

# 2

## RISKS TO THE FINANCIAL SECTOR AND ITS RESILIENCE



## 2 RISKS TO THE FINANCIAL SECTOR AND ITS RESILIENCE

Chapter 2 of this FSR focuses on analysing developments in the Spanish banking sector and in the other financial intermediaries during 2020, a year in which the COVID-19 pandemic has had a significant impact on the financial system, albeit an impact which the economic policy response has largely cushioned. Thus, lending grew in Spain during the year and NPLs continued to decline. However, this was largely conditioned by the credit support schemes implemented (State guarantees and loan moratoria), which will need to be monitored closely. The impact of the pandemic on banking activity and the economic outlook, along with several extraordinary adjustments, gave rise to negative profitability in the banking sector in 2020, albeit unevenly across institutions. However, this unfavourable profitability performance did not translate into a worsening of the sector's solvency, and capital ratios increased, underpinned in part by the reform of European capital requirements and by the authorities' recommendation on dividend distribution restrictions. As regards the non-bank financial sector, the net flows contributed to investment funds stabilised in the second half of the year, although these intermediaries were exposed to the risk of abrupt changes in financial market conditions. Interconnections between financial sub-sectors through common holdings of marketable securities, particularly those on the edge of investment grade, are a potential propagation channel for this risk.

### 2.1 Deposit institutions

#### 2.1.1 Balance sheet structure, risks and vulnerabilities

##### *Credit risk*

**The outstanding balance of deposit institutions' lending to the private sector in Spain grew in 2020 as a whole, although less buoyantly in the second half of the year.** The year-on-year growth rate stood at 3.5%,<sup>1</sup> although credit expansion was particularly strong in Q2, coinciding with heightened deployment of the ICO guarantee scheme for loans to firms (see Chart 2.1).<sup>2</sup> This is the first time bank lending has grown in Spain since 2008, reflecting the banking sector's ability to meet households' and firms' liquidity needs and the effect of the economic policy measures

<sup>1</sup> In December 2020 growth was affected by a corporate transaction consisting of the absorption of an SLI into a significant deposit institution (DI). In any event, excluding this transaction, growth for 2020 as a whole was 2,9%.

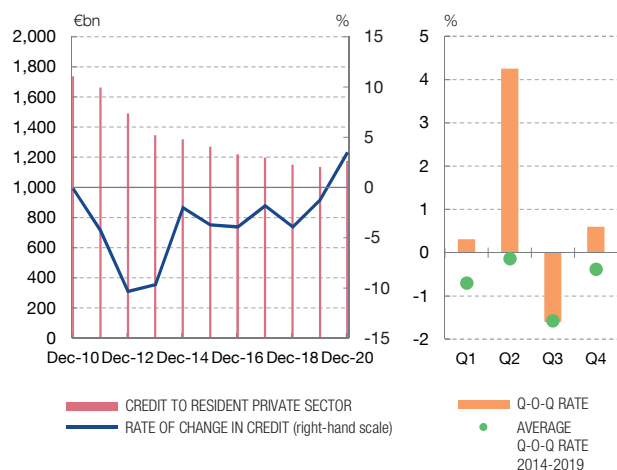
<sup>2</sup> [Royal Decree-Law 8/2020](#) of 17 March 2020 approved a State guarantee facility of up to €100 billion to help preserve employment and mitigate the economic effects of the health crisis. [Royal Decree-Law 25/2020](#) approved a second facility to cover funding needs for new investments. [Royal Decree-Law 34/2020](#) extended the application deadlines and improved the conditions of the previously approved guarantee facilities.

Chart 2.1

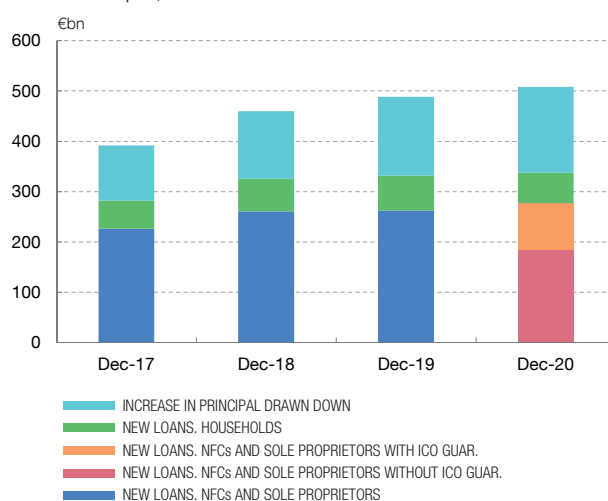
**THE SUPPORT MEASURES HAVE SUSTAINED THE FLOW OF NEW CREDIT IN 2020, THUS CONTRIBUTING TO THE GROWTH OF THE STOCK IN THE YEAR, WHICH WAS CONCENTRATED IN Q2**

The stock of credit of deposit institutions (DIs) to the private sector resident in Spain grew by 3.5% in 2020, although there was some sluggishness in H2. The volume of new credit granted was 4.1% higher than in 2019. Business lending with ICO guarantees accounted for 34% of the credit drawn down on new loans to non-financial corporations and sole proprietors, thus critically contributing to preventing the contraction of lending to the private sector.

1 CREDIT VOLUME AND YEAR-ON-YEAR RATE OF CHANGE BUSINESS IN SPAIN, ID



2 VOLUME OF NEW CREDIT IN THE PAST 12 MONTHS. HOUSEHOLDS, NFCs AND SOLE PROPRIETORS Business in Spain, ID



SOURCE: Banco de España.

taken to mitigate the negative effects of the crisis, in particular the credit support schemes (ICO guarantees and moratoria).

**Total new lending granted in 2020 to households and to non-financial corporations (NFCs) and sole proprietors exceeded that granted in 2019 by 4.1%.** However, behaviour was mixed: lending to NFCs and sole proprietors increased by 6.6% and that to households decreased by 5.6%. The volume of credit drawn in transactions linked to the ICO guarantee facilities represented 18% of total new lending granted by deposit institutions in Spain in 2020 (see Chart 2.1) and 34% of new lending granted to NFCs and sole proprietors. These developments have also been sustained more broadly by the raft of fiscal and monetary measures adopted in response to the COVID-19 crisis.

**Non-performing loans to the resident private sector continued to decrease in 2020, albeit to a lesser extent than in previous years.** The stock of problem assets of this kind declined by 3.8% year-on-year (see Chart 2.2), compared with the decreases recorded in 2018 (-29.1%) and 2019 (-19.1%). The severe contraction of the Spanish economy as a result of the COVID-19 pandemic explains the worse relative performance of NPLs in the past year, with a rebound in Q2 followed by a return to the downward path associated with certain sales of these portfolios.

**The net flow of NPLs was less negative than in the previous year, with comparable rates of NPL inflows and outflows.** Inflows into NPLs decreased slightly with respect to 2019 but recoveries and outflows to write-offs also declined. This, together with fewer asset sale transactions, has given stability to the balance of NPLs. In contrast with the two previous economic crises in Spain, when NPLs rose strongly during the first year, with a smaller economic contraction, to date an increase in these problem assets has not been recorded during the current crisis (see Chart 2.2). It is highly likely that there will be a significant increase in new NPLs in the coming quarters that outflows will be unable to offset.

**The NPL ratio also continued to decline, once again more moderately than in recent years, confirming the change in its determinants observed since mid-2020.** The moderate fall in the balance of NPLs in the numerator of the ratio, along with the aforementioned growth of loans in the denominator, caused the NPL ratio to continue its downward trend of recent years, to stand at 4.4% (0.4 pp less than in December 2019). If the current pace of growth of lending does not hold, or NPLs increase owing to the worsening of economic agents' financial conditions, the NPL ratio could rise in the coming months, especially in the sectors hardest hit by the pandemic.

**The economic policy support measures adopted to mitigate the negative effects of the pandemic would largely explain the lower sensitivity of NPLs to changes in activity.** As discussed in Chapter 1, measures such as furlough schemes, tax moratoria and public guarantee and debt moratoria schemes are specifically designed to improve firms' ability to pay and have proved to be effective to date. However, part of the effects of these measures could be merely temporary, and, as mentioned earlier, if economic activity remains stalled for some time, especially in certain sectors, this would ultimately give rise to greater increases in NPLs owing to the worsening of firms' and households' solvency over the coming quarters. This deterioration of the credit portfolio could condition the supply of credit by banks, impacting the strength of the recovery. In this connection, ongoing monitoring of exposures linked to the public guarantee scheme for loans to firms (see Box 2.1) and the debt moratoria scheme (see Box 2.2) is necessary to measure the scope and duration of their mitigating effects.

**There were also some signs of credit quality impairment, of varying intensity, in the performance of refinanced and Stage 2 loans, and in non-performing loans in specific segments.** While forborne loans continued to fall year-on-year in 2020, these declines have been much more moderate since the onset of the pandemic, possibly indicating banks' greater recourse to them to mitigate payment difficulties encountered by some borrowers. Stage 2 loans, which signal impairment more specifically, increased substantially in 2020, especially in Q4.<sup>3</sup> Also notable is the pick-up in the growth of non-performance in the consumer portfolio in 2020.

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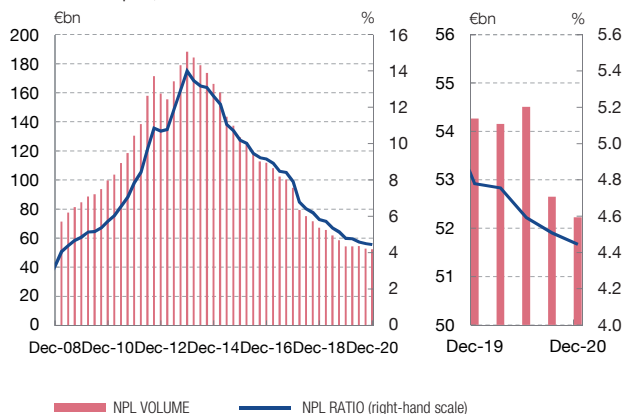
<sup>3</sup> Pursuant to Circular 4/2017, a loan is classified as a Stage 2 exposure when credit risk has increased significantly since initial recognition, even though no event of default has occurred.

Chart 2.2

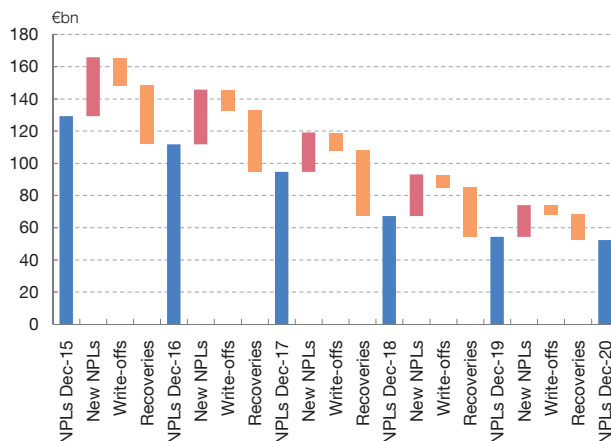
**NPLs MODERATED THEIR FALL WITH RESPECT TO OTHER YEARS, AND THE NPL RATIO CONTINUED TO DECLINE OWING TO THE GROWTH OF CREDIT, ALTHOUGH THERE ARE SOME EARLY SIGNS OF IMPAIRMENT**

NPLs decreased less than in prior years owing to the impact of the COVID-19 pandemic, which translated into fewer recoveries that hardly offset the inflow of new NPLs. Compared with past crises, which affected non-performing assets more rapidly, in the current crisis this impact is being cushioned by the measures adopted to mitigate the effects of the pandemic. Also, the NPL ratio continued to decline, also owing to the growth observed in credit. However, the rate of growth of forbearance slowed and Stage 2 loans and non-performance in specific segments, such as consumption, increased substantially, signalling the possibility of a future increase in non-performing loans.

