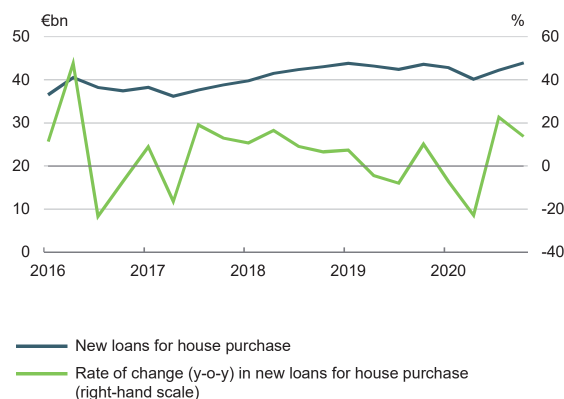



3 Housing and construction loans (d)




Loans to households for house purchase
Loans for construction, property development and real estate activities

4 New housing loans (e)



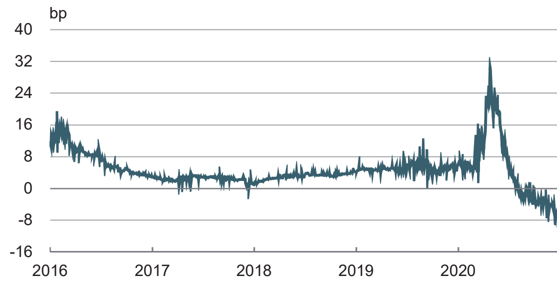

New loans for house purchase
Rate of change (y-o-y) in new loans for house purchase (right-hand scale)

**SOURCE:** Banco de España.

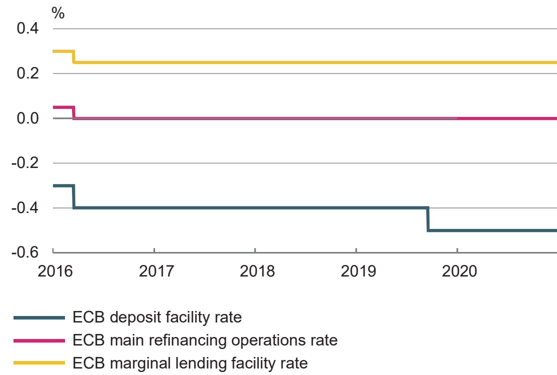
**a** Year-on-year rate of change.
**b** 12-month moving average.
**c** The solid and broken lines denote, respectively, the average, minimum and maximum values of a set of four indicators for changes in real estate sector prices vis-à-vis their long-term trends: i) house price gap with respect to the long-term trend calculated using a Hodrick Prescott filter with a smoothing parameter of 400,000; ii) house-price-to-disposable income ratio gap with respect to the long-term trend calculated using a Hodrick Prescott filter with a smoothing parameter of 400,000; econometric model for house price imbalances explained by long-term trends in disposable income and mortgage rates; and iv) long-term econometric model for long-term house price imbalances explained by prices in preceding periods, disposable income, new mortgage rates and fiscal variables.
**d** Year-on-year rate of change.
**e** Cumulative 12-month flow.

