

RISKS TO THE FINANCIAL SECTOR AND ITS RESILIENCE



The moderation of bank lending in Spain observed in 2021 H1 continued in H2. The subdued growth in lending to firms last year, essentially explained by demandside factors, offset more expansive developments in loans to households, driven by stronger momentum in loans for house purchase. The profitability of Spanish banks recovered notably in 2021 across the main countries where they operate, supported by a positive change in extraordinary items and lower provisioning. The banking sector's common equity tier 1 ratio (CET1) held relatively stable last year, after increasing in 2020. Despite this positive performance, latent credit risks persist, associated in particular with a higher proportion of Stage 2 loans, concentrated in the sectors hardest hit by the COVID-19 pandemic. Spanish financial intermediaries' direct credit exposures to Russia are very limited, but the deteriorating macroeconomic outlook, as a consequence of Russia's invasion of Ukraine, and the inflation dynamics, are likely to increase the probability of these risks materialising and their impact on the banking sector. The results of the stress tests show the banking sector to have satisfactory aggregate resilience in terms of solvency. However, a high degree of materialisation of the macrofinancial risks identified would entail a reduction in the average CET1 ratio, mainly owing to credit quality impairment in scenarios of both rising interest rates and slowing economic activity.

2.1 Deposit institutions

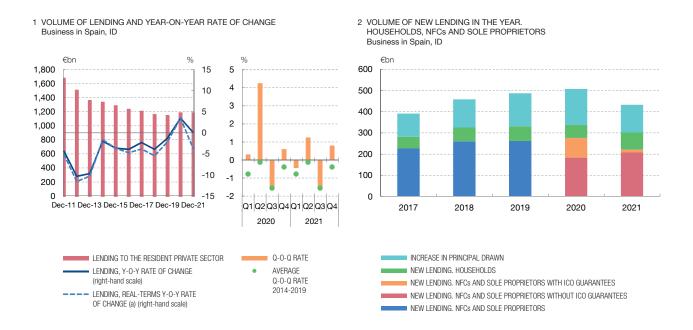
2.1.1 Balance sheet structure, risks and vulnerabilities

Credit risk

The outstanding stock of loans extended by deposit institutions in Spain to the resident private sector declined slightly in 2021, with a year-on-year nominal fall of 0.1%. This performance contrasts with the robust growth recorded in 2020, fostered in part by the policies implemented to mitigate the effects of the pandemic. Given that inflation in Spain rose significantly in 2021, there was a sharp decline in credit in real terms (-4% year-on-year). This high inflation could affect the decisions of lenders and borrowers and lead to a redistribution of the real cost of debt among them. The stability of the nominal stock of loans was bolstered by the reduction in new lending observed in 2021 as compared with 2020 (see Chart 2.1.2). The bulk of this decline came in new loans to non-financial corporations (NFCs) and sole proprietors, which more than offset the increase in new loans to households. As

LENDING TO THE RESIDENT PRIVATE SECTOR DECLINED SLIGHTLY IN 2021, SINCE THE MODERATION IN NEW LENDING TO NFCs AND SOLE PROPRIETORS OFFSET THE MORE EXPANSIVE PERFORMANCE OF LENDING TO HOUSEHOLDS

Lending to the resident private sector, which had grown in the first year of the pandemic, fell slightly in 2021. Contributing to this was the decline in new State-backed loans to NFCs and sole proprietors, which offset the increase in new loans to households. Owing to the sharp increase in prices observed last year, credit developments were negative real terms (-3.9% year-on-year).



SOURCES: Instituto de Crédito Oficial and Banco de España.

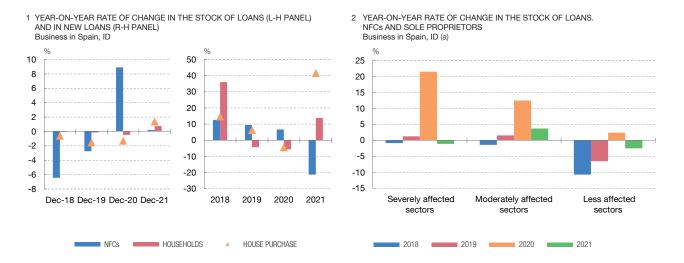
a The "lending, real-terms rate of change" series is obtained taking into account its composition, deflating the portion of lending extended to households using CPI and other credit (NFCs, financial corporations and sole proprietors) using the GDP deflator.

the ICO guarantee programme roll-out neared its end there was a substantial reduction in new guaranteed loans. However, the programme launched at the end of March 2022, associated with the armed conflict in Ukraine, could reverse that trend. The growth in principal drawn down on existing transactions also eased as compared with the previous year.

The stock of loans to households increased moderately in 2021, driven by strong growth in new lending for house purchase, while the stock of loans to NFCs and sole proprietors stabilised at the previous year's levels. In 2021, the stock of loans for house purchase grew 1.2% year-on-year, which prompted a positive change for households as a whole (0.6%) for the first time in recent years (see Chart 2.2.1). New lending for house purchase showed robust growth of 41.5% on 2020, while also standing 35.2% higher than in 2019. New loans to NFCs and sole proprietors as a whole declined by 21.6% as compared with a year earlier. Loans to NFCs and sole proprietors grew only in the sectors moderately affected by

THERE WAS A SIGNIFICANT INCREASE IN NEW LENDING FOR HOUSE PURCHASE IN 2021, PAVING THE WAY FOR A MODERATE INCREASE IN THE STOCK OF LOANS TO HOUSEHOLDS, WHILE CORPORATE LENDING HELD RELATIVELY STABLE ACROSS THE DIFFERENT SECTORS

The stock of loans to households showed slight year-on-year growth for the first time in recent years, owing to the performance of loans for house purchase. This was observed more robustly in new lending. The stock of loans to NFCs and sole proprietors held stable in 2021, growing only to some extent only in the sectors moderately affected by the pandemic and declining in the rest.



SOURCE: Banco de España.

a Lending to the more severely affected sectors is proxied by that corresponding to sectors with a fall in turnover of more than 15% in 2020 and that can be identified in the FI-130 regulatory return. Specifically, lending to the more severely affected sectors includes hospitality, manufacture of refined petroleum products, social services and entertainment, transportation and storage, and manufacture of transport equipment. Lending to moderately affected sectors is proxied using the following sectorisation in the FI-130 regulatory return: metallurgy, manufacture of machinery, other manufacturing activities, professional services, mining and quarrying, wholesale and retail trade, and repair of vehicles. Other productive activities are in the largely unaffected sectors.

the pandemic¹ (see Chart 2.2.2). Part of the decline in the most severely affected sectors can be explained by lower financing needs in the year and the build-up of liquidity reserves in 2020, when they were the primary objective of public policies geared towards maintaining the flow of credit in the economy.² In this regard, it should be noted that ICO-backed loans were extended under highly advantageous maturity conditions for firms, which will reduce their refinancing requirements in the years ahead. In any event, more cautious lending policies with these sectors may also have contributed to these developments.

¹ Lending to the hardest-hit sectors is proxied by that corresponding to the sectors with a fall in turnover of more than 15% in 2020 and that can be identified in the FI-130 regulatory return. Specifically, lending to the most severely affected sectors includes hospitality, manufacture of refined petroleum products, social services and entertainment, transportation and storage, and manufacture of transport equipment. Lending to the moderately affected sectors is proxied using the following sectorisation in the FI-130 regulatory return: metallurgy, manufacture of machinery, other manufacturing, professional services, mining and quarrying, wholesale and retail trade, and repair of vehicles. All other productive activities make up the largely unaffected sectors.

² See R. Barreira, S. Mayordomo, I. Roibás and Manuel Ruiz-García (2022), "Recent developments in lending to non-financial corporations: supply and demand factors", Analytical Article, *Economic Bulletin* 1/2022, Banco de España.

Non-performing loans (NPLs) continued to decrease in 2021 and at a faster pace than observed in 2020, while the NPL ratio likewise remained in decline. In the last year, NPLs to the resident private sector stood at €49.3 billion, down 5.4% on the previous year³ (see Chart 2.3.1). This meant more intense balance sheet restructuring than in 2020, although the reduction remained far smaller than in the years leading up to the COVID-19 pandemic. In any event, the data confirm a singular NPL performance as compared with previous crises in the Spanish economy, given that the severe macroeconomic deterioration has not triggered aggregate NPL increases. The economic policy measures implemented during the current crisis have proven crucial in maintaining the ability to repay of households and, in particular, of NFCs and sole proprietors. Against this background, the NPL ratio for credit to the resident private sector stood at 4.2% in December 2021, down 0.2 pp on the previous year, although the pace of decline in this ratio has been easing in recent years, mainly due to the slowing reduction in NPLs. In 2021, the stability in the volume of credit also contributed to curb the decline in the ratio, in contrast to 2020 when the credit expansion tended to drive down the ratio. The reduction in NPL volume and NPL ratios in 2021 was recorded both for households and for NFCs and sole proprietors, but was more moderate for households due to a worse performance from the consumer credit segment.

Despite the good aggregate performance of NPLs, certain signs of impairment may presage an increase in troubled assets going forward. Stage 2 loans, which have a higher probability of default than performing loans,⁴ continued to rise at elevated rates (14% year-on-year in December 2021), although notably below those of previous quarters (see Chart 2.3.2). In December 2021, Stage 2 loans accounted for 8% of the total loan portfolio, up 2.2 pp on pre-pandemic levels. The volume of forborne loans (likewise typically associated with possible repayment difficulties for borrowers), more than half of which are classified as non-performing, grew 14.3% year-on-year, compared with the decline of 9% observed in December 2020. This growth in forborne credit came exclusively in the NFCs and sole proprietors sector (30.6%), while a moderate decline was observed in the households sector (-3.4%).⁵ In aggregate terms, forborne exposures accounted for 5% of total outstanding loans, the same percentage as prior to the pandemic.

The sectors most severely affected by the COVID-19 crisis continue to show the strongest signs of deterioration, which are particularly evident in Stage 2

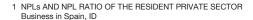
³ The application since 1 January 2021 of EBA guidelines (EBA/GL/2016/07) relating to the new definition of default pursuant to Article 178 of (EU) Regulation No 575/2013, has given rise to some differences in the amounts classified as "NPLs for accounting purposes" (accounting definition contained in Banco de España Circular 4/2017) and "NPLs for prudential purposes" (according to the above-mentioned EBA guidelines). Specifically, on data to December 2021, "NPLs for prudential purposes" were around 12% higher than "NPLs for accounting purposes", which in absolute terms amount to an increase of approximately €6 billion.