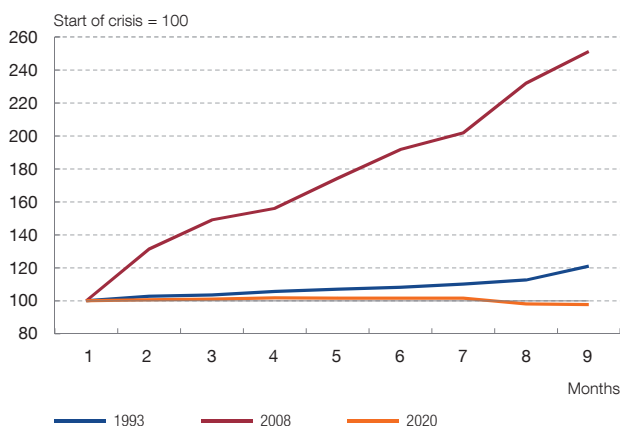
1 RESIDENT PRIVATE SECTOR'S NPLs AND NPL RATIO  
Business in Spain, ID



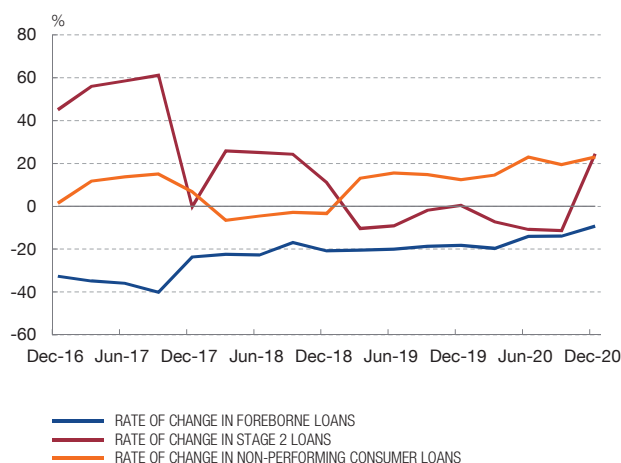
2 NPL INFLOWS AND OUTFLOWS (a)



3 CHANGES IN NPLs SINCE THE START OF EACH CRISIS



4 SIGNS OF EARLY IMPAIRMENT IN RESIDENT PRIVATE SECTOR LOANS  
Business in Spain, ID



SOURCE: Banco de España.

a NPL recoveries include NPL loans reclassified as performing, foreclosed assets and possible NPL portfolios sold to third parties.

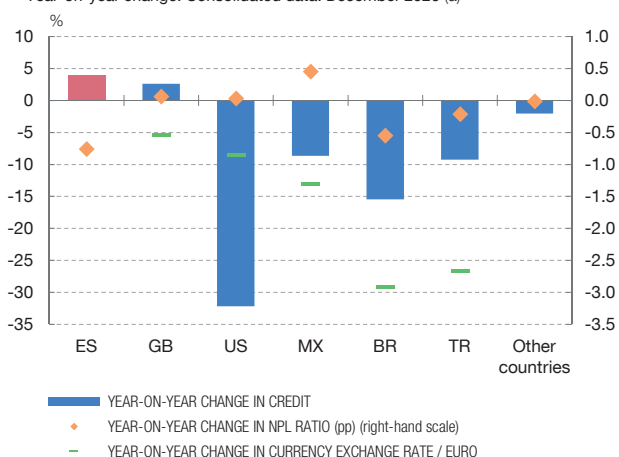
**In 2020 Spanish deposit institutions increased their total volume of assets at consolidated level by 3.5%, despite the drop in the stock of loans to the private sector** (see Annex 1). The decline in credit to the private sector was a consequence of the overall decrease for the foreign countries where Spanish deposit institutions have a significant presence, not for lending in Spain, which has expanded. In particular, financial assets abroad (which account for one half of consolidated

Chart 2.3

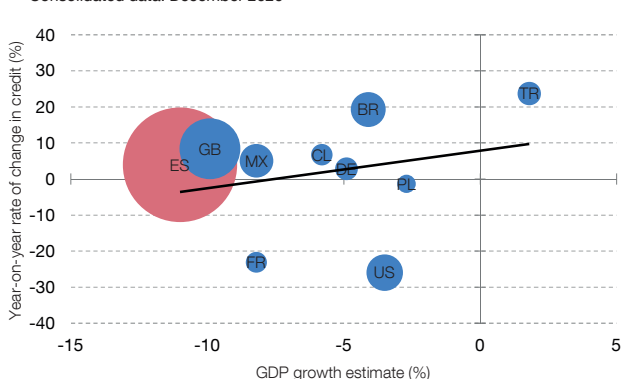
**THE VOLUME OF CREDIT ABROAD OF SPAIN'S MAIN DEPOSIT INSTITUTIONS HAS BEEN ADVERSELY AFFECTED BY THE COVID-19 PANDEMIC, PARTIAL DIVESTMENT IN THE UNITED STATES AND THE APPRECIATION OF THE EURO. HOWEVER, THE CREDIT SUPPORT PROGRAMMES HAVE COUNTERED THESE IMPACTS IN PART**

The volume of credit in the main emerging countries in which Spanish deposit institutions are present fell in the past year owing to the impact of the COVID-19 pandemic and to the depreciation of their currencies against the euro. Meanwhile, it grew in the United Kingdom. The fall in the United States resulted from the divestment decision adopted by one of Spain's main banks. However, if the exchange rate effect is not taken into account, year-on-year credit growth and, in general, a positive relationship between the year-on-year rate of change in credit and estimated GDP growth are observed, although with differing dynamics depending on the credit support measures adopted by the different countries. The NPL ratio has declined in all significant countries, except in the United Kingdom and, especially, in Mexico.

1 LOANS AND NPL RATIO IN SPAIN AND ABROAD  
Year-on-year change. Consolidated data. December 2020 (a)



2 CHANGE IN CREDIT IN LOCAL CURRENCY AND GDP GROWTH ESTIMATE (a) (b) (c)  
Consolidated data. December 2020



SOURCES: Banco de España and IMF (April 2021 WEO).

- a The data in the panels refer to the four main Spanish banking groups with significant international activity.
- b Credit rate of change in constant euros, adjusted by year-on-year change in exchange rate (i.e.: rate of change in credit =  $[\text{credit}_{\text{Dec-20}} \times (\text{exr}_{\text{€}/\text{currency Dec-20}} / \text{exr}_{\text{€}/\text{currency Dec-19}})] / \text{credit}_{\text{Dec-19}} - 1$ ).
- c The size of the circles depicts the volume of credit adjusted at December 2020 in each country (i.e.: United Kingdom, €402 billion).

financial assets) decreased by 4.8% in 2020 (compared with a 9.2% increase one year ago), in part owing to decisions to divest in certain countries adopted by some banks and to exchange rate developments.

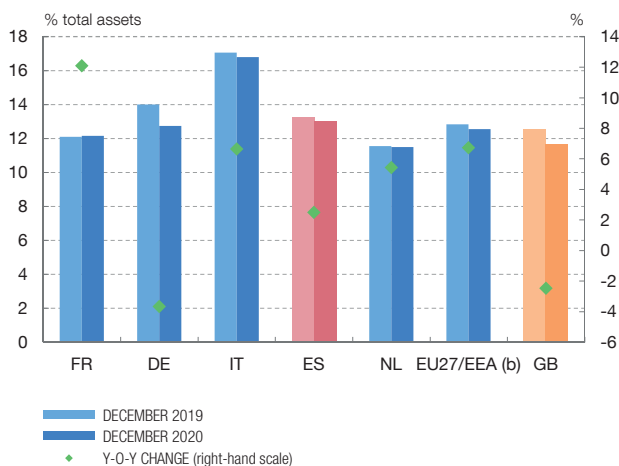
**The main Spanish deposit institutions' business abroad was adversely affected by the COVID-19 pandemic, conditioned by the depreciation of currencies other than the euro, in particular emerging market currencies.** Lending volume in the United Kingdom (the main country where Spanish deposit institutions operate) was less affected than in Mexico, Brazil and Turkey, in part owing to the greater depreciation of their currencies in the past year. In fact, these three countries recorded lending volume increases in local currency, which, however, did not offset the negative effect of the depreciations. The strong fall in lending in the United States was the result of the divestment decision made by one of the main Spanish deposit institutions, with its consequent reclassification to non-current assets held for sale. The NPL ratio declined in the main countries, except in Mexico (see Chart 2.3.1), where it stood at 2.6% as at December 2020, far lower than the 6.4% posted in Turkey. Chart 2.3.2 shows that despite the severity of the negative impact caused by COVID-19 in most of the countries where Spanish deposit institutions are present,

Chart 2.4

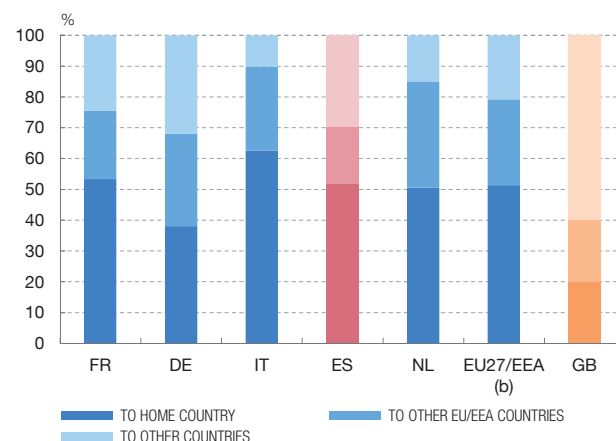
**THE INCREASE IN GOVERNMENT DEBT ISSUANCE TO FINANCE MEASURES TO TACKLE COVID-19 WAS REFLECTED IN THE GROWTH OF EUROPEAN BANKS' GOVERNMENT DEBT HOLDINGS**

As at December 2020 the exposure to sovereign debt represented 12.5% of total assets at European level. In Spain, the weight was 13%, slightly above the European average and only exceeded by Italy (16.8%). The volume of sovereign exposure varied unevenly across the largest European countries' banks, from -3.7% in Germany to 12.1% in France. The proportion of debt issued by European banks' own home country was 51.3% of the total sovereign exposure. The weight of Spain's domestic sovereign exposure (51.8%) was similar to the European average, and to that of countries such as France (53.3%) and the Netherlands (50.5%).

1 SOVEREIGN EXPOSURES OF EUROPEAN BANKS (a)  
Consolidated data. December 2020



2 SOVEREIGN EXPOSURES TO HOME COUNTRY OF EUROPEAN BANKS (a)  
Consolidated data. December 2020



SOURCE: EBA.

- a The data for Spain are shown in red and those for the United Kingdom in yellow.
- b The EBA data include Iceland. From 2020 Q1 aggregate data for the EU no longer include figures from UK banks and include data from UK bank subsidiaries in EU countries.

the measures adopted to counter its adverse effects<sup>4</sup> have driven up the volume of lending, with positive year-on-year rates of change being recorded in local currency. In many countries, this greater buoyancy of credit has been linked to the approval of support schemes (for instance, Mexico did not adopt measures to promote lending and credit growth was lower than in other countries, such as the United Kingdom, Brazil and Turkey).

**Spanish banks have increased their sovereign exposures at consolidated level, although to a lesser extent than in previous crises and than the average of European banks.** The increase in public debt issuance to defray the fiscal cost of the measures taken to tackle the COVID-19 pandemic was reflected in an uneven change in the sovereign exposures of European banks. While these grew by 2.5% in year-on-year terms for Spanish banks as at December 2020, this growth reached 12.1% for French banks (see Chart 4.1). German banks reduced their sovereign exposure by 3.7% in 2020. As a percentage of total assets, Spanish banks' sovereign exposures declined by 0.2 pp in 2020, similar to the European average reduction (-0.3 pp). Spanish banks' exposure to sovereign debt stood at 13% of total assets in

4 See Box 2.1 Effects of the pandemic on the international banking systems most relevant to Spain, in the Autumn 2020 FSR.



December 2020, in line with the average for European banks. European banks' sovereign exposures are concentrated in bonds issued by their own country, which on average accounted for 51.3% of the total sovereign exposure (see Chart 2.4.2).