## Chart A.5 Liquidity and funding risk

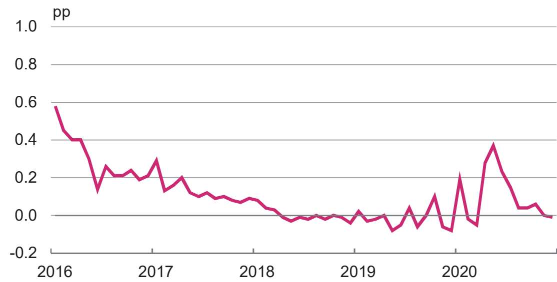
1 3M LIBOR-OIS spread



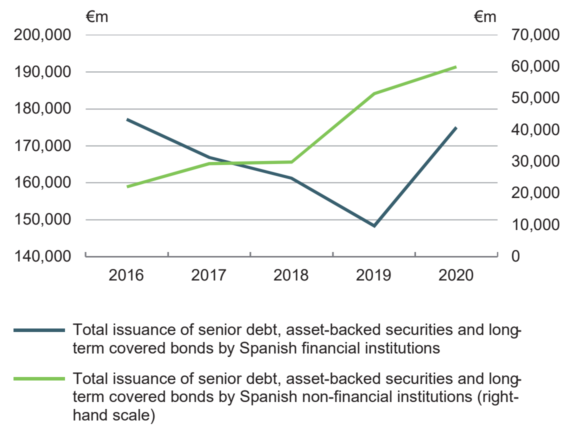

2 Eurosystem monetary policy interest rates




3 Spain average interest rate spread against the euro area on new loans of up to €1 million extended to firms



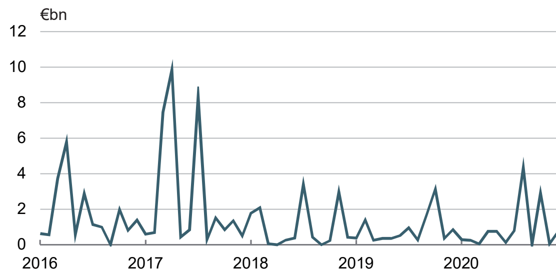

4 Bond issuances



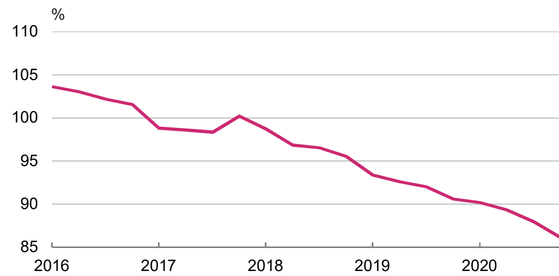

**SOURCES:** Banco de España, ECB and CNMV.

## Chart A.5 Liquidity and funding risk (a) (cont'd)

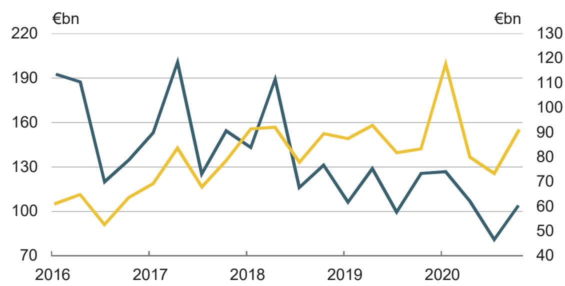
5 Equity issuances by Spanish firms




6 Loan-to-deposit ratio, other resident sectors



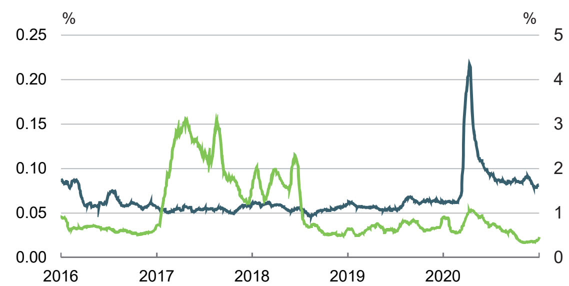

7 Trading of Spanish equities




Spanish equities traded on Spanish stock market

Spanish equities traded on foreign stock markets (Chi-X, Turquoise, BATS and others) (right-hand scale)

8 Bid-ask spreads




IBEX 35 bid-ask spread

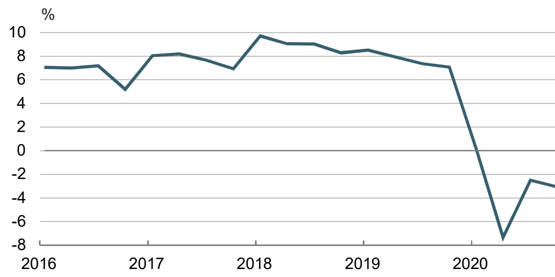
10-year sovereign bond bid-ask spread (right-hand scale)