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

⁵ The increase in forborne loans largely corresponds to ICO-backed loans with term extensions pursuant to the provisions of Royal Decree-Law 34/2020.

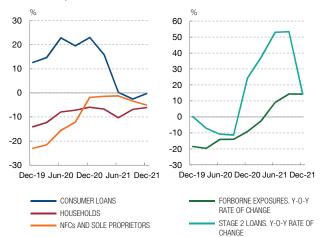
NPLS CONTINUED TO DECLINE IN 2021, ALTHOUGH AT A SLOWER PACE THAN IN THE YEARS PRECEDING THE PANDEMIC, AND EARLY SIGNS OF IMPAIRMENT PERSIST

NPLs to other resident sectors declined more quickly in 2021 than in 2020, although far more slowly than in the years leading up to the pandemic. The NPL ratio likewise declined, albeit more moderately than in recent years. Growth in forborne exposures stabilised, while that in Stage 2 assets moderated notably in 2021. However, the ratio of Stage 2 loans continued to rise, particularly in the sectors severely affected by the pandemic, where the NPL ratio also increased slightly. The credit quality of loans linked to expired moratoria deteriorated over 2021, both for those with and without mortgage collateral. In December 2021, 94% of the moratoria linked to loans to households had expired.

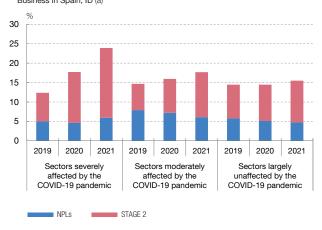




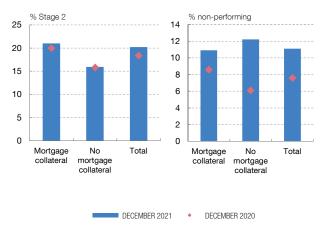
2 YEAR-ON-YEAR RATES OF CHANGE IN NPLs (L-H PANEL) AND SIGNS OF EARLY IMPAIRMENT IN LENDING TO THE RESIDENT PRIVATE SECTOR (R-H PANEL) Business in Spain, ID



3 SHARE OF NON-PERFORMING AND STAGE 2 LOANS. NFCs AND SOLE PROPRIETORS Business in Spain, ID (a)



4 STATUS OF LOANS WITH EXPIRED COVID-19 MORATORIA (b)



SOURCE: Banco de España.

- a Lending to the more severely affected sectors is proxied by that corresponding to sectors with a fall in turnover of more than 15% in 2020, which can be identified in the FI-130 regulatory return. Specifically, lending to the more severely affected sectors includes hospitality, manufacture of refined petroleum products, social services and entertainment, transportation and storage, and manufacture of transport equipment. Lending to moderately affected sectors is proxied using the following sectorisation in the FI-130 regulatory return: metallurgy, manufacture of machinery, other manufacturing activities, professional services, mining and quarrying, wholesale and retail trade, and repair of vehicles. Other productive activities are in the largely unaffected sectors.
- b Includes at each date loans with expired moratoria under the different programmes implemented since April 2020 to mitigate the effect of the COVID-19 pandemic. Stage 2 loans present a significant increase in credit risk since origination, but without a default having occurred or any strong indication that a default will occur, in which case they would be classified as non-performing. These loans are both to households and NFCs, although the latter represent a small fraction of the total.

loans. In the hardest-hit sectors, NPLs increased as a proportion of total exposure as compared with the onset of the crisis (from 5% to 5.9%), whereas they declined in the other sectors (see Chart 2.3.3). However, the differences are more significant in Stage 2 loans, despite these growing across all sectors. The combined share of NPLs and Stage 2 loans in the sectors most severely affected by the pandemic reached 23.9% in December 2021, compared with 17.7% in the moderately affected sectors and 15.5% in the less affected sectors.

The credit quality of outstanding loans linked to expired moratoria deteriorated in 2021. The percentage of outstanding loans arising from expired or cancelled moratoria that are non-performing (see Chart 2.3.4) stood at 11.1% at end-2021 compared with 7.6% in 2020. Stage 2 loans increased from 18.4% to 20.2% in the same period. Despite this sharper deterioration, it should be noted that the total volume of loans that have benefited from some type of moratorium account for a low percentage of institutions' balance sheets. 6 Moreover, by December 2021, the moratoria had already expired for 94% of these loans and, therefore, there is very little scope for further impairment triggered by an increase in expired moratoria. In addition, confidence in this loan group's ability to pay without government support has grown over time since the moratoria expired, given that NPLs have remained in check. However, it should be noted that borrowers benefiting from this programme tend to be more vulnerable and may be especially affected by the materialisation of macroeconomic risks, in particular those arising from the conflict in Ukraine. The approval, at the end of March 2022, of measures to mitigate the economic effects of the conflict could limit the potential impact of such risks on these more vulnerable borrowers.

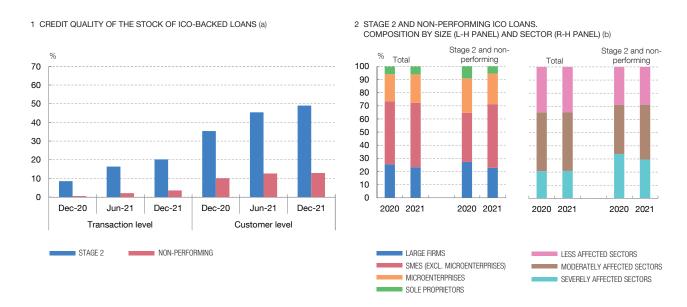
ICO-backed loans extended to firms and sole proprietors deteriorated further in 2021 H2. Specifically, the proportion drawn classified as Stage 2 (see Chart 2.4.1) increased to 20.2% in December 2021 (up 3.9 pp on June 2021), while the NPL ratio reached 3.5% (up 1.4 pp on June 2021). In the sectors hardest hit by the COVID-19 crisis and which may also be severely affected by the rising energy and food prices, the percentages of Stage 2 loans observed (e.g. 35.5% and 22.7% in hospitality and transport, respectively, in December 2021) are higher than for ICO loans overall; this is also true of NPLs (e.g. 6.5% and 4.5% in hospitality and transport, respectively, in December 2021). The percentages of ICO loans linked to customers whose bank loans as a whole show some sign of impairment (non-performing or Stage 2) are higher (see Chart 2.4.1), which could indicate financial weaknesses predating the COVID-19 crisis in some of these customers.

Firms that have opted for ICO loans and show signs of vulnerability may also find their credit quality further impaired by the effects of the armed conflict in

⁶ Loans subject to moratoria at any time following the onset of the pandemic amounted to €60.5 billion (somewhat less than 9% of all loans eligible for moratoria and around 5% of total loans to the non-financial private sector in December 2020).

THE IMPAIRMENT OF THE ICO LOANS PORTFOLIO CONTINUED IN 2021 H2, ALBEIT AT A SLOWER PACE, WITH A HIGHER PROPORTION OF LOANS TO SMEs AND THE MODERATELY AFFECTED SECTORS CLASSIFIED AS NON-PERFORMING AND STAGE 2

The credit quality of ICO-backed loans continued to deteriorate, albeit at a slower pace than observed in the previous half-year period. The Stage 2 category continues to account for the bulk of the impairment. The pace of this impairment is uneven across portfolios, with a larger proportion concentrated in SMEs and in sectors moderately affected by the pandemic as compared with end-2020.



SOURCE: Banco de España.

- a In the transaction-level analysis, the proportional volume of ICO-backed loans to firms and sole proprietors in non-performing or Stage 2 status is measured. The customer-level analysis assesses for each firm and sole proprietor with an ICO-backed loan their total drawn exposure in all financial transactions reported to the CCR, with any system institution. If any of the customer's transactions are troubled (Stage 2 or non-performing) above a minimal materiality threshold, they are flagged as impaired. Subsequently, the proportion is calculated of the volume of ICO-backed loans associated with customers that have any such flag for their credit transactions taken as a whole. In both the customer-level and the transaction-level approach, the proportion classified as either Stage 2 or non-performing is measured using the amount drawn in the terms described in each of the approaches.
- b Lending to the more severely affected sectors is proxied by that corresponding to sectors with a fall in turnover of more than 15% in 2020 and that can be identified in the FI-130 regulatory return. Specifically, lending to the more severely affected sectors includes hospitality, manufacture of refined petroleum products, social services and entertainment, transportation and storage, and manufacture of transport equipment. Lending to moderately affected sectors is proxied using the following sectorisation in the FI-130 regulatory return: metallurgy, manufacture of machinery, other manufacturing activities, professional services, mining and quarrying, wholesale and retail trade, and repair of vehicles. Other productive activities are in the largely unaffected sectors.

Ukraine and by rising inflation, particularly in the sectors hardest hit by the latest crisis. However, the increase in the proportion of ICO loans linked to customers with some sign of impairment had moderated significantly by December 2021 compared with the previous half-year period (3.6 pp and 0.3 pp for Stage 2 loans and NPLs, respectively), showing a slower pace of impairment than at transaction level (see Chart 2.4.1). The relative share of total Stage 2 and non-performing ICO loans accounted for by SMEs and firms in sectors moderately affected by the pandemic grew over the course of 2021 (see Chart 2.4.2).

A factor that could increase the risk of credit impairment in ICO loans is the end of the interest-only period that a large portion of these loans have enjoyed.

Around 35% of ICO loans (in terms of volume of exposure) still benefit from interestonly periods which will come to an end, in most cases, in 2022 H2. It should also be noted that, at December 2021, an additional 22% of ICO loans are structured with a bullet payment at maturity, which notably reduces their debt burden until that date. On data to December 2021, recourse to the provisions envisaged in the code of good practice for the debt renegotiation framework provided for in Royal Decree-Law 5/2021 for customers with guaranteed loans has been fairly limited. Maturity extensions have been arranged for around 3,000 loans, representing somewhat less than €500 million.