### *Liquidity and financing conditions*

**Purchase programs and, to a lesser extent, refinancing operations explain the expansion of the Eurosystem's balance sheet and the liquidity maintained by banks** (see Chart 2.5). The balance of asset purchase programmes has increased by €467 billion since end-October 2020, the date of the last FSR, to €3,985 billion,<sup>5</sup> driven by the expansion of the pandemic emergency purchase programme (PEPP) announced in December 2020.<sup>6</sup> European banks have continued to have recourse to the Eurosystem's refinancing operations (TLTRO III) to obtain liquidity. Operations allotted in the latest TLTRO III tender<sup>7</sup> amounted to €331 billion, up from €50 billion allotted in December 2020, with a net increase in the liquidity obtained by banks through this channel of €353 billion after these latest two tenders.<sup>8</sup> Overall, European banks continue to have high liquidity levels, up €833 billion since the cut-off date of the last FSR.

**These high liquidity volumes, along with the extension of the favourable funding conditions for banks and the expansion of the PEPP, have contributed to bringing money market interest rates down to record lows** (see Chart 2.5.2). The euro short-term rate (€STR)<sup>9</sup> has declined gradually, currently standing below the pre-pandemic levels (around -55 bp), very far from its highs in April. Similarly, the €STR trading volume has declined from its highs, stabilising at levels close to those recorded before March. It has also been observed that money market transactions with very short (overnight) maturities have gained weight over those with longer-term maturities since the beginning of the crisis.

**European banks' access to the Eurosystem's refinancing operations – with very favourable conditions – has improved their interbank funding costs, which are expected to remain low over a prolonged period.** The expected interbank funding spread, calculated as the difference between expectations for EURIBOR and for risk-free interest rates, as determined by the OIS curve, provides

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5 Data updated as at 20/4/21.

6 As a result of the decision of the Governing Council of the ECB of 10 December 2020 to expand the PEPP envelope to €1.85 trillion at least until March 2022.

7 The dates of the latest two tenders were 16 December 2020 and 24 March 2021 respectively.

8 The increase of €353 billion is calculated as follows: €381 billion (TLTRO III) – 29 billion (TLTRO II) + 3 billion (PELTRO).

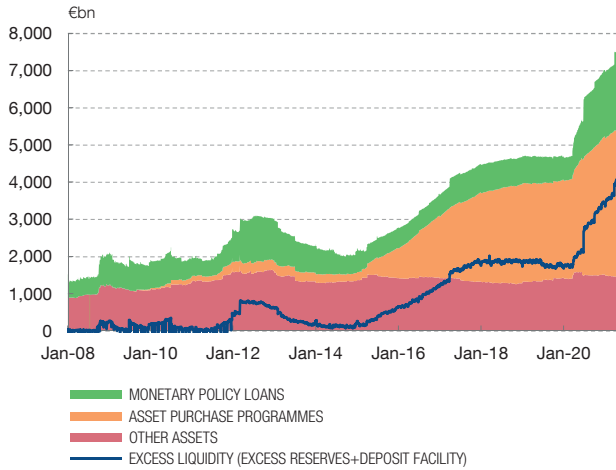
9 This refers to the transactions used to calculate the €STR, which reflects the wholesale euro unsecured overnight borrowing costs of banks located in the euro area. The €STR and trading volume are calculated and published each business day by the ECB based on the information provided by the 48 euro area MMSR reporting banks.

Chart 2.5

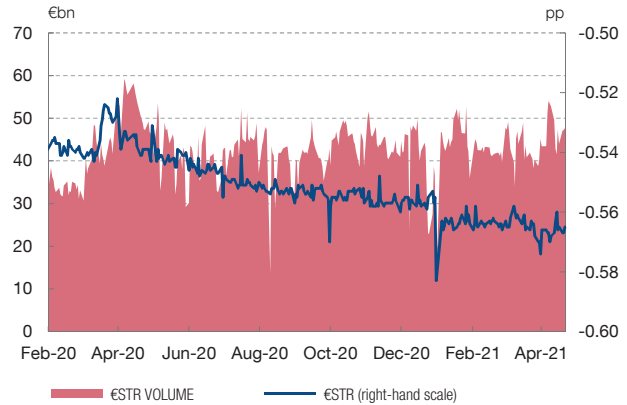
**THE ECB'S MONETARY POLICY HAS LED TO A RISE IN EXCESS LIQUIDITY, TO RECORD HIGHS, CONTRIBUTING TO AN EASING OF FINANCIAL CONDITIONS**

Money market interest rates are at historic lows as a result of excess liquidity and the latest monetary policy measures adopted. Also, the Eurosystem's financing operations have contributed to a notable improvement in banks' financing conditions, which are expected to remain at low levels over a prolonged period. Borrowing costs on the wholesale market also declined in 2020 as a result of these measures.

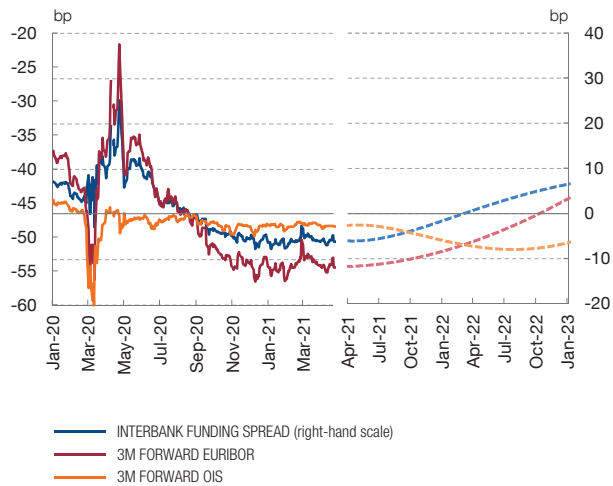
1 EUROSISTEM BALANCE SHEET AND EXCESS LIQUIDITY



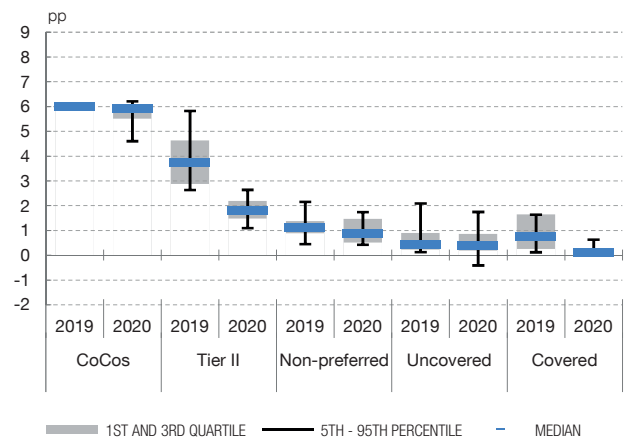
2 €STR VOLUMES AND RATES



3 INTERBANK FUNDING SPREAD (a)



4 ISSUANCE COST (IN EURO) BY TYPE OF INSTRUMENT: 2019 vs 2020 (b)



SOURCES: Bloomberg, Thomson Reuters and Banco de España.

- a The solid lines show the spread between the three-month forward rate for 3-month Euribor and the forward rate based on the OIS curve for a three-month period, and the levels of these two rates, while the broken lines show the projections for the forward Euribor and OIS curves, respectively, and the spread between them.
- b Only one issuance of contingent convertible bonds (CoCos) was carried out in 2019. The cost for Spanish banks' issues is shown based on the coupon. For bonds with a variable coupon, the issuance cost is calculated on the basis of the benchmark interest rate price on the issue date.

an indicator of market expectations regarding changes in interbank funding costs.<sup>10</sup> This spread narrowed substantially during the second half of 2020 as a result of the

10 This indicator is calculated based on the work carried out by *Jondeau et al. (2020)*. It is calculated as the 3-month EURIBOR-OIS forward rate spread:  $FF = F_{euribor3,3} - F_{OIS3,3}$ , where  $F_{euribor3,3}$  represents the 3-month forward rate for 3-month EURIBOR and  $F_{OIS3,3}$  the forward rate based on the overnight index swap (OIS) curve with the same time horizon. The following derivatives are used as a reference for EURIBOR: a) Forward Rate Agreements (FRAs) for between 1 and 12 months, and b) Interest Rate Swaps (IRS) for between 1 and 10 years, where 3-month EURIBOR is the underlying rate.

liquidity injection received by banks through TLTRO III operations since June and the decision to maintain the interest rate on these operations at low levels for longer.<sup>11</sup> Despite an expected increase in this indicator in 2021-2022, explained by EURIBOR recovery expectations and the continuation of the risk-free interest rate level, it would remain moderate and comparable with the pre-crisis level (see Chart 2.5).

**The cost of new issues denominated in euro has decreased or held steady for all debt instruments in the wholesale funding market.** The decrease is particularly noteworthy in the case of bonds meeting the Tier II capital requirements and of covered bonds. Also, the cost of issuance is less dispersed in these cases (see Chart 2.5).

**The structure and average cost of liabilities at Spanish deposit institutions was relatively stable in 2020, although the recourse to central bank funding increased somewhat.** The average cost of private sector deposits remains at minimum levels, while the average cost of debt on the liability side of the balance sheet has increased minimally. In the individual balance sheet of business in Spain the volume of private sector deposits increased in 2020 (by 9% year-on-year), possibly driven by households' and firms' precautionary reasons, yet their weight in total funding decreased by 1.2 pp. The weight of private sector deposits in the consolidated balance sheet also fell by 0.3 pp in 2020, to stand at 66.8% of total funding (deposits and debt issuance on the balance sheet). In contrast, the weight of deposits received from central banks in total consolidated funding increased by 4.4 pp compared with December 2019, standing at 10.6% at December 2020. This change was prompted by the accommodative monetary policy adopted by the ECB and other central banks. Box 2.3 conducts a preliminary analysis of the consequences of the possible introduction of a digital euro for financial stability and monetary policy, where banks' deposit-taking activity plays a key role.

## 2.1.2 Profitability and solvency

### *Profitability*

**Over the course of 2020, the consolidated net profit of the Spanish banking system as a whole was negative (around -€8 billion), down nearly €26.5 billion on the profit recorded in 2019.** This translates into a return on assets (ROA) of -0.21% (a fall of 72 bp from 0.51% in 2019) and a return on equity (ROE) of -3.1% (a fall of 10 pp from 6.9% recorded a year earlier).

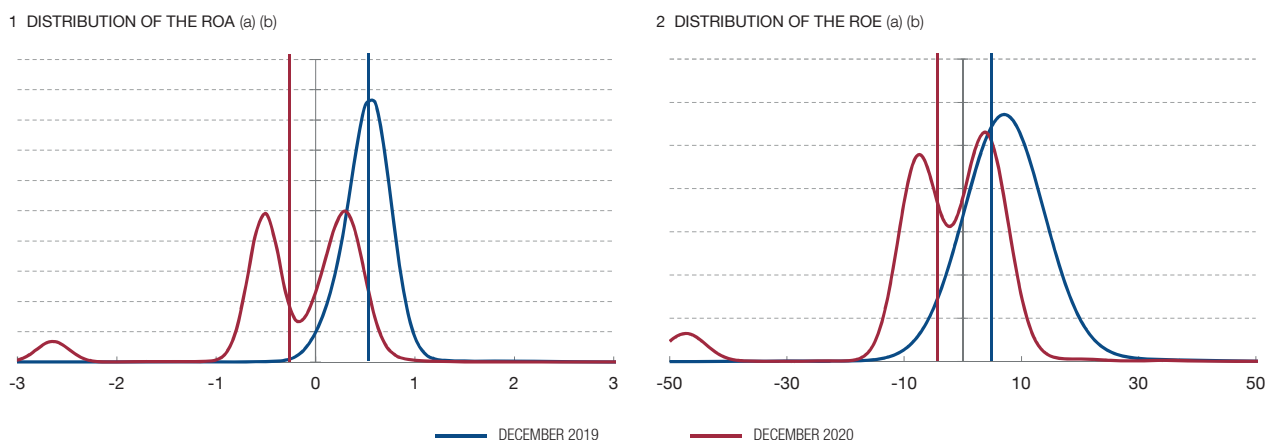
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<sup>11</sup> Decision of the ECB Governing Council meeting of 10 December 2020. The interest rate applied to TLTRO III remains 50 bp below the MRO rate until 23 June 2022. For banks meeting certain criteria the rate may be up to 50 bp below the average deposit facility rate.