**SOURCES:** CNMV and Banco de España.

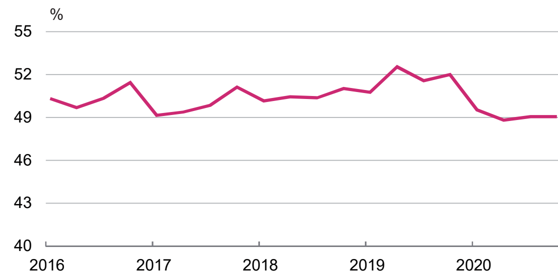
a Households and non-financial corporations.

## Chart A.6 Solvency and profitability risk. Banks. Consolidated data

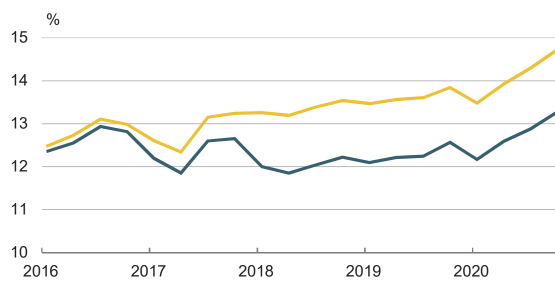
1 Return on equity (ROE) (a)



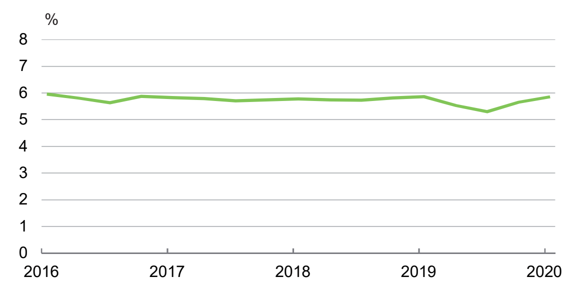

2 Cost-to-income ratio (b)




3 Capital ratios




4 Leverage ratio (phase-in)



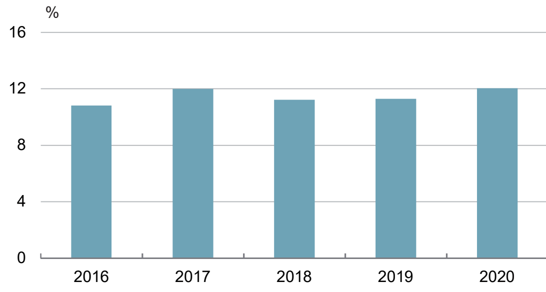

Tier 1 capital ratio (phase-in)
CET1 ratio (phase-in)

**SOURCE:** Banco de España.

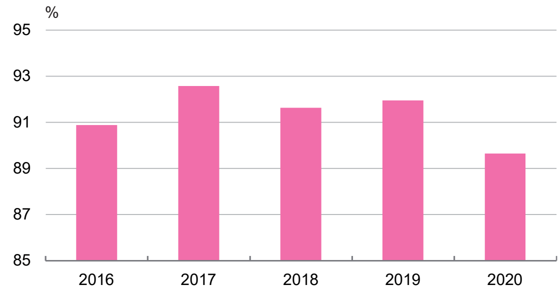
**a** Net income as a proportion of average equity.
**b** Operating costs as a proportion of gross income.