Some of the measures adopted to mitigate the negative economic effects of the war in Ukraine will alleviate, in particular, the financial pressure to which firms with ICO financing are subject. The resolution adopted by the Council of Ministers on 29 March 2022 modified the framework of good practices of Royal Decree-Law 5/2021, establishing the following: (i) to maintain, at least until 30 September 2022, the limits on and conditions of the working capital facilities granted, (ii) to eliminate the requirement that turnover must have declined by at least 30% between 2019 and 2020 to be eligible for the term extensions envisaged in the code of good practice, and (iii) to offer the possibility in new loan applications, should the borrower so request, of a temporary six-month suspension of principal repayments by extending the interest-only period or introducing an additional one. The provisions of (iii) apply to the self-employed and small and medium-sized firms belonging to the agricultural, livestock, fishing, and road transport sectors. The changes to the code of good practice may facilitate, in particular, the servicing of ICO loans to vulnerable borrowers, although some of them may also affect, more generally, other lending to firms.

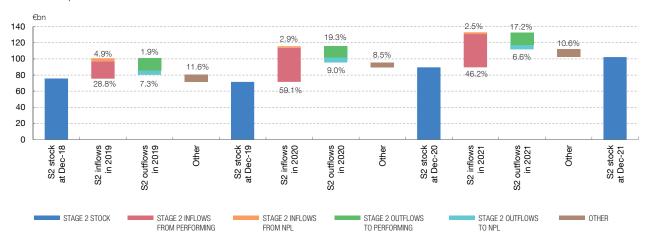
Further analysis of bank loans as a whole shows that the marked increase in the volume of Stage 2 loans owes to larger inflows from performing status. In 2020 and 2021, reclassifications to Stage 2 from performing status represented approximately 60% and 46% of Stage 2 loans at the beginning of the respective years, figures well above those of 2019 (see Chart 2.5.1). By contrast, Stage 2 inflows from non-performing status were far lower and declined during the crisis. Reclassifications out of Stage 2 were not significantly affected by the pandemic, and nor were they a driving factor behind the change in the stock of Stage 2 credit. This performance appears to be consistent with the impairment prompted by a worsening macroeconomic situation and suggests the persistence of latent risks, given that inflows to Stage 2 may presage a subsequent credit quality impairment that is yet to materialise.

The easing pace of the reduction in NPLs following the pandemic owed to the slowdown in outflows, while the volume of NPL inflows held at similar levels. Inflows as a proportion of the existing stock of NPLs have increased since the onset of the pandemic, albeit moderately. Overall, the absolute value of these inflows has

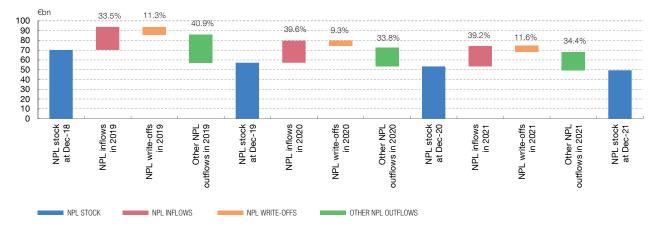
STAGE 2 LOANS HAVE INCREASED SIGNIFICANTLY IN THE LAST TWO YEARS OWING TO HIGHER INFLOWS, WHILE THE DECLINE IN THE STOCK OF NPLs HAS MODERATED DUE TO A SLOWER PACE OF OUTFLOWS

Stage 2 loans and advances in banking operations in Spain increased in the last two years, essentially due to a more robust inflow of loans from performing status, implying a degree of latent impairment in these exposures. Meanwhile, the slowdown in the reduction of NPLs owed mostly to more sluggish NPL outflows, with negligible changes in inflows from other credit classifications.

1 INFLOWS AND OUTFLOWS OF STAGE 2 LOANS AND ADVANCES (a) Business in Spain. ID



2 INFLOWS AND OUTFLOWS OF NON-PERFORMING LOANS AND ADVANCES (b) Business in Spain. ID

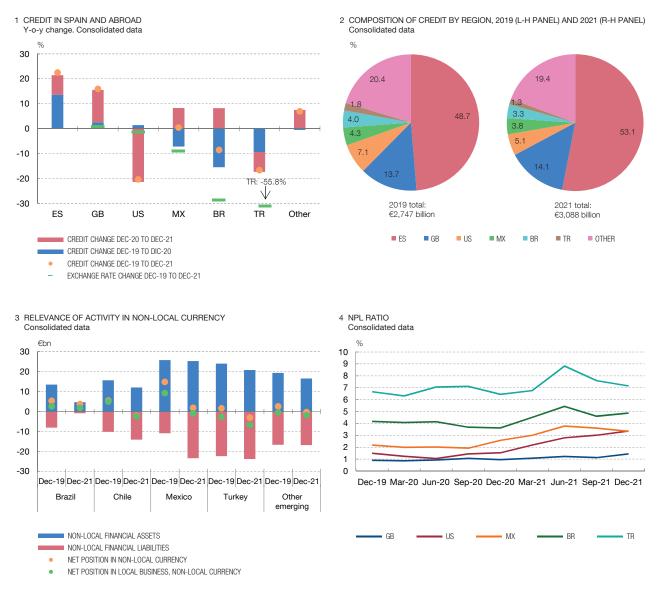


SOURCE: Banco de España.

- a The volume of Stage 2 loans is measured using the gross carrying amount on the institutions' individual balance sheet. To be included as inflows and outflows, loans must end the year at a different stage of value impairment than at the start of the year or at the time of initial balance sheet recognition, if later. The percentages above the bars of the different Stage 2 inflows and outflows show their proportion in the stock of Stage 2 loans on balance sheets as at December of the previous year. The "Other" bar includes loans that, having been Stage 2 at the previous year-end, are repaid or sold over the year under way.
- b The stock of non-performing loans and advances in each year corresponds to the carrying amounts on the institutions' balance sheets. NPL inflows are movements of loans from performing status and Stage 2, along with loans acquired from third parties. NPL outflows include movements to performing status and Stage 2, along with asset foreclosures, portfolio sales and securitisations. The percentages that appear above the inflows and outflows over the course of a year represent the share of these in the stock of loans and advances in non-performing status as at December of the previous year.

CREDIT EXPOSURE ABROAD INCREASED IN 2021, ALTHOUGH ITS PROPORTION OF TOTAL CONSOLIDATED CREDIT HAS DECLINED SINCE THE PANDEMIC BEGAN, OWING TO THE DIVESTMENT IN THE UNITED STATES AND THE EXCHANGE RATE DEVELOPMENTS OF SOME CURRENCIES AGAINST THE EURO

Banks' credit exposure abroad as a proportion of the total has declined since the pandemic broke, despite the increase observed in 2021. By country, there has been a notable drop in the United States, due to a divestment conducted by a bank, and likewise in Turkey and Brazil, owing to exchange rate developments. It should be noted that the exchange rate risk borne by Spanish banks in these markets is relatively low since, with the exception of Turkey, net positions in non-local currency are positive or only slightly negative. NPL ratios declined in the second half of the year, particularly in Turkey.



SOURCE: Banco de España.

been quite stable (see Chart 2.5.2). For their part, NPL write-offs held steady. The most pronounced change following the pandemic was recorded in other outflows (including asset foreclosures, portfolio sales and securitisations), which moderated notably, representing the main brake on the reduction in the stock of NPLs.

The volume Spanish deposit institutions' credit abroad increased by 4.5% in 2021, contrasting with the performance observed a year earlier (down by 1.5%). By country, there were notable cumulative declines in the United States, owing to a divestment made in the country by a Spanish institution, and in Turkey and Brazil, largely due to adverse exchange rate developments for their currencies against the euro (see Chart 2.6.1). Since the onset of the COVID-19 crisis, the share of business abroad has declined slightly to below 50% of the total. Of the countries where Spanish institutions have most exposure, only the United Kingdom has gained share in the last two years (see Chart 2.6.2). It should be noted that Spanish institutions' net non-local currency position in the emerging economies where they operate is generally low, owing to similar balances of assets and liabilities in those currencies (see Chart 2.6.3). This mitigates the risks associated with the exchange rate depreciation recorded during the pandemic. Lastly, NPL ratios, which had risen in some countries in 2021 Q2, moderated during the subsequent six months, particularly in Turkey and Mexico (see Chart 2.6.4).

Liquidity and financing conditions

The Eurosystem's balance sheet continued to expand due to the purchase programmes, although the amount of the refinancing operations declined, leading to a net increase in the liquidity provided to institutions. Specifically, since the last Report the volume of the purchase programmes increased by €218 billion (albeit at a slower pace than noted in previous Reports) to €4.8 trillion. By contrast, the balance of TLTRO-III declined by €8 billion, owing to early redemptions by institutions at year-end outstripping their participation in the last TLTRO-III.

Money market interest rates held at very low levels, particularly in the secured segment (repo). The latter decreased markedly and across the board in the last few months of the year as a result of the collateral shortage and excess liquidity. Indeed, the monetary policy measures (purchase programmes and liquidity provision) have reduced the availability of, and driven up demand for, assets eligible for use as collateral, which are needed to access refinancing operations and to satisfy regulatory requirements for high-quality liquid assets (HQLA). As tends to be the case, these factors were accentuated at the end of the year, although the downward trend had already been observed across the different countries in the months leading up to December 2021. This decline in repo rates was larger than that observed in preceding years, also extending to transactions conducted on the sovereign debt of

⁷ Although this divestment took place in 2020, it was not concluded until 2021 Q2. In the chart it is recorded in 2021, since the asset amount was initially recognised in non-current assets held for sale until completion of the transaction. This accounting treatment differs from that used in previous Financial Stability Reports (FSRs), in which non-current assets held for sale were not taken into account to calculate the exposure in each country.

countries such as Spain and Italy (see Chart 2.7.1). By contrast, the interest rate on unsecured transactions (€STR)⁸ curbed the downward trend observed up to end-2021. For its part, the higher expectations of interest rate increases observed since early February 2022⁹ have exerted upward pressure on interest rates negotiated on the interbank market (3-month EURIBOR) and on risk-free rates (overnight indexed swap; OIS).

Spanish banks' wholesale market funding costs¹⁰ have been driven up in the last month by expectations of less accommodative monetary policy and the uncertainty prompted by the Ukraine crisis. Expectations of interest rate increases have fed through to wholesale market interest rates on longer-term bank debt (a measure of funding costs) more robustly than to the OIS. Thus, banks' credit risk spread¹¹ has widened, suggesting greater risk perception in the market, which has accentuated since the invasion of Ukraine began. Moreover, the potential withdrawal of stimuli by central banks could lead to an additional increase in the cost of bank bond issuances going forward (see Chart 2.7.2).