Chart 2.6

**MOST BANKS HAVE REDUCED THEIR NET PROFIT IN 2020 WITH RESPECT TO THE PREVIOUS YEAR**

As a result of the impact of the pandemic on banking activity and on the worsening of the economic outlook, the decrease in profit in 2020 was widespread among banks. However, the negative net accounting profits of the largest banks are influenced by the appreciation of the euro, the negative extraordinary adjustments relating to goodwill and deferred tax assets and the accounting adjustments linked to merger processes.



SOURCE: Banco de España.

- a The charts show the ROA and ROE density functions for Spanish deposit institutions, weighted by the amount of average total assets and average equity, respectively. The density function is approximated by means of a kernel estimator, which enables non-parametric estimation and provides a continuous, smoothed graphic representation of the function. The vertical lines indicate the ROA and the ROE of the Spanish banking system as a whole in 2019 (blue) and 2020 (red).
- b The negative mode closest to zero relates to large significant institutions whose results in 2020 are largely explained by negative extraordinary adjustments. The most extreme mode relates to another significant institution with accounting adjustments linked to a merger process.

**This negative result is explained by the COVID-19 pandemic, which was also accompanied by negative extraordinary adjustments applied during the year in three of the system’s main banks. Without these adjustments or the positive extraordinary items, the sector’s profitability would be positive, with ROA standing at 0.3% and ROE at 4.3%.** In particular, as noted in the previous FSR, the two largest banks recorded adjustments to their goodwill for an amount in excess of €12 billion in the first half of 2020, along with other adjustments, such as those linked to tax assets. In addition, as a result of the approval of its merger, another bank recorded an adjustment to fair value for an amount exceeding €5.5 billion in its year-end accounts, in accordance with accounting standards.<sup>12</sup> These negative adjustments were partially offset by positive extraordinary adjustments exceeding €1.2 billion associated with the sale of payment service, insurance, asset management and depository businesses.

**Even without taking into account these negative extraordinary adjustments, the sector’s profitability, which was already moderate in 2019, appears to have decreased substantially with respect to the previous year.** Chart 2.6 shows how,

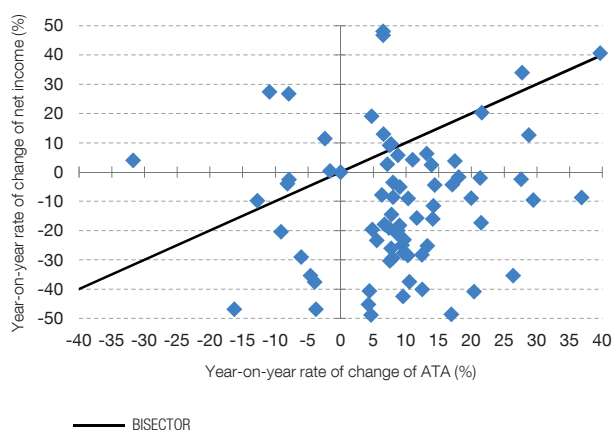
12 International Financial Reporting Standard 5 (IFRS 5) “Non-current assets held for sale and discontinued operations”, which indicates that assets meeting the requirements for classification as held for sale should be valued at the lower of carrying amount and fair value less costs to sell.

Chart 2.7

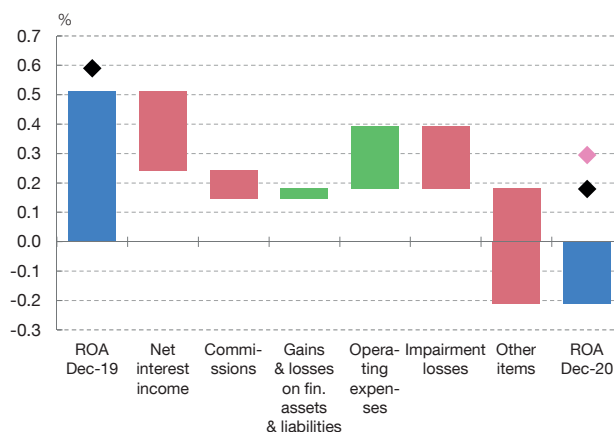
## THE IMPACT OF THE PANDEMIC ON BANKING ACTIVITY AND THE ECONOMIC OUTLOOK HAS SEVERELY AFFECTED PROFITABILITY IN THE SPANISH BANKING SECTOR

In 2020 most institutions have recorded a fall in net income, while their ATAs have increased. The main determinants of the sharp fall in profits include the decrease in net interest income and in fees and commissions, the increase in impairment losses and the negative extraordinary adjustments (goodwill, tax assets and the deterioration in value arising from accounting reclassification, included in other items), while the increase in results on financial assets and liabilities and, in particular, the decline in operating expenses, contribute to improving income for the year.

1 CHANGE IN ATA AND CHANGE IN PROFIT. DECEMBER 2020



2 BREAKDOWN OF THE CHANGE IN PROFIT  
Consolidated net profit as a percentage of ATA (a)



SOURCE: Banco de España.

- a The red (green) colour of the bars indicates a negative (positive) contribution of the item concerned to the change in consolidated profit in December 2020 with respect to 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 pink diamond shows the ROA in 2020 excluding, in addition to the aforementioned adjustments, the deterioration in value arising from accounting reclassification (-€5.6 billion) and the extraordinary positive results recorded in 2020 (€1.2 billion).
- b Including adjustments to goodwill and other extraordinary adjustments.

both for the ROA and the ROE, the distribution of profit in 2020 shifted significantly towards more negative values. Along the same lines, Chart 2.7.1 shows that most banks (more than three quarters of the sector) recorded a decline in net profit from the previous year, while their average total assets (ATAs) increased. For the system as a whole, ATAs increased by more than 4% year-on-year in 2020, while average equity decreased by more than 3%.

**The impact of the pandemic on net interest income and fees and commissions resulted in both items posting year-on-year declines of around 10% in 2020** (see Annex 2). Part of this decrease in net interest income and net commissions is due to currency depreciation in the main countries in which Spanish banks have a significant presence, especially emerging countries.

**Gains on financial assets and liabilities and operating expenses were the only items improving significantly with respect to the previous year. The decline in operating expenses was particularly notable** (see Chart 2.7.2). Breaking the trend of recent years, gains on financial assets and liabilities increased by 35% in 2020, driven by the sale of securities portfolios accumulating

capital gains. This helped limit to some extent the adverse effects on gross income, which, however, declined by 5.1% year-on-year. Operating expenses decreased by more than 10%, in part owing to a lower contribution of extraordinary restructuring costs. This notable decline caused operating income to increase slightly with respect to the previous year (0.7%). As with net interest income and fees and commissions, the performance of other income and operating expense headings is at least partly explained by currency depreciation in the countries where Spanish banks have a significant presence, especially in the case of emerging countries (see Chart 2.3).

**Operating income from activity in Spain has been more resilient to the impact of the pandemic.** Recurrent banking activity was less affected in business in Spain than in total business in 2020. Thus, net interest income fell by barely 0.7% between December 2019 and December 2020 and fees and commissions increased by 1.4% in the same period. Gross income decreased by 1.9%, but since the decline in operating expenses was greater (-5.8%), the performance of operating income was ultimately positive.

**Impairment losses increased significantly in the year, especially in the first six months.** As a result of the potential negative impact of the COVID19 pandemic on credit quality, financial asset impairment losses increased by more than 50%, giving rise to the recording of provisions that were €8.7 billion higher in 2020 than in 2019. However, most of this increase was posted in the first half of the year (the increase in provisions between June 2020 and June 2019 was already €7.6 billion), with the pace of provisions slowing significantly from June. Impairment losses in the business in Spain account for more than 40% of total provisions and in this case the pace of provisioning in the second half of the year, although somewhat slower, remained close to the levels of the first half of 2020.

**Credit risk provisioning for the business in Spain has been significant, but this effort needs to be maintained over time and even increase depending on the effectiveness of the support measures and on macroeconomic developments.** The provisions recorded in 2020 for the business in Spain amount to 21.5% of those estimated for 2020-2022 under the Banco de España FLESB framework for stress testing on the assumption of a moderate impact of the support measures, and to 33.6% on the assumption of a medium impact of the support measures<sup>13</sup> (see Box 2.1). In any case, significant dispersion between banks was observed in the provisioning effort made (see Chart 2.8).<sup>14</sup>

13 Under the moderate impact assumption, the quality of ICO-guaranteed loans is average for the portfolio of loans to business, while under the medium impact assumption, the quality is at a midpoint between the moderate impact assumption and a maximum impact assumption where the guarantee schemes are used in full to absorb the worst quality credit (for further details, see Chapter 2 of the Autumn 2020 FSR of the Banco de España.

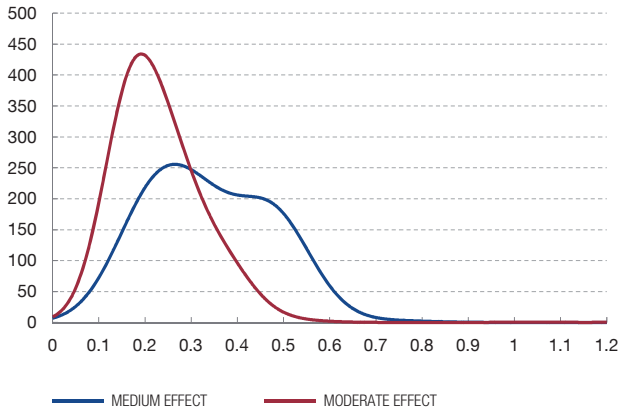
14 See also Box 5 of the ECB's Financial Stability Review, November 2020, where different explanatory factors of the heterogeneity across banks regarding the increase in their provisions owing to the pandemic are discussed.

Chart 2.8

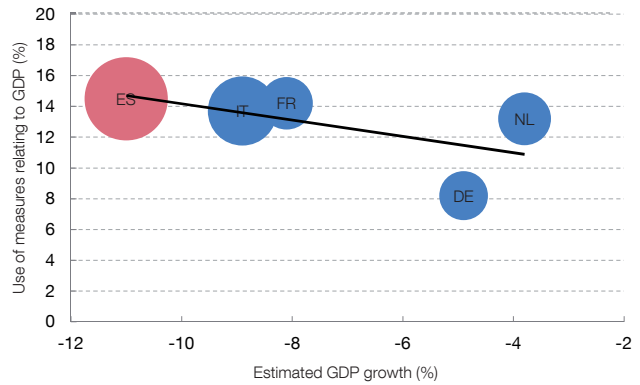
**SPANISH INSTITUTIONS SHOULD MAINTAIN THEIR PROVISIONING EFFORT TO ABSORB THE IMPACT OF THE COVID-19 CRISIS ON CREDIT QUALITY, THE SCALE OF WHICH HAS BEEN CONDITIONED IN 2020 BY ECONOMIC PERFORMANCE AND BY THE SCOPE OF THE SUPPORT MEASURES**

The pace of impairment provisioning in 2020 would broadly have been adequate to absorb the credit losses estimated in the FLESB stress test exercise for the 2020-2022 horizon, but the effort should be maintained over time in order to fully absorb the estimated credit impairment for the period. There is, however, heterogeneity across banks and uncertainty about the medium-term impact of the support measures implemented, mainly the ICO credit guarantees, and about the macroeconomic scenario. Among the main European countries, a negative relationship was observed in 2020 between the performance of GDP and the intensity of provisions, with limited change in the intensity of the measures relating to GDP.

1 PROVISIONS RECORDED IN 2020 VS. ESTIMATED PROVISIONS FOR 2020-2022 Business in Spain. Estimate obtained under the FLESB framework (a)



2 INTENSITY OF PROVISIONING, FALL IN GDP AND SUPPORT MEASURES - 2020 Consolidated data by jurisdiction (b)



SOURCES: Banco de España and ESRB.