## Chart A.6 Solvency and profitability risk (cont'd)
## Insurance undertakings

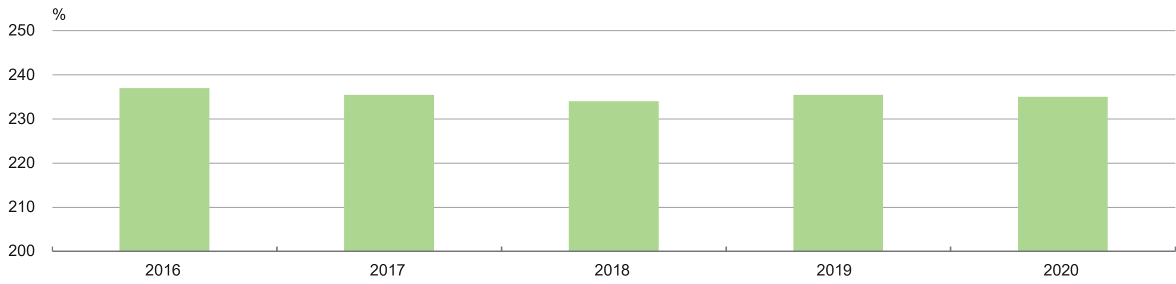
5 Return on equity (ROE)