Given the current maturity structure of wholesale bank debt, the risk of an increase in banks' funding costs may grow over time, depending on the scenario in terms of future interest rate increases. Banks' wholesale debt maturity schedule shows that a significant portion of the outstanding balance matures before 2024. The need for institutions to make new issuances to replace redemptions of their debt will adversely affect wholesale funding costs under a scenario of rate increases. In particular, assuming an increase in interest rates similar to that projected for the EURIBOR (around 1.5 pp in 2022-2027), such funding costs could rise by 0.7 pp by 2024 (see Chart 2.7.3).

There were mixed developments in the cost of new issuances in 2021 across instrument types and issuers, with a very significant increase in the volume of unsecured debt issuances. Institutions stepped up their debt issuances to comply with prudential and resolution requirements, including issuances of Tier 2 instruments and contingent convertible bonds (CoCos). A higher number of institutions made such issuances in 2021 than in 2020, giving rise to greater cost diversity. The rising costs of Tier 2 debt owed at least in part to smaller institutions issuing these instruments to comply with MREL resolution requirements. This factor may have had a relevant impact, given that MREL requirements are binding

⁸ This represents the unsecured overnight borrowing costs of institutions located in the euro area. Both the interest rate and trading volume are calculated and published each business day by the ECB based on the information provided by the 48 euro area institutions subject to Money Market Statistical Reporting (MMSR).

⁹ Following the ECB Governing Council monetary policy meeting of 3 February 2022.

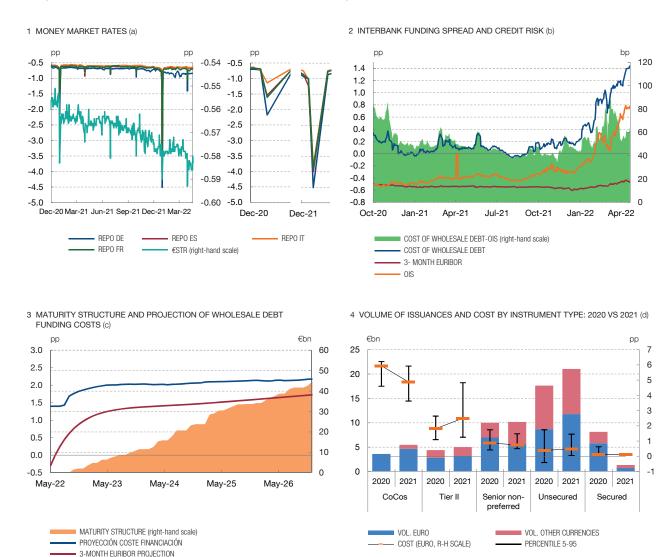
¹⁰ The cost of unsecured debt issued by Santander, BBVA, CaixaBank and Sabadell, calculated as the weighted average (by volume) of the interest rate negotiated in the secondary market for issues outstanding at January 2022.

¹¹ Understood as the difference between the funding cost and the risk-free rate.

¹² EURIBOR projection based on the 3-month EURIBOR forward curve.

MONEY MARKET INTEREST RATES STAND AT HISTORICALLY LOW LEVELS. HOWEVER, THE POTENTIAL TIGHTENING OF MONETARY POLICY COULD DRIVE UP FUNDING COSTS, PARTICULARLY IN THE WHOLESALE FUNDING MARKET

In the money markets, secured interest rates stand at historically low levels due to excess liquidity and the shortage of eligible collateral assets. Interbank costs climbed slightly in 2021 and expectations of interest rate increases could translate into more expensive wholesale funding. Lastly, the crisis in Ukraine could be an additional conditioning factor for developments vis-à-vis bank credit risk perception in the



SOURCES: Bloomberg, Thomson Reuters and Banco de España.

- a Repo rate: the overnight rate on transactions conducted with other financial institutions by banks reporting to the MMSR and using debt issued by Spanish (ES), German (DE), Italian (IT) and French (FR) Government entities as collateral.
- b The credit risk spread is calculated for unsecured bonds issued in euro by Spanish banks (Santander, BBVA, CaixaBank and Sabadell). The cost of funding is obtained as the average interest rate negotiated on the secondary market for these bonds and the spread is calculated on the riskfree interest rate (OIS) with the same maturity. Shown is the OIS for the same term as the average debt maturity.
- c Shown is the expected 3-month EURIBOR performance using the implicit forward rate obtained from forward rate agreements (FRAs) for terms of up to one year and from interest rate swaps (IRS) for terms of between one and 30 years. To project future funding costs, the combined performance of the 3-month EURIBOR and the cost of wholesale funding is analysed and the average observed spread between the two series in the last year is obtained. The average cost of funding comprises both current outstanding debt over the projection horizon and new issuances, which are assumed to match the volume of, and to maintain the same maturity as, the current portfolio, but obtained at the future cost of funding, found as the forward of the 3-month EURIBOR plus the average observed spread. In this case, it is assumed that rates follow a similar trajectory to the 3-month EURIBOR and that risk premiums would not increase. The maturity structure of the debt shows the cumulative amount of the bonds matured.
- d Shown is the cost of the issues on the primary market for bonds in euro. Only one secured debt issuance took place in 2021 in this currency (covered bonds).

from 1 January 2022 and institutions must reach the required levels of such instruments. There was also a broad-based increase in unsecured debt issuances, particularly in the last few months of the year, which came at a slightly higher cost than in 2020. This against the backdrop of rising expectations of interest rate increases, which could prompt institutions to bring forward issuances (see Chart 2.7.4).

Deposits at Spanish banks continued to increase in 2021, albeit at slower rates than in the previous year. The balance of bank deposits held by the resident private sector in Spain rose by 4.1% in 2021, compared with growth of 8.9% in 2020. This decrease in the growth of deposits (-4.8 pp) seems attributable, at least in part, to the fall in precautionary saving once the uncertainty over the course of the pandemic and its economic consequences gradually abated. By institutional sector, NFCs increased their deposits more than households in 2021, but in both cases the growth was more subdued than in 2020. The loan-to-deposit ratio for business in Spain continued the downward trajectory recorded since the end of the global financial crisis, declining last year by 3.5 pp to 82.6%. On the consolidated balance sheet, the share of private sector deposits as a proportion of total assets increased, following 5.9% growth in 2021.

2.1.2 Profitability and solvency

Profitability

In 2021, the Spanish banking sector as a whole recorded consolidated net profit of €26 billion, up significantly (by €34 billion) on the losses recorded in 2020. This translates into a return on assets (ROA) of 0.67% (up nearly 0.9 pp from -0.21% in 2020) and a return on equity (ROE) of 10.5% (up 13.6 pp from -3.1% in 2020).¹³ Ordinary profit improved significantly in 2021 as compared with 2020, but extraordinary results (negative in 2020 and positive in 2021) had the largest impact on the year-on-year profitability improvement.¹⁴ Excluding these extraordinary items the Spanish banking sector's ROA would have stood at 0.57%, an increase of 37 bp on 2020 (see Chart 2.8.1), while ROE without extraordinary items would have reached 9% (more than 6 pp higher than in 2020).

The main driver of the improvement in ordinary profit was the reduction in impairment losses on financial assets. At consolidated level, impairment losses

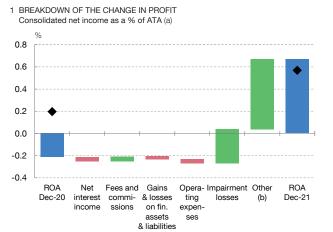
BANCO DE ESPAÑA

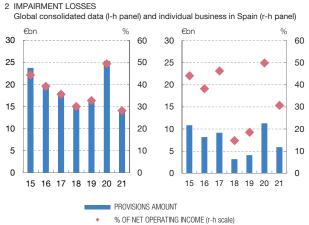
¹³ In the case of ROE, the year-on-year change also increased due to the 4.1% decline in average equity in 2021. By contrast, the year-on-year change in ROA declined owing to the 3.8% increase in average total assets in 2021.

¹⁴ In 2021 extraordinary gains were recognised as a result of two mergers (€4.2 billion), the spin-off of an insurance company (€0.9 billion) and restructuring costs at the two main institutions (-€1.2 billion). In 2020 the extraordinary items included the negative adjustments to goodwill of the two banks with the largest international presence (-€1.2 billion), the adjustment for deferred tax assets (-€2.5 billion), the restructuring of a bank (-€1.2 billion) and capital gains on the sale of business lines (€0.6 billion).

IN 2021, THE PROFITABILITY OF THE SPANISH BANKING SYSTEM NOTABLY IMPROVED WITH RESPECT TO 2020; THE MAIN DRIVERS OF THIS IMPROVEMENT WERE EXTRAORDINARY GAINS AND THE DECLINE IN IMPAIRMENT LOSSES

Profit in the Spanish banking sector improved substantially following the losses recorded in 2020. Extraordinary results, which were negative in 2020 and positive in 2021, had a significant bearing on this improvement. Ordinary profit also improved notably, owing mainly to the reduction in impairment losses, which stood slightly below levels recorded in pre-pandemic years. Net fees and commissions also made a positive contribution to results, albeit to a far smaller extent.





SOURCE: Banco de España.

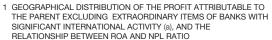
- a The red (green) colour of the bars denotes a negative (positive) contribution of the corresponding item to the change in consolidated profit in December 2021 compared with December 2020. The black diamonds denote the ROA excluding extraordinary items. Specifically, in December 2020: adjustments to goodwill (-€12.2 billion), the adjustment for deferred tax assets (-€2.5 billion), restructuring costs (-€1.2 billion) and capital gains from the sale of business (€0.6 billion); and in December 2021: an extraordinary net gain as a result of two mergers (€4.2 billion), the spin-off of an insurance company (€0.9 billion) and extraordinary restructuring costs (-€1.2 billion).
- **b** Including, among other items, the extraordinary gains referred to in the above note.

on financial assets declined by 43.5% in 2021 compared with 2020, representing a drop in absolute amounts of €11 billion (from €25.3 billion in 2020 to €14.3 billion in 2021). This amount and its share in net operating income (28.2%) are similar to, but somewhat lower than, the two years prior to the pandemic (see Chart 2.8.2). The reduction in impairment losses for business in Spain in 2021 was of a similar magnitude (47.7%), with both the amount and its share in net operating income remaining higher than in the two years leading up to the pandemic.