- a The numerator of the ratios considers the provisions recorded by Spanish banks for credit risk for business in Spain in 2020. The denominator considers the required provisions estimated by the FLESB framework for the baseline scenario in the 2020-2022 horizon. The denominator considers two assumptions regarding the impact of the support measures (mainly the ICO guarantee scheme): moderate and medium. Under the moderate impact assumption, the quality of credit guaranteed by the ICO is similar to that of the portfolio of loans to business activities as a whole, while, under the medium impact assumption, quality is at the midpoint between the moderate impact assumption and the maximum impact assumption where guarantees are used in full to absorb the worst credit quality (see Chapter 2 of the Autumn 2020 FSR of the Banco de España for further details). The chart shows the density function of such ratios for Spanish deposit institutions, weighted by total credit volume. The density function is approximated by means of a kernel estimator, which enables non-parametric estimation and provides a continuous, smoothed graphic representation of the function.
- b Each dot represents an EU country. The dot's area is proportional to the intensity of provisioning recorded in 2020, estimated based on the measurement of cost of risk of the EBA's dashboard for December 2020. The X axis represents the fall in GDP during that year and the Y axis represents the volume of measures used in relation to GDP in 2019, in accordance with Special Feature of the ECB's Financial Stability Review, Autumn 2020. The measures considered include direct tax transfers, furlough and similar schemes, tax and loan moratoria, use of public guarantees for bank credit and potential additional credit (not for credit already granted) resulting from the release of capital buffers and the effect of the reform of the treatment of provisions under IFRS 9.

**In the largest European economies there is to some extent a positive relationship between the the falls in activity and the credit risk provisioning effort.**<sup>15</sup> In general, it is observed that the countries which have resorted more heavily to these support measures tend to be those which have endured a sharper contraction. This suggests that governments whose economies are more vulnerable to the pandemic have fostered more ambitious plans (see Chart 2.8). Credit institutions also seem to have made a greater provisioning effort in jurisdictions

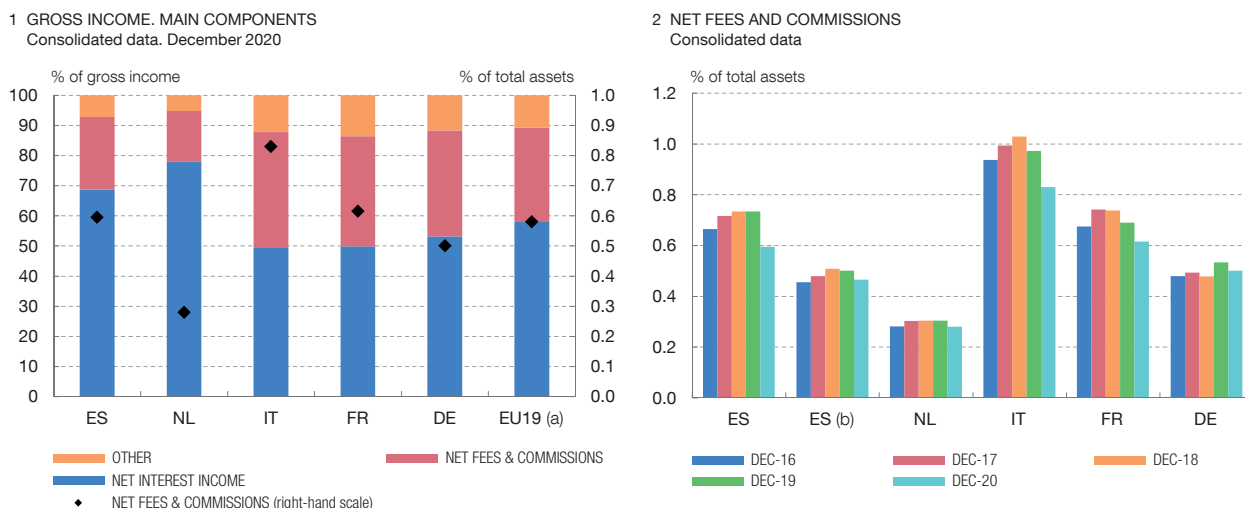
<sup>15</sup> The measure used to reflect the scale of the provisions is the cost of risk reported in the EBA Risk Dashboard 2020Q4.



Chart 2.9

**NET INTEREST INCOME IS THE MAIN COMPONENT OF GROSS INCOME FOR EUROPEAN BANKS, ALTHOUGH A GROWING WEIGHT OF NET FEES AND COMMISSIONS AS A SOURCE OF INCOME WAS OBSERVED, WHICH WAS HALTED BY THE COVID-19 CRISIS**

Despite the growing weight of net fees and commissions in total assets as an additional source of income in recent years, net interest income continues to be the main source of gross margin for the main European countries, although there are differences across countries. However, this growing trend has halted as a result of the COVID-19 crisis.



SOURCES: ECB and Banco de España.

- a Includes the 19 Euro area member countries.
- b Individual data, business in Spain.

recording larger GDP declines, which means that the measures might not have been sufficient to offset all the credit risk increase associated with this crisis.

**At European level, the main component of gross income in the banking sector continued to be net interest income.** According to the latest banking supervision statistics released by the ECB (December 2020), banks in the Netherlands and Spain were the most dependent on net interest income, which accounted for 77.9% and 68.7%, respectively, of gross income, while for those in France and Germany it accounted for approximately 50% (see Chart 2.9.1), which is explained by the different business models of their largest banks. Spanish banks made the biggest recent effort among European banks in terms of seeking alternative sources of income through the growth of net fees and commissions (see Chart 2.9.2). However, this ratio shows a lower level in business in Spain (0.47%) than at consolidated level (0.6%), the first figure being lower than the average for European banks at consolidated level (0.58%), and the second being higher, owing to the contribution of business abroad. The adaptation of its business model in areas where this item weighs less than average provides Spanish banks with greater potential for further growth in this source of income.

**Against this backdrop, the weight of business abroad in Spanish deposit institutions' ordinary profit has increased.** Thus, without taking into account the



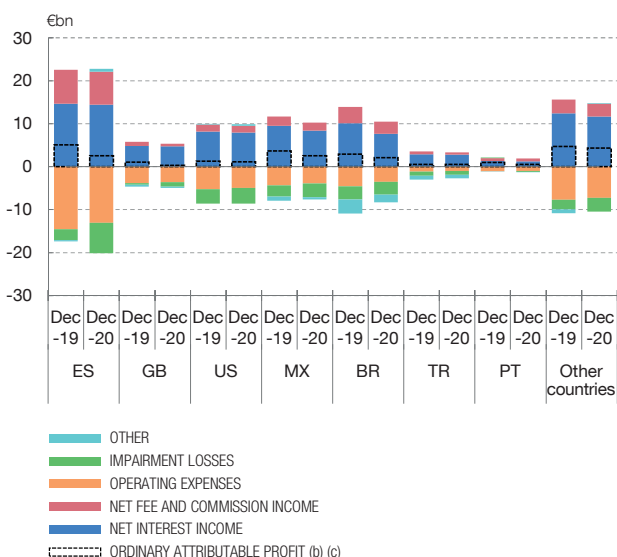
Chart 2.10

**BUSINESS ABROAD INCREASED ITS CONTRIBUTION TO THE ORDINARY PROFIT OF SPANISH DEPOSIT INSTITUTIONS WITH SIGNIFICANT INTERNATIONAL ACTIVITY**

Ordinary profit obtained abroad by deposit institutions with a strong international presence fell across the board (e.g. -31% in Brazil or -28% in Mexico), in part owing to currency depreciation in emerging countries, but its relative contribution to ordinary profitability at the consolidated level increased. This is explained by the larger fall in business in Spain (-50%), affected by relatively higher impairment losses than the average for the other countries. However, the smaller contribution to consolidated profit made by business abroad was on account of the goodwill adjustment at the subsidiaries in the United Kingdom and the United States. The extraordinary COVID-19-related provisions were also concentrated in the first half of the year.

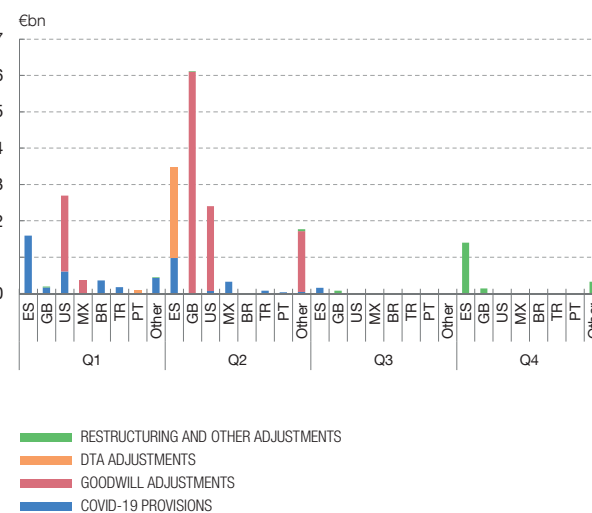
1 INCOME STATEMENT. MAIN COMPONENTS

Main Spanish banking groups (a)  
Consolidated data. December 2020



2 COVID-19 PROVISIONS AND EXTRAORDINARY ADJUSTMENTS

Main Spanish banking groups (a)  
Consolidated data. December 2020



SOURCE: CNMV.

- a The panel data refer to the four big Spanish banking groups with significant international activity.
- b Ordinary attributable profit does not include impairment of goodwill or other adjustments (e.g. restructuring costs, adjustments for deferred taxes, etc.), and for Spain it does not include the contribution by the corporate centre.
- c Ordinary attributable profit was affected by the appreciation of the euro, against the emerging currencies (i.e. Brazil, Turkey and Mexico) and against the US dollar and pound sterling.

adjustments made by Spain’s main banking groups to the goodwill of their subsidiaries in the United Kingdom and the United States, ordinary profit from business abroad accounted for over 80% of the total (see Chart 2.10.1). Business in Spain made a smaller contribution to the ordinary profit of Spain’s main banking groups as a result of the larger relative increase in impairment provisions in 2020 (see Chart 2.10.2). As discussed earlier, impairment losses in business in Spain represent a high proportion of total provisions in 2020.

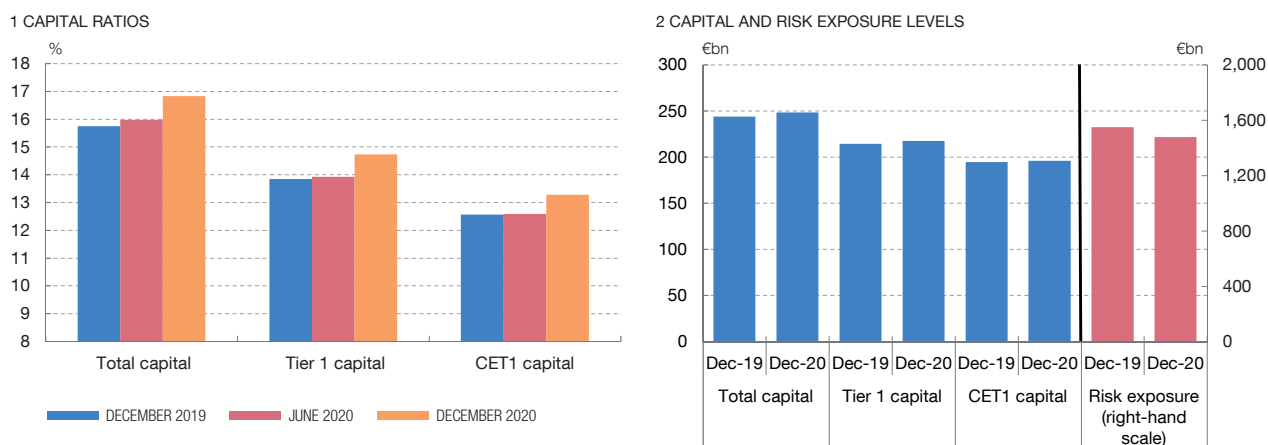
*Solvency*

**In 2020, despite the outbreak of the pandemic, the CET1 ratio of the Spanish banking system increased by 71 basis points (bp), to 13.3%.** This increase was recorded in the second half of the year. The same trend, i.e. a rise in the ratios mainly

Chart 2.11

### THE AGGREGATE CAPITAL RATIOS OF THE SPANISH BANKING SECTOR INCREASED IN 2020 DESPITE THE PANDEMIC

In 2020, the CET1 ratio increased by 72 bp to stand at 13.3% at the end of the year. The rise occurred in the second half the year and, although CET1 capital increased slightly, it was mainly a consequence of the decline in RWAs, partly due to currency depreciation. The Tier 1 capital and total capital ratios also increased in 2020. The European quick fix and the prudential filters prevented the deterioration in profitability (due to negative extraordinary adjustments) from translating into a deterioration in solvency, and also contributed to the improvement in the ratios.