6 Gross non-life combined ratio



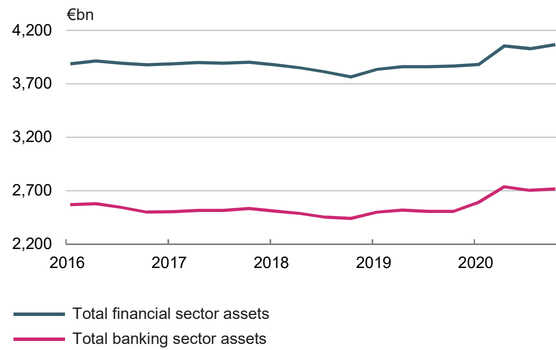

7 Solvency ratio



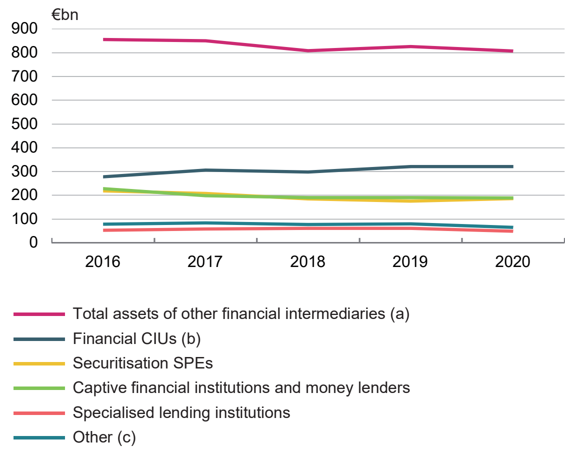

**SOURCE:** DGSFP.

## Chart A.7 Structural risks and interconnectedness

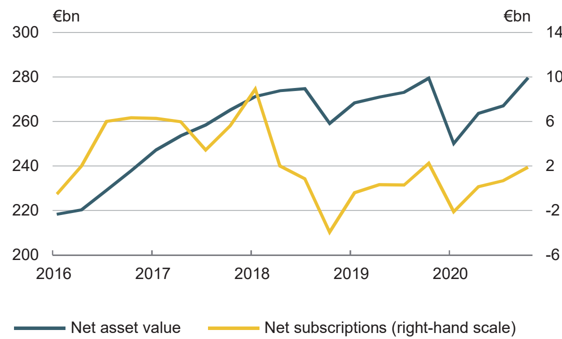
1 Financial sector assets



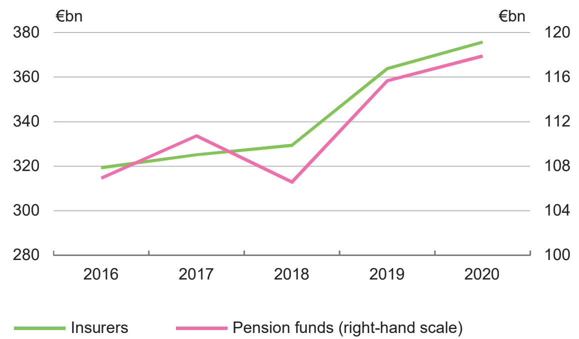

2 Assets of other financial intermediaries




3 Investment funds




4 Assets of insurers and pension funds

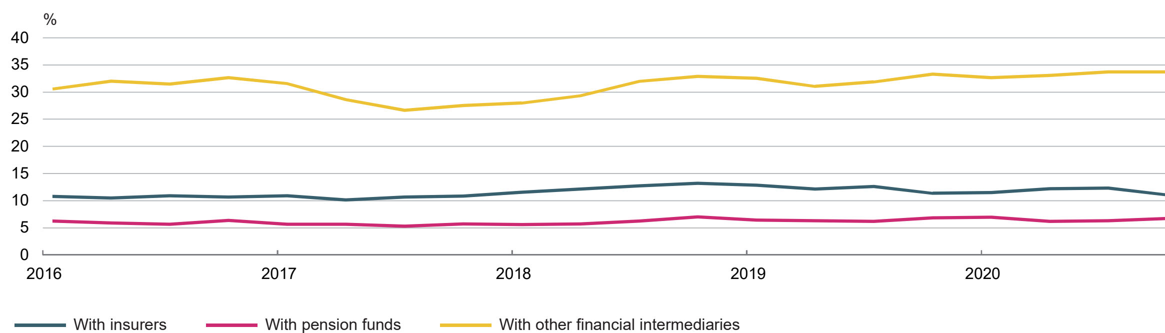



**SOURCES:** CNMV, DGSFP and Banco de España.

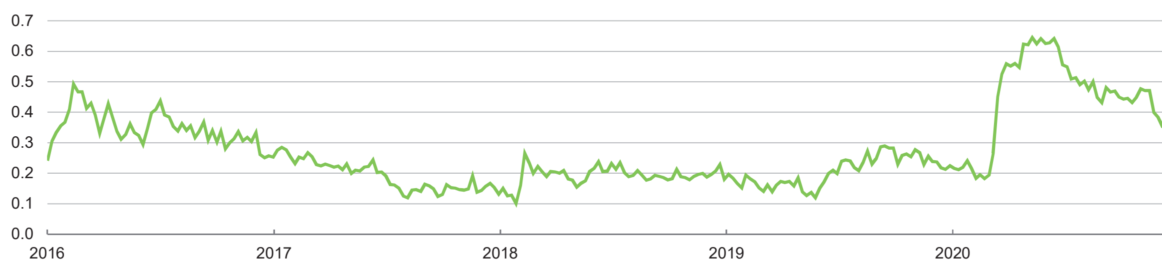
**a** The 2020 data are provisional.
**b** Includes investment funds (including money market funds), open-end investment companies and hedge funds.
**c** From 2020, not including assets belonging to Sareb, which was reclassified in the general goverment sector.

## Chart A.7 Structural risks and interconnectedness (cont'd)

5 Banking sector liabilities, by sector (a)




6 Systemic risk indicator (b)




**SOURCES:** Banco de España and CNMV.

**a** Distributions as a percentage of total liabilities with the financial sector.
**b** Stress is measured in six segments of the financial system and is aggregated, to obtain a single figure that factors in the correlation between the segments. The econometric estimates suggest that indicator values below 0.27 denote periods of low stress, values between 0.27 and 0.49 denote periods of medium stress, and values over 0.49 denote periods of high stress.

# Annex 2 Key publications by AMCESFI member institutions and their staff

**Ministerio de Asuntos Económicos y Transformación Digital, Comisión Nacional del Mercado de Valores and Banco de España**

"Análisis de las medidas públicas de apoyo adoptadas en España frente al COVID-19 desde el punto de vista de la estabilidad financiera"
Judith Arnal (coord.), Francisco Carrasco, Lucía Paternina, Gema Pedrón, Lourdes Ramos and Raquel Vegas
*AMCESFI Documento Ocasional,* July 2021