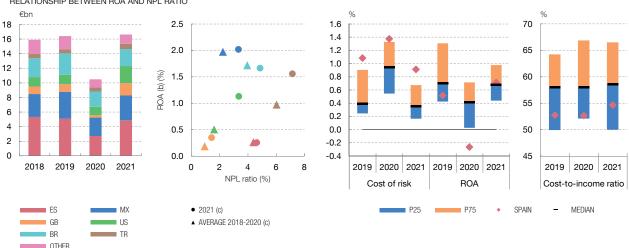
The improvement in ordinary profit in 2021 was widespread across the main countries where Spanish banks conduct significant international business. In 2021, profit (and the structure thereof) in those countries marked a return to levels similar to those recorded before the health crisis (see Chart 2.9.1, left-hand panel). Mexico, Brazil and the United States are the largest contributors to profit after Spain. The right-hand panel of Chart 2.9.1 shows that profitability is generally associated with a higher level of credit risk, although this does not apply to business in Spain. Profitability is higher in the main emerging countries where Spanish institutions operate (Mexico, Brazil and Turkey) than in the advanced countries (the

THE 2021 PROFITABILITY IMPROVEMENT WAS BROAD-BASED ACROSS THE COUNTRIES WHERE SPANISH BANKS HAVE SIGNIFICANT BUSINESS, AS WELL AS IN THE BANKING SECTORS OF THE MAIN EUROPEAN COUNTRIES

The profit of Spanish banks has improved markedly in the main countries where they operate, with profitability generally associated with a higher risk level in terms of NPL ratios. Profitability likewise improved in the banking sectors of the main European countries, returning to levels similar to those observed pre-health crisis, with the reduction in cost of risk contributing to these developments. Spanish banks have a lower (better) cost-to-income ratio than their European peers.







SOURCES: EBA, Banco de España and CNMV.

- a Four banks with significant international activity are included in this chart and non-recurring items in the period 2018-2021 are excluded.
- b ROA is calculated as the profit of Spanish banks in each country divided by their total financial assets in each country.
- c For each country (denoted by a different colour), the values of the 2021 ratio (circle) and the 2018-2020 average (triangle) are shown.
- d Percentiles calculated based on the aggregate financial ratios published by the EBA for each of the EU banking systems. Cost of risk is defined as impairment loss charges divided by gross lending. The cost-to-income ratio is defined as operating expenses divided by gross income; therefore, lower values indicate greater efficiency.

United States,¹⁵ Spain and the United Kingdom). This was true both in 2021 and in previous years.

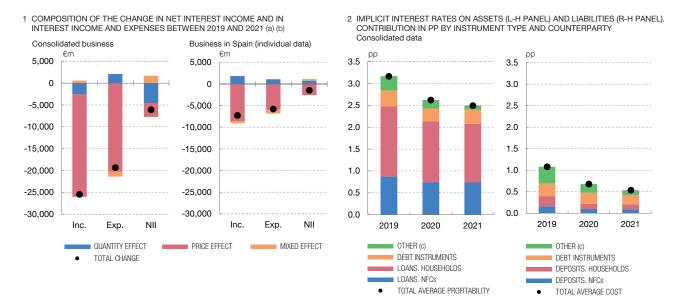
In 2021, profitability also improved at European level, following the notable decline of the previous year, and returned to close to pre-pandemic levels. As in Spain, the significant decline in impairment provisioning led to improved profitability. Conversely, the cost-to-income ratio¹⁶ was less affected by the health crisis and held relatively stable in Europe (see Chart 2.9.2). The cost-to-income ratio of Spanish institutions is lower (better) than that of its European peers.

Despite the divestment of a bank in the United States, profit in the country increased considerably in 2021 as compared with 2020, owing to profit improving markedly at another Spanish bank with US operations due to a significant reduction in its impairment losses. The high profitability of certain business segments in the United States should also be noted, outstripping the average profitability of operations in emerging countries.

¹⁶ The cost-to-income ratio is defined as the ratio of operating expenses to gross income, such that higher (lower) values refer to lower (higher) efficiency.

IN 2020-2021, THE QUANTITY EFFECT WAS NEGATIVE FOR NET INTEREST INCOME AT CONSOLIDATED LEVEL AND SLIGHTLY POSITIVE FOR BUSINESS IN SPAIN, WHILE THE PRICE EFFECT WAS NEGATIVE FOR BOTH PERIMETERS, IN A CONTEXT OF A DECLINING IMPLICIT PROFITABILITY OF ASSETS

The fall in consolidated net interest income in the last two years, concentrated in 2020, owed to a lower interest rate spread (price effect) and a drop in the volume of assets in parallel with an increase in the funding volume (quantity effect). This latter factor represents an important difference as compared with business in Spain, where the quantity effect partially offset the likewise negative price effect.



SOURCE: Banco de España.

- a The quantity effect is calculated as the product of the change in investment (in the case of income) or funding (in the case of expenses) and the return (income) or cost (expenses) held constant at the values of the initial period. The price effect is calculated as the product of the change in return (income) or cost (expenses) and the investment (income) or funding (expenses) held stable at values of the initial period. The mixed effect is a residual calculated as the difference between the total change and the sum of the price and quantity effects. The effects on NII are calculated as the difference between the effects on interest income and interest expense.
- b Income and expenses are net of interest expenses on the asset side and interest income on the liabilities side, respectively.
- c This category includes, first, the results of transactions (assets or liabilities) with the central bank, credit institutions, other financial institutions and general government, and, second, income and expenses net of derivatives, hedging instruments and others.

Gross income grew by close to 3%, driven by the timid improvement in net interest income,¹⁷ and, above all, by the 10.4% increase in net fees and commissions,¹⁸ which more than offset the marked drop in gains and losses on financial assets and liabilities (see Annex 2). In any case, in 2021 net interest income remained lower than in 2019. This decline is explained by the larger fall in interest income than in interest expenses (see Chart 2.10.1). The quantity effect¹⁹

¹⁷ However, since the year-on-year increase in net interest income (1.4%) in 2021 was lower than the increase in average total assets (3.8%, see footnote 13), its contribution to the change in ROA in 2021 was negative, as shown in Chart 2.8.1.

¹⁸ Net fees and commissions accounted for 41% of net interest income.

The quantity effect is calculated as the product of the change in investments (in the case of income) or funding (in the case of expenses) and the return (income) or cost (expenses) held constant at the values of the initial period. The price effect is calculated as the product of the change in return (income) or cost (expenses) by the investments (income) or funding (expenses) held stable at values of the initial period. The mixed effect is a residual calculated as the difference between the total change and the sum of the price and quantity effects.

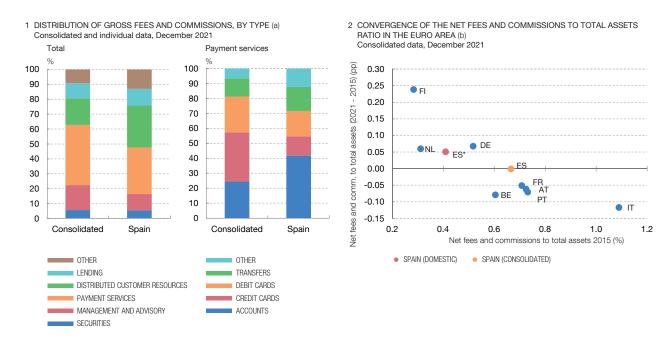
contributes negatively to income, largely due to the divestment in the United States and exchange rate depreciation (see Chart 2.6), and, conversely, leads to an increase in expenses. The price effect is negative, with the resulting decrease in income exceeding the reduction in expenses. For business in Spain, the price effect is again negative, but the quantity effect, unlike at consolidated level, is positive for interest income, which can be explained by the expansion of the balance sheet in Spain.²⁰ It should be noted that the implied rates on assets and liabilities remained on a declining path in 2021 (see Chart 2.10.2). A potential rise in interest rates could have a positive impact on institutions' net interest income, through the improved profitability of instruments and a widening of net interest margins. However, the net impact on bank profitability of a rate rise also depends on the set of variables of the macroeconomic scenario in which the rate rise occurs, and thus requires a specific assessment. Box 2.1 examines the impact on the banking sector of potentially adverse scenarios in which different risks to financial stability, including significant interest rate hikes, materialise forcefully. In such adverse scenarios, bank profitability and solvency are negatively affected despite interest rates rising.

Fee and commission income has increased in recent years, in a process of convergence towards average values for European countries, with payment services as the main source of such income. At consolidated level, gross fee and commission income amounts to €31,406 million, mostly accounted for by payment services (€12,676; 40.4% of the total), as shown in Chart 2.11. The second most important source of income are customer resources distributed but not managed (mainly income from the marketing of funds or insurance), amounting to €5,600 million (17.8% of the total). For business in Spain, the total volume of gross income accounts for approximately 45% of the consolidated total (€14,329 million), and the payment and distributed resources categories are again the most significant, albeit with a far more similar relative weight. Payment services thus account for €4,472 million (31.2% of the total) and distributed customer resources for €4,028 million (28.1% of the total). The large share accounted for by payment services may potentially be a significant and stable source of income, owing to the strong and recurring demand for such services. However, it is also one of the segments facing increasing competition from new technological competitors, which will force banks to add value to their services and improve their technology infrastructure to preserve their market share. Compared with their main European peers, Spanish banks have lower fee and commission income, although it has risen in recent years as part of a convergence towards more homogeneous business models (as shown in Chart 2.11.2). Since 2015, net fee and commission income as a percentage of total assets has increased from 0.41% to 0.45%.

²⁰ For a more detailed analysis, see P. Alves, J. Cebrián and E. Pérez Asenjo (2021), "Recent developments in financing and bank lending to the non-financial private sector. 3rd quarter of 2021", Analytical Articles, *Economic Bulletin*, Banco de España.

INCOME FROM PAYMENT SERVICES, MORE SUSCEPTIBLE TO COMPETITION FROM TECHNOLOGY FIRMS, IS THE MAIN SOURCE OF FEE AND COMMISSION INCOME FOR SPANISH BANKS, WHILE NET FEE AND COMMISSION INCOME OVERALL IS CONVERGING TOWARDS THE VALUES OF OTHER EUROPEAN COUNTRIES

The main source of fee and commission income are payment services, with credit and debit cards as the main income category at the consolidated level and payment accounts at the level of business in Spain. Payment services provide a potentially stable flow of income owing to bank customers' recurring demand, although they may also be potentially more susceptible than other services to the competition of new digital operators and the emergence of new means of payment. Overall, fees and commissions in Spain have grown as a source of income since 2015, in line with the process of convergence towards the average levels for the euro area.