SOURCE Banco de España.

in the second half of the year, was followed by the Tier 1 capital ratio and the total capital ratio, which stood at 14.7% and 16.8%, respectively (see Chart 2.11.1). The downturn in profitability did not lead to a negative adjustment of banks' solvency, largely because negative extraordinary items (e.g. goodwill impairment) affect balance sheet items that are not counted towards banks' prudential capital.

**The decrease in the risk-weighted assets (RWAs) of the largest institutions contributed to the increase in the solvency ratios.** Although prudential capital levels rose in 2020 in the numerators of the ratios for the banking sector as a whole (CET1 by 0.8%, Tier 1 capital by 1.4% and total capital by 1.9%) the decline in RWAs was more pronounced, nearly 5% in 2020 (see Chart 2.11.2). The fall in RWAs in the past year was largely due to the measures adopted by the authorities to mitigate the effects of the pandemic (guaranteed loans, the CRR quick fix, etc.) and to exchange rate effects in the two banking groups with the strongest international presence, thus partially offsetting the adverse effects of these exchange rate movements in the volume of CET1 denominated in euro.

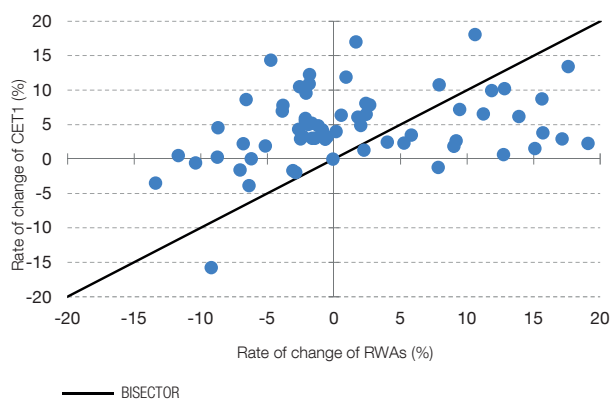
**The increase in capital levels was driven by the authorities' recommendation on dividend distribution restrictions and, to a greater extent, by the CRR quick fix.** Specifically, the CRR reform exempts part of banks' investments in intangible fixed assets related to software from deduction. In addition, a further discount to risk weighting was added to credit to SMEs. Also, the prudential treatment of eligible income for solvency purposes results in it not being affected by the negative

Chart 2.12

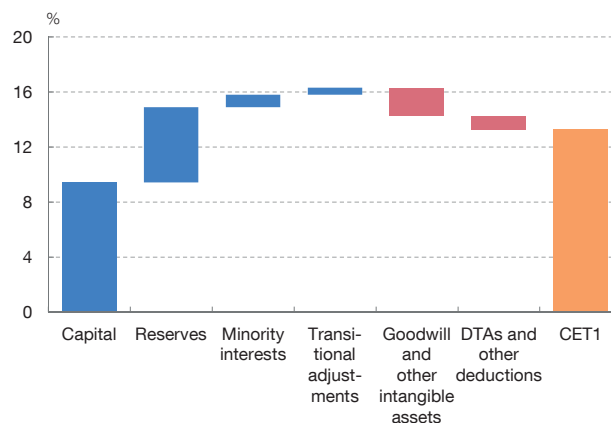
**WHEREAS MOST BANKS INCREASED THEIR CET1 IN 2020, CHANGES IN RWAs WERE DIVIDED EVENLY BETWEEN POSITIVE AND NEGATIVE VALUES**

A large portion of banks increased their CET1 during 2020, whereas negative and positive changes in RWAs were distributed more evenly. However, since the largest banks reduced their RWAs (partly as a result of currency depreciation), the aggregate volume of RWAs fell by almost 5% in 2020. Deductions associated with goodwill decreased owing to the significant impairment of this component in 2020.

1 RATE OF CHANGE OF CET1 AND RWAs BETWEEN DECEMBER 2020 AND DECEMBER 2019 (a)



2 BREAKDOWN OF CET1 RATIO AS % OF RWAs



SOURCE: Banco de España.

a The dots above the bisector represent increases (decreases) in CET1 over the last year greater (smaller) than the increases (decreases) in RWAs and, therefore, relate to increases in the CET1 ratio between December 2019 and December 2020. The reverse applies for the dots below the bisector.

extraordinary items identified in the previous section and, therefore, the rest of profit generation contributes positively to the numerator’s performance. Chart 2.12.1 shows that the increase in CET1 is widespread among banks (the same is true for the other two types of capital), while in the case of RWAs there are greater disparities, with increases and reductions. Thus, the decrease in the Spanish banking system’s aggregate RWAs in 2020 is due to the decline in most (10) of the (12) significant institutions supervised by the SSM while, for the rest of the system, RWAs broadly increased.

**As regards the composition of the CET1 ratio, capital instruments and reserves together account for more than 90% of the CET1 ratio** (see Chart 2.12.2). However, over the past year there was some change in the relative weights of these two items, with capital rising and reserves declining. As regards deductions, the decrease in those deriving from goodwill and tax assets is notable, as a consequence of the downward adjustment to the goodwill recorded by the two banks with the largest international presence discussed in the previous section.

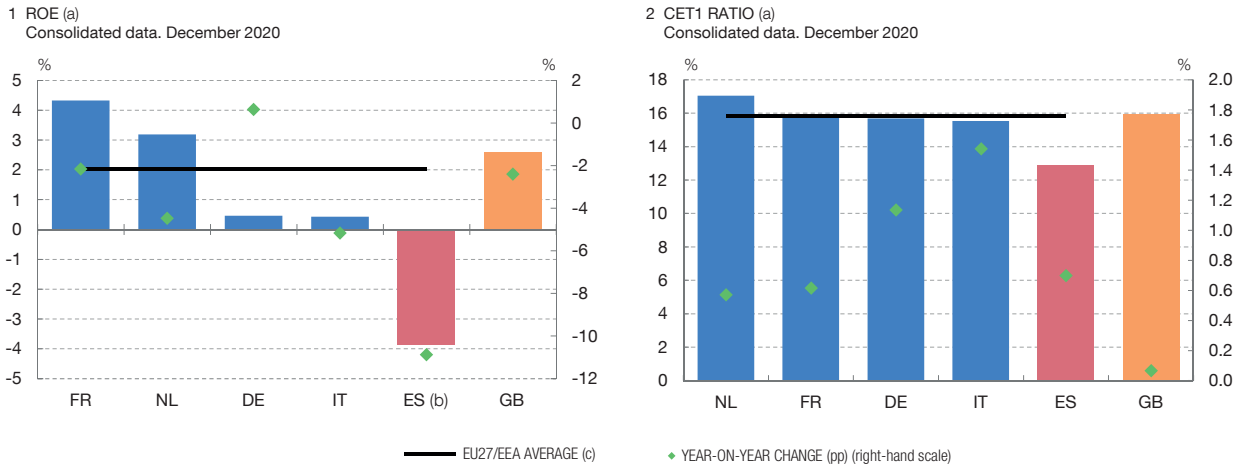
*Comparison of European banks in terms of solvency and profitability*

**The profitability of Spanish deposit institutions was lower, on average, compared to the rest of the European banking sector in 2020, although the**

Chart 2.13

**SPANISH DEPOSIT INSTITUTIONS COMPARE UNFAVOURABLY WITH THE EUROPEAN BANKING SECTOR, AS A WHOLE, IN TERMS OF PROFITABILITY AND THE CET1 RATIO**

The ROE of the main Spanish deposit institutions stood at -3.9% in December 2020 – considerably lower than the European average of 2% – reversing the trend of recent years. This lower ROE was heavily influenced by extraordinary negative adjustments such as those to the goodwill of the foreign subsidiaries of the two major banking groups. Similarly, the CET1 ratio of Spanish deposit institutions continues to be the lowest of the largest European countries. However, this ratio grew for Spanish banks in 2020, and even more so for the banks of the other main European countries, largely driven by the revision of the capital requirements regulation.



SOURCE: EBA.

- a The charts show the data for Spain in red and that for the UK in yellow.
- b Excluding extraordinary results, the ROE of Spanish banks was 4.3%, -3.7 pp lower than in 2019.
- c The EBA data include Iceland. As from 2020 Q1, the EU aggregate data no longer include figures for UK banks but do include data of UK banks' subsidiaries in EU countries.

**aforementioned extraordinary factors could be conditioning this assessment.**

Chart 2.13.1 shows the European comparison of the ROE ratio based on the latest data published by the EBA at December 2020. The main Spanish banks reported a negative ROE (-3.9%), well below the European average (2%) and countries such as France and the Netherlands (above 3%). Also, Italy's and Germany's main banks posted profitabilities close to zero. This behavior in 2020 contrasts with the higher than European average profitability of Spanish banks after the financial global financial crisis. The negative profitability for the Spanish banking sector has been marked, as mentioned earlier, by certain extraordinary items. If Spanish banks' extraordinary profit is excluded, ROE in 2020 is more favourable (4.3%), although this is 3.7 pp lower than in 2019.<sup>16</sup>

**Analysing solvency in terms of RWAs, Spanish banks ranked last among the main European banks as at December 2020, but they were in line with the European average in terms of the leverage ratio.** Spanish banks' CET1 ratio as at that date stood at 12.9% (see Chart 2.13.2), 3 pp below the European average (15.9%).

<sup>16</sup> A rigorous comparison with the results of other European banks would require a comparable detail of the influence of these extraordinary items on their results for 2020.

The positive across-the-board performance of this ratio in 2020 was underpinned for banks supervised by the SSM by the “quick fix”. It should be borne in mind that this difference with the European average, in the case of the solvency ratio in terms of RWAs or the CET1 ratio, was already observed before the COVID-19 crisis and it is due to greater asset density, in part owing to structural factors such as the greater use of the standardised approach by Spanish banks. In fact, if solvency is measured in terms of the leverage ratio, Spain’s significant institutions (5.8%) are in line with the European average and above those of the larger countries, except Italy.

### 2.1.3 Deposit institutions’ operational risks

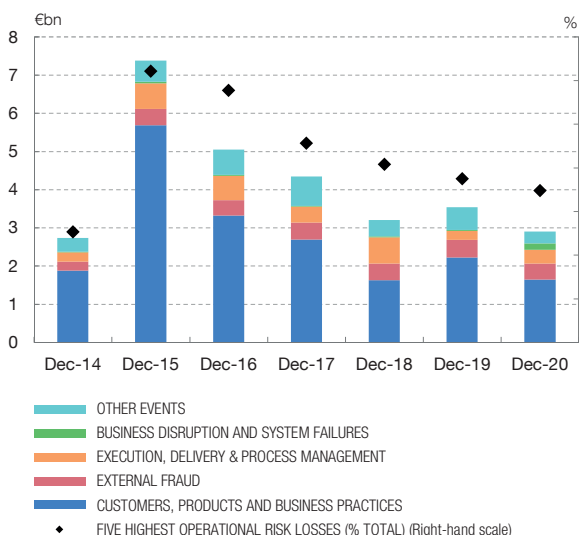
**In recent years, the impact of operational risks in terms of losses for deposit institutions has declined.** This is explained in part by the fall in customer complaints (particularly those relating to mortgage loans), which have sometimes been resolved through the courts against Spanish deposit institutions and, in certain cases, are still pending resolution (see Chart 2.14.1).<sup>17</sup> However, other types of operational risk loss events have increased, particularly those relating to external fraud, which is in many

Chart 2.14

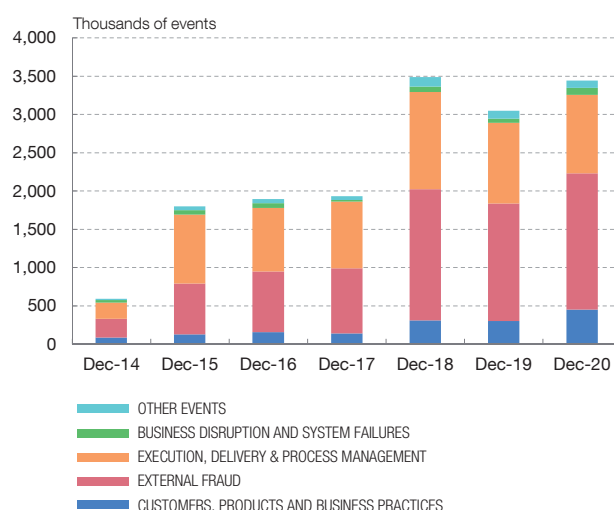
#### OPERATIONAL RISK LOSSES HAVE FALLEN IN RECENT YEARS, ALTHOUGH THE NUMBER OF EVENTS GREW

Operational risk losses fell significantly between 2015 and 2018, especially those relating to customers, products and business practices, but have stabilised in recent years. By contrast, the number of loss events has continued to rise, particularly external fraud-related loss

1 OPERATIONAL RISK. TOTAL LOSSES  
Consolidated data. December 2020



2 OPERATIONAL RISK. NUMBER OF EVENTS  
Consolidated data. December 2020



SOURCE: Banco de España.