**Ministerio de Asuntos Económicos y Transformación Digital**

**Secretaría General del Tesoro y Financiación Internacional**
Presentation of the monographic issue of *Información Comercial Española,* "Política macroprudencial en España: instituciones e instrumentos"
Carlos San Basilio
*Información Comercial Española,* No 918, February 2021

"AMCESFI - La política macroprudencial en España y en el marco internacional"
Judith Arnal, Juan Luis Díez Gibson, Javier Muñoz Moldes and María Eugenia Menéndez-Morán Pazos
*Información Comercial Española,* No 918, February 2021

"Política fiscal y estabilidad financiera: los efectos de los avales públicos en respuesta a la crisis del COVID-19"
Judith Arnal, Fernando Hernández, Ana Pajón and Lucía Paternina
*Información Comercial Española,* No 918, February 2021

**Dirección General de Seguros y Fondos de Pensiones**
*Informe de Seguros y Fondos de Pensiones 2019*

"Herramientas macroprudenciales en el sector asegurador español"
Magdalena Rubio Benito and Francisco Carrasco Bahamonde
*Información Comercial Española,* No 918, February 2021

**Comisión Nacional del Mercado de Valores**

*Financial Stability Note* No 18, April 2021

*Financial Stability Note* No 17, January 2021

*Financial Stability Note* No 16, October 2020

*Financial Stability Note* No 15, July 2020

*Financial Stability Note* No 14, April 2020

*Financial Stability Note* No 13, January 2020

*Non-bank financial intermediation in Spain - Financial year 2019*

"La extensión de las herramientas macroprudenciales a la intermediación financiera no bancaria en el sector de la inversión colectiva"
Eudald Canadell Casanova and María Isabel Cambón Murcia
*Información Comercial Española,* No 918, February 2021

"Analysis of leverage in Spanish alternative investment funds"
Gema Pedrón
*CNMV Bulletin,* Quarter I/2021

"Deconstructing systemic risk: A reverse stress testing approach"
Javier Ojea-Ferreiro
*Working Paper* No 74

"Stress testing for non real-estate investment funds"
Ramiro Losada and Albert Martínez Pastor
*CNMV Bulletin,* Quarter IV/2020

"Central counterparty resolution: How to assess and treat available financial resources"
María José Gómez Yubero and Bárbara Gullón Ojesto
*CNMV Bulletin,* Quarter IV/2020

*Analysis of the effect of restrictions on net short positions on Spanish shares between March and May 2020*
Ramiro Losada López and Albert Martínez Pastor
July 2020

"Quantifying uncertainty in adverse liquidity scenarios for investment funds"
Javier Ojea-Ferreiro
*CNMV Bulletin,* Quarter II/2020

**Banco de España and Comisión Nacional del Mercado de Valores**

"Evolución de las conexiones entre bancos y sectores financieros no bancarios en el sistema financiero español"
Patricia Stupariu, José Alonso Olmedo and María Isabel Cambón Murcia
*Información Comercial Española,* No 918, February 2021

**Banco de España**

*Financial Stability Report,* Spring 2021

*Financial Stability Report,* Autumn 2020

*Financial Stability Report,* Spring 2020

*Supervision Report 2020*

"Recent developments in financing and bank lending to the non-financial private sector. First half of 2021"
Pana Alves, Jorge Galán, Luis Fernández Lafuerza and Eduardo Pérez Asenjo
Analytical Articles, *Economic Bulletin 3/2021,* Banco de España.

"Support measures in the banking sector: loan moratoria"
Gabriel Jiménez, Eduardo Pérez Asenjo, Raquel Vegas and Carlos Trucharte
*Financial Stability Review,* No 40, Spring 2021, Banco de España

"Estimating the cost of equity for financial institutions"
Luis Fernández Lafuerza and Javier Mencía
*Financial Stability Review,* No 40, Spring 2021, Banco de España

"Adapting the supervision of credit institutions to the COVID-19 crisis"
Sonsoles Eirea, María Oroz and Carlos Díez
*Financial Stability Review,* No 40, Spring 2021, Banco de España