SOURCES: ECB and Banco de España.

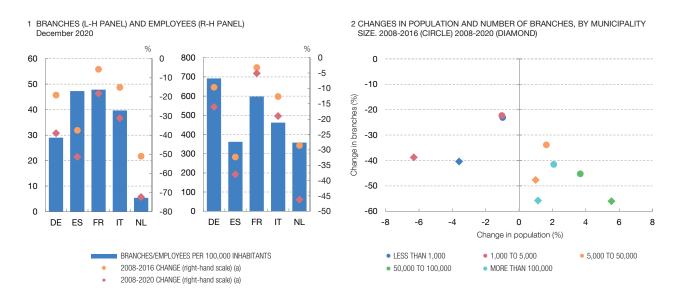
- a These categories broadly include: "Securities": securities management; "Management and advisory": custody and advisory services; "Payment services"; "Distributed customer resources": customer resources distributed but not managed (mainly marketing of funds and insurance); "Lending": services linked to lending, and "Other": other services, e.g. those linked to currencies or commodities.
- b Each dot represents a country, for a sample of the main euro area countries. Information is shown at the consolidated level, except for Spain, where it is shown both at the consolidated level (orange dot) and for business in Spain (red dot). The vertical axis shows the difference between the 2021 value less that of 2015.

The operating capacity of the Spanish banking system has also converged towards average European values, against a backdrop of branch closures and staff adjustments in the main European countries following the global financial crisis. In December 2020, the number of branches per 100,000 inhabitants in Spain was 47, a figure similar to that of the French banking system and close to that of the Italian one,²¹ although Spain has a lower population density. Between 2008 and 2020, the number of branches fell by more than 50% (almost three-quarters of this decline occurred between 2008 and 2016, while in other European countries the decline was less marked in this period). The staff adjustment has been lower, although also significant (close to 40%

²¹ In 2008, the number of branches per 100,000 inhabitants in Spain was 100, compared with around 60 in France and Italy. Data as at December 2020 are presented, since this is the latest available date with comparable ECB information for different European countries.

THE REDUCTION IN THE NUMBER OF BRANCHES IN SPAIN SINCE 2008 HAS BEEN CONCENTRATED IN HIGHER POPULATION AREAS AND HAS EXCEEDED THAT OF MOST EUROPEAN COUNTRIES, COMPARED WITH WHICH IT HAS RELATIVELY HIGH (LOW) RATIOS OF BRANCHES (EMPLOYEES) PER INHABITANT

In 2020 (latest date with comparable data at European level), the number of branches per 100,000 inhabitants in Spain was similar to that of France and close to that of Italy, their absolute number having been reduced by more than 50% since 2008, surpassed only by the Netherlands among the main European countries. The staff adjustment has also been significant, although lower than the reduction of branches, with Spain having the second-lowest ratio of employees per 100,000 inhabitants in these countries. Most of the branch and staff adjustments in Spain took place in the period 2008-2016. The reduction in the number of branches has been widespread across municipalities of all sizes, and more pronounced in larger cities.



SOURCES: ECB, Banco de España, Eurostat and INE.

a The changes refer to the total number of employees and branches (not to employees and branches per 100,000 inhabitants).

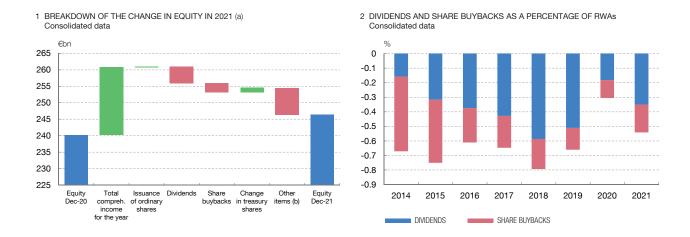
since 2008). In both cases, Spain has had the second highest declines among the main European countries, only behind those of the Netherlands (see Chart 2.12.1).

The reduction in the number of branches has been widespread across municipalities of different sizes, and more pronounced in larger cities. Since 2008, a relationship between a municipality's size and branch closures has been observed, with a more pronounced reduction of branches in larger municipalities (around 56% for municipalities with more than 50,000 inhabitants). By contrast, the least intense branch closures came in smaller municipalities with fewer than 5,000 inhabitants (around 40%; see Chart 2.12.2).

The return to profitability has also contributed to the increase in the equity of the Spanish banking system in 2021, in contrast with the notable decline in 2020 resulting from the losses recorded. As mentioned in previous FSRs, these losses did not lead to lower prudential solvency in the banking sector, largely because the significant negative extraordinary items (e.g. goodwill impairment) affect balance sheet items that are not counted towards banks' prudential capital. In 2021, equity

THE EQUITY OF THE SPANISH BANKING SECTOR INCREASED SLIGHTLY IN 2021, WHILE THE DISTRIBUTION OF PROFITS TO SHAREHOLDERS RECOVERED, BUT STILL FELL SHORT OF PRE-PANDEMIC LEVELS

The return to profitability was the main driver behind the increase in the equity of the Spanish banking sector in 2021, of more than €6 billion (2.6%). Last year, dividends reduced equity by nearly €5.2 billion and share buybacks, by €2.8 billion. The withdrawal of the restrictive regulatory recommendations led to a notable increase with respect to 2020 in these distributions as a percentage of RWAs (0.24 bp increase). However, they remained below average pre-pandemic levels, mainly due to the behaviour of dividends, since shareholder remuneration in the form of share buybacks did recover to pre-pandemic levels.



SOURCE: Banco de España.

- a The red (green) bars indicate the negative (positive) contribution of the corresponding item to the change in equity.
- b Includes, among other items, the net adjustments for recognition at fair value arising from the mergers of CaixaBank-Bankia and Unicaja-Liberbank, the effects of corrections of errors and of changes in accounting policies, the issuance of preference shares and equity instruments other than ordinary shares, the exercise or expiration of other equity instruments issued, the conversion of debt to equity, capital reduction, the entry of new institutions into the system, the reclassification of financial instruments from equity to liability and vice versa, share-based payments and the equity increase or decrease resulting from business combinations.

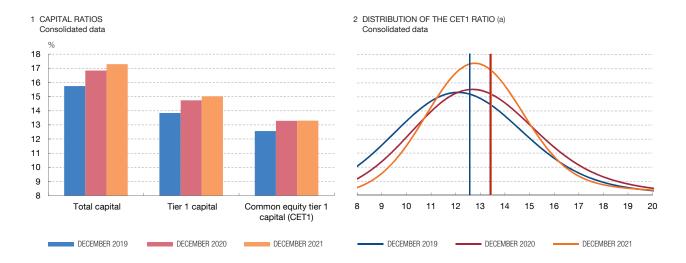
recovered slightly, increasing by more than €6,000 million (2.6%, see Chart 2.13.1). The main reason for this improvement is the return to profitability, which more than offsets the negative adjustments for recognition at fair value arising from the two mergers which were completed during the year. Dividends reduced equity by nearly €5,200 million, equal to 0.35% of risk-weighted assets (RWAs), and share buybacks by €2,800 million, equal to 0.19% of RWAs. Overall, the distribution of profits to shareholders, including dividends and share buybacks, recovered following the period of distribution restrictions, but was still short of pre-pandemic levels (see Chart 2.13.2). The main reason was the partial recovery in dividend payouts compared with 2020, since shareholder remuneration in the form of share buybacks rebounded to levels similar to those of the years immediately preceding the pandemic.

Solvency

The common equity tier 1 (CET1) ratio of Spanish banks held relatively stable in 2021, having increased in 2020. In 2021, both CET1 and RWAs experienced

THE AVERAGE CET1 RATIO HELD RELATIVELY STABLE IN 2021, DUE TO SLIGHT DECLINES OF A SIMILAR MAGNITUDE IN THE VOLUME OF CET1 AND IN RWAS, WHILE INSTITUTIONS' DISPERSION DECREASED IN TERMS OF THIS SOLVENCY METRIC

In 2021, CET1 decreased by 0.9% and RWAs by 1.1%, with the CET1 ratio up 2 bp. In addition, the distribution of this ratio among institutions evened out and a greater convergence of institutions towards the central values of the distribution was observed. Tier 1 capital and total capital ratios increased slightly in 2021.



SOURCE: Banco de España.

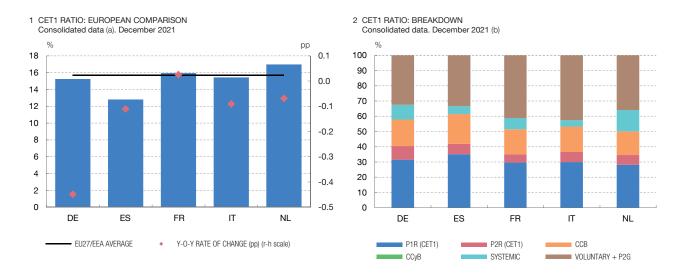
a The chart depicts the CET1 ratio density function for Spanish deposit institutions, weighted by the amount of RWAs. The density function is estimated using a kernel estimator, which enables non-parametric estimation and provides a continuous, smoothed graphic representation of the function. The vertical line denotes the CET1 ratio for the Spanish banking system as a whole in December 2019 (blue line), December 2020 (red line) and December 2021 (orange line).

similar declines (0.9% in the case of CET1 and 1.1% in the case of RWAs), with the CET1 ratio remaining relatively stable (up 2 bp). Total capital and tier 1 capital increased slightly (1.6% and 0.8%, respectively). This, along with the aforementioned decline in RWAs, led to a moderate increase in the total capital and tier 1 capital ratios, bringing them to 17.3% and 15%, respectively, at end-2021 (see Chart 2.14.1). The shift to the right in the distribution of the CET1 ratio since 2019 (see Chart 2.14.2) evidences a widespread increase in the ratio among institutions between 2019 and 2020. The distribution of the CET1 ratio in 2021 shows a convergence towards the central values of the distribution: the solvency of institutions with lower levels increased and that of those with higher levels decreased.