17 See the Annual Claims Report of the Banco de España (2019) (full version available only in Spanish).

cases associated with cybersecurity breaches, but their related operational risk losses have increased more moderately. The number of events relating to the implementation, delivery and management of processes has held relatively steady. Meanwhile, events relating to customers overall (i.e. beyond complaints), products and business practices have increased. These also account for a greater proportion of operational risk losses, although it has declined since 2015 (see Chart 2.14). Operational risk-weighted assets have also fallen, declining by 6.5% in the past year, mainly owing to the decrease in the sector's net income and the lower equivalent value of the portion of income in foreign currency resulting from the depreciation of certain currencies, such as Latin American currencies, this being the main variable used to calculate operational risk capital requirements under the standardised approach generally used by Spanish banks.

## 2.2 Non-bank financial sector and systemic interconnections

### 2.2.1 Non-bank financial sector

#### *Specialised lending institutions*

**Specialised lending institutions (SLIs) posted a strong decline in credit granted in 2020 and a worsening of the NPL ratio.** The outstanding balance of credit granted by SLIs in Spain amounted to €41.3 billion at December 2020, down 18.9% from the previous year. If the impact of corporate transactions on the sector is excluded<sup>18</sup> and only the performance of the SLIs existing in December 2020 is considered, their outstanding credit would have declined by 6.4% in the past year. In any event, this is a significant contraction compared with the rates observed in previous years, owing to the impact of the health crisis on consumer lending, which is the main source of business for SLIs (see Chart 2.15).

**The poor performance of credit contributed to the worsening of the NPL ratio in the first two quarters of 2020.** The increase, to 6.5% (0.9 pp more than in December 2019), was more subdued in the second part of the year. Yet the volume of non-performing loans is experiencing very significant growth, in line with the non-performing loans in deposit institutions' consumer loan portfolios. And this despite the fact that borrowers have availed themselves of moratoria for significant amounts.

**The income of SLIs also worsened substantially in the past year.** In 2020 the income of SLIs decreased by 19% year-on-year, in contrast with the positive changes

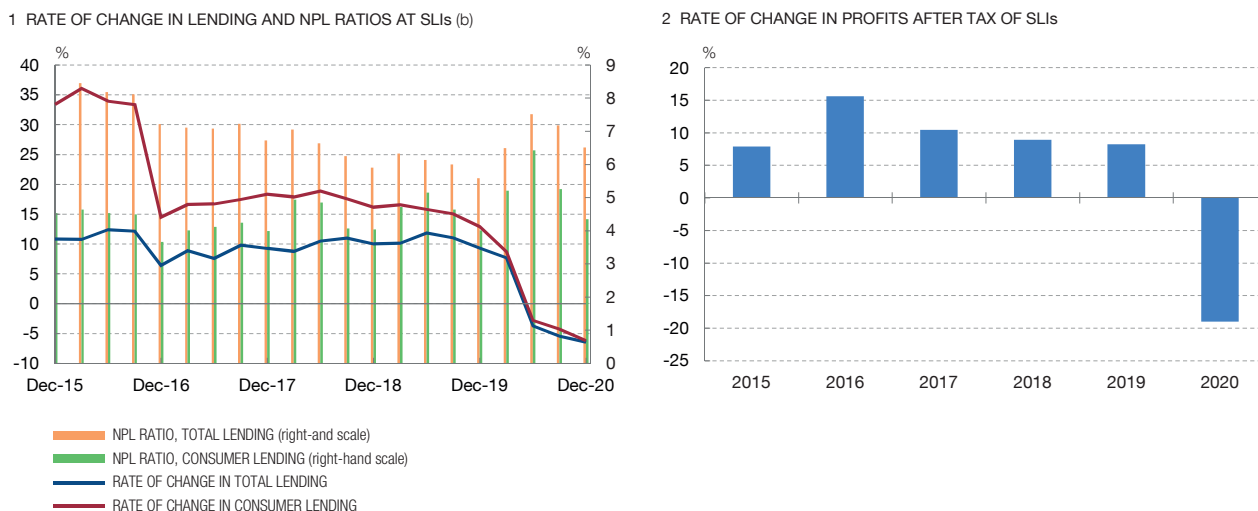
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<sup>18</sup> The absorption of a sizeable SLI by a deposit institution in 2020 accounted for approximately three quarters of the overall decline.

Chart 2.15

**THE CREDIT GRANTED BY SLIs IN 2020 DECLINED NOTABLY, THEIR NPL RATIO ROSE MODERATELY AND THEIR INCOME WAS HIT HARD BY THE PANDEMIC (a)**

Specialised lending institutions (SLIs) have been severely affected by the COVID-19 pandemic. The credit extended by these specialists in consumer credit declined notably by 6.4% for the year as a whole. The NPL ratio was particularly hard hit in the first two quarters of the year, although this effect moderated subsequently, and the ratio ended the year slightly higher than twelve months earlier. As for income, the decline in net interest income and in fees was the result of a fall of 19% in annual profit compared with growth in previous years.



SOURCE: Banco de España.

a The analysis was performed with the group of SLIs existing in December 2020 and excluded, therefore, the effects of M&A activity in recent years.  
 b The total NPL ratio is higher than the NPL ratio for the consumer segment since a larger SLI specialises in high-risk mortgage loans.

observed in recent years. As they specialise in consumer credit, SLIs were able to obtain higher profitability than other institutions, as this is also a riskier business. As mentioned earlier, the pandemic impacted consumption more severely than other segments. Accordingly, net interest income on fees and commissions declined sharply during the year, explaining the fall in profit. As a result of the specialised nature of these institutions, both their income and their NPL ratios could experience additional impairment pressures over the coming quarters if the restrictions associated with the pandemic remain, particularly as regards portfolios under moratoria.

*Investment funds*

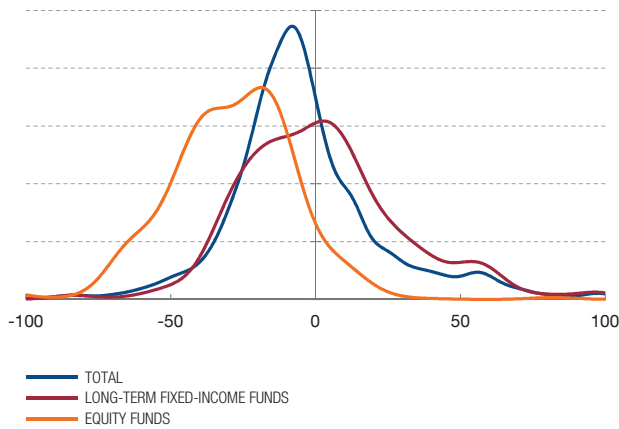
**Despite the negative impact of the COVID-19 pandemic in 2020 Q1, the net assets of investment funds registered in Spain had nearly recovered their pre-pandemic levels at end-2020.** Investment funds’ assets declined by only 0.05% in 2020, despite the 10.5% fall recorded in Q1. This aggregate performance conceals the fact that net assets declined at more than half of the funds registered in Spain, in particular at equity investment funds (see Chart 2.16.1), which were highly influenced by the negative effects of adverse changes in the prices of these types of assets in the wake of the pandemic. There is also some heterogeneity in the

Chart 2.16

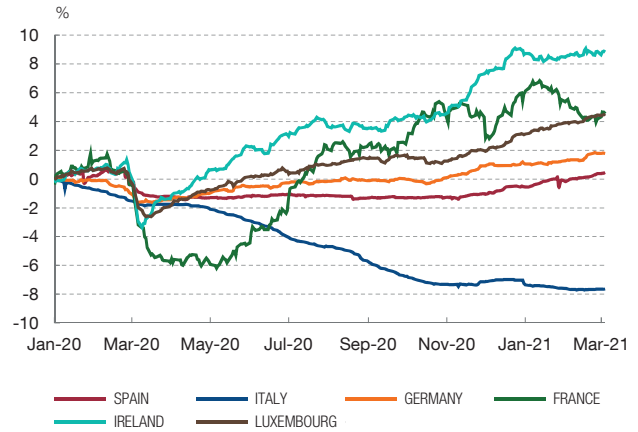
**AFTER THE INITIAL ADVERSE IMPACT OF THE COVID-19 PANDEMIC, NET ASSETS AND THE NET CAPITAL INFLOWS OF INVESTMENT FUNDS RECOVERED ACROSS THE BOARD**

Following the recovery as from 2020 Q2, in December 2020 investment funds' net assets reached a similar volume to that of the previous year, with a year-on-year rate of change of close to zero. However, the median value of the distribution of the rate of change in investment funds' net assets stood in negative territory, especially in equity funds. In March 2020, with the outbreak of the COVID-19 pandemic, there were significant net capital outflows from the investment funds of certain European countries. However, in 2020 H2 and the beginning of 2021, net capital inflows recovered in most European countries, especially in Ireland and France, with the exception of Italy.

1 INVESTMENT FUNDS. DISPERSION OF CHANGES IN NET ASSETS  
December 2019 vs December 2020 (a) (b) (c)



2 INVESTMENT FUND FLOWS (d)



**SOURCES** Inverco and Refinitiv.

- a The "long-term fixed-income funds" category includes long-term fixed-income investment funds, mixed fixed-income funds, international fixed-income funds and international mixed fixed-income funds. The "equity funds" category includes equity investment funds, mixed equity funds, international equity funds and international mixed equity funds. The total includes the two previous categories together with hedge funds, short-term fixed income funds, monetary funds, passive management funds, absolute return funds, global funds and collateralised investment funds.
- b The chart shows the density function of the rate of change in investment funds' net assets, weighted by the previous year's net assets. This density function is approximated through a kernel estimator which allows a non-parametric estimate of the density function, yielding a continuous and smoothed graphical representation of that function.
- c The components of the contribution to the change in investment funds' net assets (net subscriptions and profitability) show a correlation coefficient of 0.01 for the total and for the long-term fixed-income funds, and of 0.20 for the equity funds.
- d Cumulative change in investment funds' net capital inflows and outflows, as a percentage of and in relation to the net assets of each country's funds on 15 January 2020, based on a representative sample of funds domiciled in euro area countries.

contribution of the components of net subscriptions and profitability to the change in net assets, among both investment funds and investment fund categories. In 2021 Q1, the net assets of investment funds registered in Spain increased (by 4.7% with respect to December 2020), in terms of both net subscriptions and profitability.

**Capital inflows of investment funds in the euro area have increased substantially in recent months.** Chart 2.16.2 shows the cumulative change in capital flows since early 2020 for a representative sample of investment funds from the main euro area countries. Following the outbreak of the COVID-19 pandemic, significant net outflows were recorded, which reversed from mid-year in all the countries except Italy. The recovery picked up in the final stretch of the year, particularly in equity funds. This is consistent with the positive impact on this market of the news on the COVID-19 vaccines, which led to an increase in investors' risk appetite. In the case of Spanish investment funds, the pattern of capital inflows and



outflows, in comparison with other European countries, is proving to be more stable in this crisis. Thus, there were lower outflows at the onset of the pandemic, as well as a lower pace of inflows during the recovery phase. This could be due to the high weight of retail investors in the capital of investment funds, whose net assets are a priori less sensitive to falls in returns and, in general, to bouts of market volatility<sup>19</sup>.