"Function and application of the new macroprudential tools available to the Banco de España"
Christian Castro and Ángel Estrada
*Financial Stability Review,* No 40, Spring 2021, Banco de España

"Cyber risk as a threat to financial stability"
Francisco Herrera, José Munera and Paul Williams
*Financial Stability Review,* No 40, Spring 2021, Banco de España

"The design of macroeconomic scenarios for climate change stress tests"
Pablo Aguilar, Beatriz González and Samuel Hurtado
*Financial Stability Review,* No 40, Spring 2021, Banco de España

"El cuadro de mandos de la política macroprudencial"
Ángel Estrada and Javier Mencía
*Información Comercial Española,* No 918, February 2021

“Nuevas herramientas macroprudenciales para las entidades de crédito”
Carlos Trucharte
*Información Comercial Española,* No 918, February 2021

“Evidencia sobre el impacto y la efectividad de las herramientas macroprudenciales”
Carmen Broto and Jorge Galán
*Información Comercial Española,* No 918, February 2021

“Model-based indicators for the identification of cyclical systemic risk”
Jorge E. Galán and Javier Mencía
*Empirical Economics* (2021)

“The Financial Transmission of Housing Booms: Evidence from Spain”
Alberto Martín, Enrique Moral-Benito and Tom Schmitz
*American Economic Review,* Vol. 111(3), March 2021

“The regulatory and supervisory response to the COVID-19 crisis”
Rebeca Anguren, Luis Gutiérrez de Rozas, Esther Palomeque and Carlos José Rodríguez García
*Financial Stability Review,* No 39, Autumn 2020, Banco de España

“The challenges associated with the use of agencies’ credit ratings in the context of the COVID-19 crisis”
Elena Rodríguez de Codes, Antonio Marcelo, Roberto Blanco, Sergio Mayordomo, Fabián Arrizabalaga and Patricia Stupariu
*Financial Stability Review,* No 39, Autumn 2020, Banco de España

“At-risk measures and financial stability”
Jorge E. Galán and María Rodríguez-Moreno
*Financial Stability Review,* No 39, Autumn 2020, Banco de España

“Recent developments in financing and bank lending to the private non-financial sector”
Pana Alves, Fabián Arrizabalaga, Javier Delgado, Jorge Galán, Eduardo Pérez Asenjo, Carlos Pérez Montes and Carlos Trucharte
Analytical Articles, *Economic Bulletin* 1/2021, Banco de España

“Recent developments in the cost of bank equity in Europe”
Luis Fernández Lafuerza and Javier Mencía
Analytical Articles, *Economic Bulletin* 4/2020, Banco de España

“Recent developments in financing and bank lending to the private non-financial sector”
Pana Alves, Roberto Blanco, Sergio Mayordomo, Fabián Arrizabalaga, Javier Delgado, Gabriel Jiménez, Eduardo Pérez Asenjo, Carlos Pérez Montes and Carlos Trucharte
Analytical Articles, *Economic Bulletin* 4/2020, Banco de España

“Screening and loan origination time: lending standards, loan defaults and bank failures”
Mikel Bedayo, Gabriel Jiménez, José-Luis Peydró and Raquel Vegas
*Working Paper* No 2037, Banco de España (2020)

“The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk”
Jorge E. Galán
*Working Paper* No 2007, Banco de España (2020)

“Measuring the procyclicality of impairment accounting regimes: a comparison between IFRS 9 and US GAAP”
Alejandro Buesa, Francisco Javier Población García and Javier Tarancón
*Working Paper* No 2003, Banco de España (2020)

“Spanish non-financial corporations’ liquidity needs and solvency after the COVID-19 shock”
Roberto Blanco, Sergio Mayordomo, Álvaro Menéndez and Maristela Mulino
*Occasional Paper* No 2020, Banco de España (2020)

“Retrenchment of euro area banks and international banking models”
María Rodríguez-Moreno, María Isabel Argimón, Isabel Ortiz and Elena Fernández
*ESRB Working Paper* No 112 (2020)