The CET1 ratio of the banks of the main European countries held relatively stable last year. Following the across-the-board increase in the CET1 ratio in 2020, the banks of the major European countries held relatively stable (see Chart 2.15.1). Consequently, the solvency gap between the Spanish banking system and the main European countries has shown no significant change and Spain continues to rank last. As mentioned in previous FSRs, this difference owes largely to the higher asset density of Spanish institutions, influenced by structural factors such as the greater

THE CET1 RATIO DID NOT CHANGE SIGNIFICANTLY LAST YEAR IN THE MAIN EURO AREA BANKING SYSTEMS. A LOWER RELATIVE WEIGHT OF THE VOLUNTARY BUFFER (INCLUDING P2G) WAS ALSO OBSERVED AT SPANISH AND GERMAN BANKS

The CET1 ratio of Spanish banks remained below that of the banks of the main euro area countries, and below the EU average, although the gap held reasonably stable last year. Spanish banks have a smaller proportion (33.5%) of voluntary buffers (including P2G) than the banks of the main European countries, with the exception of German banks, which is slightly lower (32.5%).



SOURCES: EBA, ECB, ESRB and S&P Global Market Intelligence.

- a Data for the samples of the main banks in each country, in line with reporting to the Risk Dashboard of the European Banking Authority.
- b Approximation to the requirements and buffer structure using 2021 Q4 data. "P1R": Pillar 1 requirement; "P2R": Pillar 2 requirement; "CCB": capital conservation buffer; "CCyB": countercyclical capital buffer; "Systemic": the highest out of the systemic risk buffer, global systemically important institution buffer and other systemically important institution buffer; "Voluntary + P2G": P2G capital guidance and buffer in addition to regulatory buffers held voluntarily by management. The P2R data are obtained from the ECB's supervisory review and evaluation process (SREP). Buffer data are obtained from the ESRB. In both cases, the data for individual banks are aggregated, weighting by the RWAs of each bank taken from SNL, which includes information for each country's main banks (the sample includes a large percentage of total RWAs in each country's system: 23%, 92%, 70%, 77% and 55% for Germany, Spain, France, Italy and the Netherlands, respectively, on 2021 Q3 data). For 11 banks (six in Germany, three in Spain and two in Italy), RWA data for 2021 Q3 were used.

use of the standardised approach to calculate risk weights for their assets. Indeed, in December 2021, the leverage ratio of Spain's significant institutions (5.7%) was only slightly below the European average (6%).

The voluntary buffers (including P2G) of Spanish banks represent a relatively small proportion of total CET1, compared with the banks of the main European countries. In December 2021, the voluntary buffers (including the Pillar 2 Guidance, known as "P2G"), in country-level aggregate terms, represented 33.5% of CET1 in the case of Spain, a level only exceeding, and by very little, that of German banks (32.5%), and clearly below that of the other major European banking systems (see Chart 2.15.2).²² The relatively smaller proportion of voluntary capital buffers, along

²² See also P. Alves, J. Galán, L. Fernández Lafuerza and E. Pérez Asenjo (2021), Box 1: "Recent developments in financing and bank lending to the non-financial private sector. First half of 2021", Analytical Articles, *Economic Bulletin*, Banco de España.

with the lower absolute level of the CET1 ratio, pose a certain risk to Spanish banks in sustaining the flow of credit in the event of adverse shocks, since there is a lower amount of usable voluntary capital buffers to absorb losses before breaching requirements, and there is evidence²³ that a shorter distance from the CET1 ratio to these requirements make deleveraging decisions by banks more likely.

2.1.3 Deposit institutions' operational risk

Gross operational risk losses in 2021 (0.13% of total consolidated assets) have remained at levels similar to those of the last three years. Misconduct and inappropriate business practices have continued to represent the biggest operational risk concern, not significantly diminished by the rising impact of system interruptions and failures since 2020 (0.09% of total consolidated assets). However, the magnitude and contribution of the different operational risk categories may change quickly in the future with the growing importance and scope of cyber risks. There are factors suggesting that these risks may increase in the coming years, despite the current difficulties in measuring them accurately. These factors notably include growing digitalisation and, in particular, the current geopolitical context, which could lead to an increase in fraud or service interruptions owing to cyber incidents, including server issues, ransomware and denial-of-service attacks.

2.2 Non-banking financial sector and systemic interconnections

2.2.1 Non-banking financial sector

Specialised lending institutions

The stock of credit extended by specialised lending institutions (SLIs) grew in 2021, but so did NPLs, while profits declined. The credit extended by SLIs grew by 3.6% in 2021, after the year-on-year decline of 6.4% recorded in 2020,²⁴ thus resuming the growth path of pre-pandemic years (see Chart 2.16.1). The recovery was driven by consumer credit (a segment in which SLIs specialise), which grew by 11.5%, compared with the fall of 6.1% in the previous year. NPLs rose by 9.7% year-on-year, increasing the NPL ratio to 6.9% (from 6.5% in 2020), mainly owing to the behaviour of lending for house purchase. Conversely, non-performing consumer credit decreased by 8.2% year-on-year, reducing the NPL ratio in this segment to 3.6% (from 4.3% in 2020). Lastly, profit after tax fell by 19% last year, a similar fall to that recorded in 2020 (see

See C. Couaillier, M. Lo Duca, A. Reghezza and C. Rodriguez d'Acri (2022). "Caution: do not cross! Capital buffers and lending in Covid-19 times". ECB Working Paper Series No 2644.

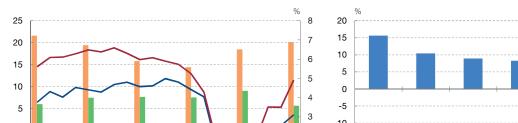
²⁴ The 2020 rate of change excludes the impact of corporate transactions, in particular, that of a significant institution which was absorbed by a deposit institution, substantially reducing the overall size of SLIs.

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THE STOCK OF CREDIT EXTENDED BY SPECIALISED LENDING INSTITUTIONS GREW IN 2021, PARTICULARLY IN THE CONSUMER SEGMENT, WHILE PROFITABILITY AGAIN DECLINED (a)

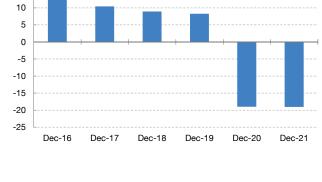
The outstanding stock of loans extended by specialised lending institutions (SLIs) increased last year, especially in the consumer segment, which has a large weight in these institutions' portfolios. The NPL ratio behaved unevenly, declining in the consumer segment but increasing in other segments, mainly in lending for house purchase. Profits posted a fall, due to lower net interest income and the worse performance of other items, which clearly offset the improvement resulting from lower loan loss provisions.



Dec-20



1 RATE OF CHANGE IN LENDING AND NPL RATIO AT SLIs (b)



2 RATE OF CHANGE IN PROFITS AFTER TAX OF SLIS

SOURCE: Banco de España.

a The analysis was performed with the group of SLIs existing in December 2021 and thus excluded the effects of corporate transactions carried out in recent years.

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Dec-21

b The total NPL ratio is higher than the NPL ratio for the consumer segment because of one larger-sized SLI specialising in high-risk mortgage loans.

Chart 2.16.2), despite the lower loan loss provisions, due to lower net interest income and the worse performance of other items. ²⁵ As a result, ROA stood at 1.7% in December 2021, down 31 bp on end-2020. A possible deterioration in macroeconomic conditions could impact this segment of the financial sector more than deposit institutions, since it focuses on higher-risk operations, such as consumer credit.

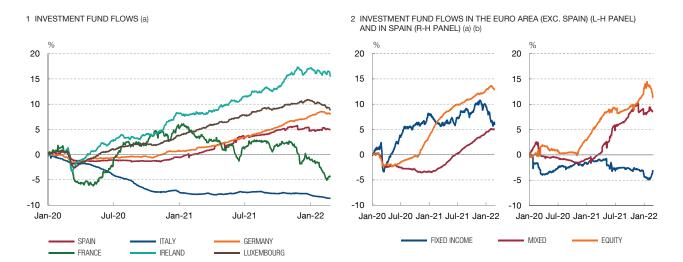
Investment funds

Euro area investment funds recorded notable capital inflows in 2021. However, these inflows performed less favourably in the early months of 2022. Net subscriptions of investment funds increased again in 2021 H2 in some of the countries in which such funds are more prevalent, such as Luxembourg and Ireland.

^{25 2020} saw an extraordinary increase in aggregate impairment losses (57.6%), owing in part to one bank revising its loss models. This explains the drop in provisioning in 2021 as compared with 2020.

CAPITAL INFLOWS INTO EURO AREA INVESTMENT FUNDS INCREASED, OVERALL, IN 2021 H2. THE EARLY MONTHS OF 2022, HOWEVER, SAW A SLOWDOWN IN INFLOWS AND CAPITAL OUTFLOWS IN SOME SEGMENTS

Capital inflows into investment funds generally held on an upward path in 2021 H2, and were particularly pronounced in funds domiciled in Ireland and Luxembourg, where a significant portion of euro area funds are concentrated. In the early months of 2022 a slowdown in capital inflows was observed, and even capital outflows in some segments.



SOURCES: Banco de España and Refinitiv.

- a Cumulative change in investment fund net capital inflows and outflows, as a percentage of the total net assets of the funds of each country or region on 15 January 2020, drawing on a representative sample of funds domiciled in euro area countries. The data for days with atypical flow values are omitted. Data up to 11 March 2022.
- b The left-hand panel of Chart 2 includes information on the funds domiciled in Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands and Portugal. The category of fixed-income funds also includes vehicles that invest in the money market. The mixed funds category invests in both fixed income and equity.

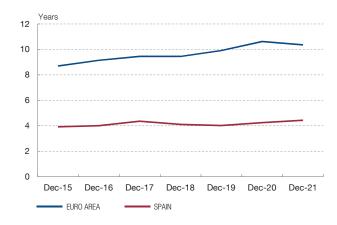
In Spain, capital inflows also rose last year, albeit at a slower pace (see Chart 2.17.1). A slowdown in capital inflows was observed during the initial weeks of the war in Ukraine, and even some capital outflows in equity vehicles and, with the exception of Spain, in fixed-income vehicles (see 2.17.2), which appears to owe to the increased uncertainty prompted by the outbreak of the conflict and expectations for the monetary policy cycle. Recent capital outflows from equity funds in Spain have been offset by the moderate capital inflows to fixed-income funds and the stability of mixed investment funds (which invest both in fixed income and equity). According to the latest available Refinitiv data, fixed-income funds account for just under a third of assets in vehicles domiciled in Spain (within the analysed categories), whereas mixed funds represent around half of all assets, and equity funds the remaining portion (approximately 20%).