### *Pension funds and insurance companies*

#### **The flows of net contributions to pension funds increased significantly in 2020.**

Thus, although gross contributions remained at levels similar to those of the previous year, net contributions grew by more than 40%, particularly in the individual systems. This dynamic could be affected by the new tax framework applicable to pension funds. Pension plan assets increased by 1.8% year-on-year, also showing an expansive behaviour in the first quarter of 2021 (growth of 2.4% since December 2020). The annual average rate of return on pension funds at December 2020 was 0.7% and the long-term rate of return (25 years) was 3.4%.

**The insurance sector improved its solvency and profitability levels in 2020, despite the outbreak of the COVID-19 pandemic, with an uneven performance of the life and non-life segments.** The solvency capital requirement (SCR) ratio was 237.8%, compared with 237% in 2019, while the ROE increased from 13.5% in 2019 to 14.9% in 2020. Premium income in the non-life sector grew slightly (1%) owing to the strength of health and multi-risk insurance, while life premiums posted a double-digit decrease, giving rise to an overall fall in premium income for the sector of 8.2%.<sup>20</sup> This drop in income was more than offset by the fall in claims and operating expenses, which explains the sustained profitability.

### **2.2.2 Banks' interconnections with the non-bank financial system**

**The analysis of interconnections between the different components of the Spanish financial system helps to identify common sources of risk, which could contribute to the transmission of tensions therein in the event that the risks to stability posed by the current crisis materialise.** For this purpose, we analyse in this section the credit ratings of common holdings – i.e. securities that form part of the portfolio of more than one financial sector – of financial sectors' marketable securities

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19 As regards the relationship between fund performance and type of holder, see Javier Gil-Bazo, Peter Hoffmann and Sergio Mayordomo, "Mutual Funding", *The Review of Financial Studies*, Volume 33, Issue 10.

20 Life insurance may cover the risk of death and/or incorporate a savings component linked to the insured's survival (with the possibility of mixed policies combining the two elements), while non-life insurance covers a wide range of risks (car, health, claims, home insurance, etc.). Data obtained from ICEA.

portfolios in 2020 Q4.<sup>21</sup> Specifically, these holdings are studied, focusing on securities issued by non-financial corporations, for banks, insurance companies, investment funds and resident pension funds. Marketable securities portfolios account for 24% of total assets in the banking sector and for around 80% of total assets in the resident non-bank financial (NBF) sectors mentioned above.<sup>22</sup>

**The main risk is that the credit ratings of certain vulnerable issuers may be downgraded, possibly triggering fire sales and losses (realised or valuation losses) for banks and NBF sectors.** Fire sales could be conducted by some financial intermediaries that can only invest in securities above a certain credit rating, or by agents, such as investment funds, that could face cash withdrawals in periods of stress.<sup>23</sup> This could impair liquidity and cause abrupt falls in prices in several markets, which could be passed on from one financial sector to another given their exposure to the same issuers. To date, the measures adopted to alleviate the impact of the health crisis have contributed to temporarily mitigating economic agents' credit risk. Similarly, the decisions adopted in the design of the ECB's asset purchase programme have also mitigated the possible non-linear effects on prices of the downgrading of credit ratings.<sup>24</sup> Also, credit rating agencies have revised their ratings less than in other crises. Nonetheless, numerous issuers, especially NFCs, are currently in a vulnerable situation, as suggested by the negative outlooks resulting from credit agencies' analyses and, accordingly, their ratings could be downgraded in the event of a worsening or persistence of the economic situation.<sup>25</sup>

**In Spain, more than 50% of each financial sector's portfolio securities are classified as above investment grade (above BBB- and equivalent ratings). This percentage would be significantly higher if only fixed income assets were considered.** Banks and insurance companies have the highest percentages of securities in investment grade, with 66% and 80%, respectively, of their holdings above this rating. In the case of investment funds and pension funds, these percentages hover around 51% and 57%, respectively, given the greater volume of unrated securities in their portfolios. Nevertheless, analysing these two subsectors

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21 Marketable securities include both fixed-income and equity instruments and may, in particular, include holdings in the capital of investment funds. Each issuer's rating at a specific date is assigned to all of its issued securities.

22 The banking sector's marketable securities portfolio, valued at market prices, amounts to around €661 billion, while the NBF sectors' portfolios are much smaller: insurance companies, €276 billion; investment funds, €263 billion; and pension funds, €119 billion.

23 See Section 2.2.2. of the [Banco de España's Autumn 2020 FSR](#) or Rodríguez de Codes et al. (2020), *The challenges associated with the use of agencies' credit ratings in the context of the COVID-19 crisis*, Section 4, [Financial Stability Review, Autumn 2020, Issue 39](#).

24 In April 2020 the ECB's Governing Council adopted certain measures to relax collateral eligibility requirements in financing transactions with financial institutions which included, most notably, the easing of the conditions for the use of non-marketable assets (loans and advances) as collateral and the reduction of valuation haircuts for marketable and non-marketable assets. At the same time, in order to mitigate the impact of rating downgrades on collateral availability, it was decided to temporarily continue to accept the marketable assets and the related issuers which on 7 April 2020 met the minimum credit quality requirements.

25 See Boxes 1 and 3 of [Chapter 2 of the ECB's Financial Stability Review, November 2020](#).

in more detail, the securities not classified as investment grade were concentrated in instruments without assigned rating at the end of last year, which represented 44.5% and 39% of the total holdings respectively. Within these instruments without an assigned rating, holdings in the capital of other investment funds predominated (a percentage higher than 30% of the portfolio) which, due to their nature, are not subject to credit ratings in the way fixed income securities are. Conversely, the presence of fixed income instruments without an assigned rating was marginal.

**The weight of securities holdings classified in the highest categories (from A- to AAA+ and equivalent ratings) is greater for insurance companies (60%), which is significantly higher than for investment funds (27%) and pension funds and banks (35%).** These figures largely reflect that banks and insurance companies have larger holdings of – mainly Spanish – government debt securities. Lastly, holdings bordering on investment grade, in the BBB range, make up between 20% to 25% of portfolios for the NBF sectors and 31% for the banking sector.

**The ratings of securities held in common by the banking sector and NBF sectors are concentrated between A- and AAA+** (see Chart 2.17.1). The percentage of securities held in common by each pair of sectors<sup>26</sup> varies only slightly with respect to the similar exercise conducted in 2020<sup>27</sup> and is particularly high in the case of NBF sector. The holdings held in common by banks and NBF sectors that are bordering on investment grade represent a relatively small percentage of the total bank portfolio, around 12%. The weight of securities bordering on investment grade in holdings held in common with other sectors is more significant for investment and pension funds (around 20%).

**The weight of unrated holdings in investment and pension fund portfolios was high in December 2020.** Specifically, nearly 40% of their holdings are unrated (29% in the banking sector and 16% in the insurance sector). This is also reflected in the percentage of holdings these two sectors have in common and which each of them has with insurance companies. However, leaving aside the participations in other funds that, as already indicated, exceed 30% of the portfolio, the holdings that have not been assessed by credit rating agencies are not subject to the risk of fire sales owing to possible rating downgrades. However, as they are unrated, their secondary markets are likely to be shallow, which would make them difficult to sell in the event of possible liquidity needs and could generate more downward pressure on prices in an episode of tension.

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26 Each financial sector maintains in its portfolio securities that the other sectors have also acquired. These may be securities issued by non-financial corporations, governments or other financial intermediaries. For instance, if a bank or an investment fund have acquired parts of the same bond issue of a firm in the transport sector, the amounts relating to these holdings are computed as common holdings.

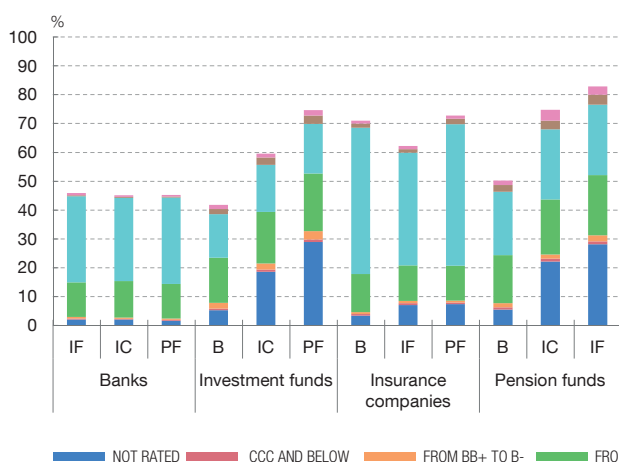
27 See the [Banco de España's Spring 2020 Financial Stability Report](#).

Chart 2.17

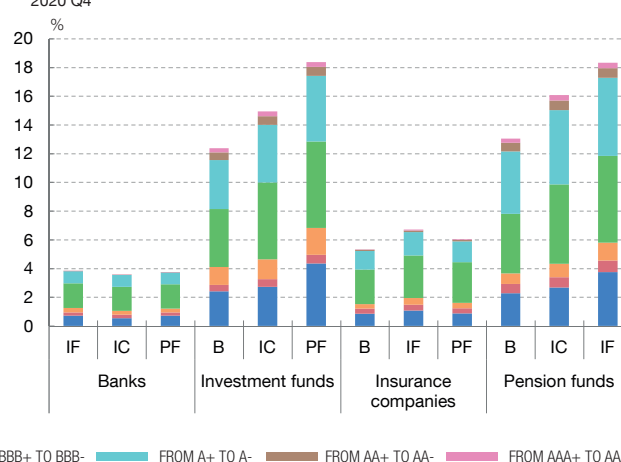
**COMMON HOLDINGS IN DIFFERENT FINANCIAL INTERMEDIARIES OF SECURITIES ON THE EDGE OF INVESTMENT GRADE ARE IMPORTANT FOR INVESTMENT AND PENSION FUNDS**

Investment funds and pension funds hold a relatively high proportion of common holdings of securities issued by NFCs that are on the edge of investment grade and are, therefore, more vulnerable to the possibility of a worsening of the economic situation. By contrast, in the case of the banking sector and the insurance companies, these securities account for a low proportion of total portfolio.

1 TOTAL COMMON HOLDINGS AS A PROPORTION OF TOTAL PORTFOLIO (a) 2020 Q4



2 TOTAL COMMON HOLDINGS OF CORPORATE SECURITIES AS A PROPORTION OF TOTAL PORTFOLIO (a) 2020 Q4



SOURCES: Securities Holding Statistics by Sector and Refinitiv.

a IF, IC, PF and B denote investment funds, insurance companies, pension funds and banks, respectively. Each sector has common holdings with other sectors, as shown by the different columns in the chart, which depict the common holdings between each sector pair. For instance, the first column on the left-hand side indicates that the common holdings between banks and investment funds make up 48% of the total banking sector portfolio; of these holdings, approximately 12% are investment grade (BBB+ to BBB-). The market value of the holdings reported by the institutions is taken into account (or, where appropriate, their fair value). The latest credit rating available at 29.1.2021 is used, standardised according to S&P's credit rating scale.

**Banks' holdings of bonds or shares issued by NFCs are minimal, around 4.5% of their marketable securities portfolio, and lower than those of the NBF sectors.** The weight of these corporate securities in the NBF sectors' portfolios is higher (10% in the case of insurance companies and around 20% in that of investment funds and pension funds). Approximately 40% of corporate security holdings held by banks are securities issued by Spanish NFCs, while the percentage is lower for the NBF sectors, between 18% and 34%<sup>28</sup>.

**Investment funds and pension funds maintain the highest percentage of common holdings of corporate securities relative to the size of the portfolio, between 12% and 17% for each sector** (see Chart 2.17.2). Holdings on the edge of investment grade range between 4% and 6% of the portfolio of these two sub-sectors. For banks and insurance companies, common holdings of corporate

28 The data used in this analysis are grouped at sectoral level, but are not consolidated on an intra- or cross-sectoral basis. This means that NFCs may have subsidiaries classified in the sectors of financial intermediaries through which they are financed via the issuance of securities, but since the consolidated information is not available, these exposures are not included in the analysis as securities issued by NFCs.

securities are lower, standing at 4% and 6.5%, respectively. Chart 2.17 shows that when securities other than corporate securities are excluded, the weight of common holdings declines significantly in magnitudes exceeding 30 pp of the total portfolio. This effect evidences the importance of other common exposures different from corporate securities (particularly government debt) as a possible channel for the transmission of market shocks to all the financial sectors.