# Glossary

| | |
|---|---|
| ABSPP | Asset-backed securities purchase programme |
| AIFs | Alternative investment funds |
| AMCESFI | *Autoridad Macroprudencial Consejo de Estabilidad Financiera* (Spanish macroprudential authority) |
| APP | Asset purchase programme |
| ATA | Average total assets |
| BCBS | Basel Committee on Banking Supervision |
| bn | Billion |
| bp | Basis points |
| CBPP3 | Third covered bond purchase programme |
| CCoB | Capital conservation buffer |
| CCP | Central counterparty |
| CCS | *Consorcio de Compensación de Seguros* (Insurance Compensation Consortium) |
| CCyB | Countercyclical capital buffer |
| CDS | Credit default swap |
| CET1 | Common Equity Tier 1 |
| CIUs | Collective investment undertakings |
| CNMV | *Comisión Nacional del Mercado de Valores* (National Securities Market Commission) |
| COVID-19 | Coronavirus disease 2019 |
| CRD | Capital Requirements Directive |
| CRR | Capital Requirements Regulation |
| CSPP | Corporate sector purchase programme |
| DFR | Deposit facility rate |
| DGSFP | *Dirección General de Seguros y Fondos de Pensiones* (Directorate General of Insurance and Pension Funds) |
| EBA | European Banking Authority |
| EBITDA | Earnings before interest, taxes, depreciation and amortisation |
| ECB | European Central Bank |
| EF | Economic function |
| EIOPA | European Insurance and Occupational Pensions Authority |
| ESG | Environmental, social and governance |
| ESMA | European Securities and Markets Authority |
| ESRB | European Systemic Risk Board |
| EU | European Union |
| FROB | Spanish executive resolution authority |
| FSB | Financial Stability Board |
| FSR | Financial Stability Report |
| FSTC | Financial Stability Technical Committee (AMCESFI) |
| GDP | Gross domestic product |

| | |
|---|---|
| G-SII | Global systemically important institution |
| HICP | Harmonised index of consumer prices |
| HQLAs | High-quality liquid assets |
| ICO | *Instituto de Crédito Oficial* (Official Credit Institute) |
| IMF | International Monetary Fund |
| INE | *Instituto Nacional de Estadística* (National Statistics Institute) |
| LCR | Liquidity coverage ratio |
| LEI | Legal Entity Identifier |
| LFS | Labour force survey |
| LTROs | Longer-term refinancing operations |
| LTV | Loan-to-value ratio |
| NBFI | Non-bank financial intermediation |
| NBFS | Non-bank financial sector |
| NFCs | Non-financial corporations |
| NIIP | Net international investment position |
| NPLs | Non-performing loans |
| OFIs | Other financial institutions |
| OIS | Overnight interest swap |
| O-SII | Other systemically important institution |
| P2G | Pillar 2 guidance |
| P2R | Pillar 2 requirement |
| PEPP | Pandemic emergency purchase programme |
| pp | Percentage points |
| PSPP | Public sector purchase programme |
| ROA | Return on assets |
| ROE | Return on equity |
| RWAs | Risk-weighted assets |
| Sareb | Spanish asset management company |
| SHS | Securities holdings statistics |
| SHSS | Securities holdings statistics by sector |
| SICAV | *Sociedad de inversión de capital variable* (open-end investment company) |
| SLIs | Specialised lending institutions |
| SMEs | Small and medium-sized enterprises |
| SPEs | Special purpose entities |
| SRB | Single Resolution Board |
| SRI | Systemic risk indicator |
| SSM | Single Supervisory Mechanism |
| T2 | Tier 2 |
| TLTROs | Targeted longer-term refinancing operations |
| UCITS | Undertakings for collective investment in transferable securities |
| VaR | Value at risk |

Cut-off date: 30 June 2021.

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Banco de España - Comisión Nacional del Mercado de Valores,
Madrid, 2021
ISSN: 2660 - 4116