The maturity structure of fixed-income portfolios of funds domiciled in the euro area has lengthened, and their risk profile increased, since 2015, meaning that they would be more vulnerable to a rise in interest rates. The average maturity of fixed-income portfolios of euro area funds increased by two years

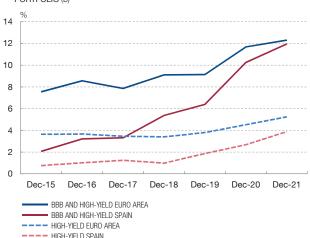
SINCE 2015, THE AVERAGE MATURITY OF THE FIXED-INCOME PORTFOLIOS AND BOND HOLDINGS ON THE CUSP OR BELOW INVESTMENT GRADE HAS INCREASED IN EURO AREA INVESTMENT FUNDS, AND TO A LESSER DEGREE IN FUNDS DOMICILED IN SPAIN

In recent years, euro area investment funds, but not those domiciled in Spain, moderately increased the average maturity of their fixed-income portfolios, as a result of which the value of their assets could be more sensitive to changes in interest rates. Both in the euro area as a whole and particularly in Spain, high-yield bond holdings have also increased, although they represent a relatively small proportion of the total fixed-income portfolio. However, if bonds on the cusp of investment grade are also taken into account, a clearer upward trend and a higher degree of materiality in the total portfolio can be observed.









SOURCES: Securities Holdings Statistics by Sector and Refinitiv.

- a Average maturity refers to the weighted average of the residual maturity of fixed-income instruments in investment fund portfolios (the weightings are the volume of holdings), comprising bonds of all issuers. All euro area countries are included.
- b This chart shows the percentages of the total fixed-income portfolio represented by high-yield bond holdings and with ratings on the cusp of investment grade issued by non-financial corporations. High-yield bonds refer to instruments with a rating below investment grade (below BBB-, according to the Standard and Poor's rating scale), while BBB-rated bonds are considered to be on the cusp of investment grade. These percentages are calculated using the market value of the total fixed-income holdings at each date. The calculation includes all the funds of all euro area countries. The percentage of corporate fixed income without a credit rating may be significant in some segments, standing at around 4% of the total fixed-income portfolio in Spain and at 6% in the euro area.

compared with 2015 and was around 10.5 years at end-2021, exposing these funds to greater market risk in the event of an interest rate rise (see Chart 2.18.1). No clear upward trend was observed for Spanish funds, with the average maturity remaining stable at around four years, lower than that of funds in the euro area as a whole. The weight of securities holdings with a credit rating below investment grade has risen significantly since 2018, both in the euro area overall and in Spain. Last year, this increase was higher for funds domiciled in Spain (see Chart 2.18.2). These holdings represent a relatively small proportion of the fixed-income portfolio (5% and 4% in the euro area and Spain, respectively). However, their increasing weight in recent years denotes a higher credit risk exposure of these vehicles. If securities holdings on the cusp of investment grade (BBB on the Standard & Poor's rating scale) are also taken into account, a clearer upward trend can be observed, particularly in Spain, along with a higher degree of materiality (up to 12% of investment funds' fixed-income portfolios) both in Spain and in the euro area as a whole.

Pension funds

The returns and total assets of pension funds increased in 2021, despite the decline in contributions. Gross contributions to pension funds fell by more than 30% in 2021, standing below the level of pension benefits. Despite the drop in gross contributions, the returns and total assets of pension schemes increased, the latter by 8% in 2021 compared with the previous year. This increase reflects pension funds' high annual average returns, which climbed by 783 bp since December 2020 to stand at 8.5% in December 2021. For their part, long-term returns (25 years) held at around 3.3% in 2021.

Insurance companies

The profitability of the insurance sector experienced a moderate decline last year, but its solvency was not adversely affected. In 2021, Spanish insurance companies had a ROE of 12.4% and a solvency ratio of 240.7%. Profitability was down 2.5 pp on 2020, while the solvency ratio rose by 2.9 pp. Net profit in 2021 was €479 billion, representing a drop of 12.5% compared with the previous year. The decline in net profit is mainly explained by the withdrawal of the restrictions on mobility, which had led to a substantial reduction in the volume of claims in most insurance sectors and to an extraordinary increase in net profit in 2020. The ratio of claims to earned premiums was 35.2% in 2021, compared with 37.1% in 2019 and 32.4% in 2020.

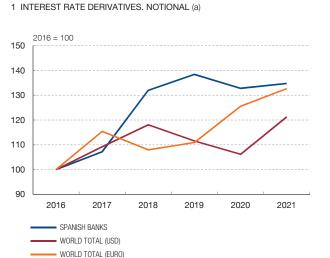
The volume of savings managed by insurance companies was €257 billion in December 2021, an increase of 6.4% year-on-year. This volume includes €195 billion of life insurance technical provisions (0.8% higher than a year earlier) and €61 billion of pension fund assets managed by insurance companies (up 28.1% on the previous year).

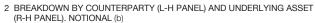
2.2.2 Systemic interconnections

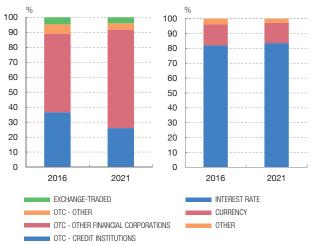
The Spanish banking system's total assets and liabilities vis-à-vis other sectors remained unchanged on the whole in 2021 H2. In December 2021, the value of the resident banking sector's assets and liabilities (at non-consolidated level) vis-à-vis other resident and non-resident sectors was close to 195% and 191% of GDP, respectively. The distribution of the assets reveals relatively uniform exposures to households (55% of GDP) and to NFCs (44% of GDP), and smaller exposures to general government (24% of GDP). However, on the liability side, exposures to households predominate (83% of GDP). The banking sector's assets vis-à-vis those of other Spanish financial sectors amount to 19% of GDP, and in the case of liabilities, to around 21% of GDP.

THE NOTIONAL VOLUME OF THE BANKING SECTOR'S INTEREST RATE DERIVATIVES HAS TENDED TO INCREASE IN RECENT YEARS IN SPAIN, WITH NON-BANK FINANCIAL INSTITUTIONS AS THE MAIN COUNTERPARTIES

In recent years, the total notional value of interest rate derivatives has increased in Spain, in line with the trend observed, with some fluctuations in other jurisdictions. Non-bank financial institutions are the main counterparties.







SOURCES: Banco de España and BIS.

- a In Chart 1, "World total" refers to the global trading of derivatives in the currencies considered. Data for 2021 refer to the end of 2021 H1, except for Spanish banks, where data refer to year-end exposure, according to FINREP regulatory returns (consolidated data).
- b Exposure relating to exchange-traded derivatives is calculated as the difference between total exposure to derivatives and exposure to OTC (bilateral agreements) counterparties. Consolidated data.

The banking sector's derivatives market activity is a major source of interconnectedness with the rest of the financial system, where its main counterparties for such transactions can be found. In recent years, the notional amounts traded by Spanish banks in interest rate derivatives (see Chart 2.19.1) have increased. These amounts represent the volume of underlying assets linked to the contracts and do not directly reflect the exposure to the market or counterparty risk associated with these instruments. This increase has run parallel to the growth of this type of derivatives traded in euro in other jurisdictions. Most of Spanish banks' derivatives contracts are classified in the trading portfolio (98% at end-2021), and are therefore, in accordance with accounting standards, not used for hedging economic risks. Non-bank financial institutions (including central clearing houses)²⁶ are the main counterparties, and their weight has tended to increase since 2016 (see Chart 2.19.2, left-hand panel). Interest rate derivatives account for the bulk of banks' activity in the derivatives market, surpassing currency derivatives (see Chart 2.19.2, right-hand panel). Spanish banks' direct exposure to the commodity

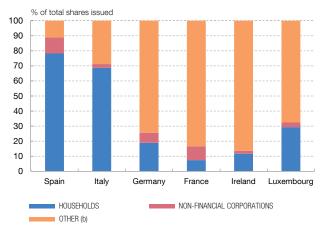
²⁶ Overall, the trend towards central clearing of derivatives has been more pronounced for interest rate derivatives, driven by regulatory requirements. See Aramonte and Huang (2019).

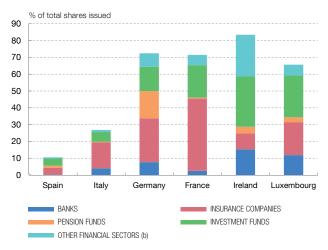
THE STRUCTURE OF INVESTMENT FUND HOLDINGS IS UNEVEN ACROSS THE EURO AREA, WITH A GREATER WEIGHT OF **RETAIL INVESTORS FOR FUNDS DOMICILED IN SPAIN**

Households are the main holders of investment funds domiciled in Spain and Italy, whereas in countries like Germany, France, Ireland and Luxembourg, other financial sectors hold the largest proportion of shares issued by investment funds. Holders that are financial intermediaries notably include insurance companies, particularly in Germany and France, and also investment funds (the so-called "funds of funds"), especially in Ireland and Luxembourg, which act as European financial centres for these types of vehicles.









SOURCE: Securities Holdings Statistics by Sector.

- a Data refer to December 2021 and are presented as a percentage of the total shares issued by each country's funds.
- b The "Other" category includes insurance companies, pension funds, banks, other financial intermediaries and public-sector entities (the latter represent a small percentage, except in France, where public-sector holdings exceed 10%). Thus, the total percentage of holdings under "Other" in Chart 1 exceeds that of the sum of financial intermediaries' holdings in Chart 2, owing to the presence of public-sector entities in the "Other" category.
- c This category includes sectors such as financial auxiliaries, captive financial institutions and money lenders and other financial intermediaries with a small share of holdings.

derivatives market, which has experienced increased volatility as a result of the war in Ukraine, is very low.27

The structure of investment fund holders is highly uneven across the euro area and this could influence the behaviour of these funds in crisis situations.

Households are the main holders of investment funds domiciled in certain countries such as Spain or Italy, where they own more than 70% of the shares issued (see Chart 2.20.1). In countries like Germany, France, Ireland or Luxembourg, the financial sector holds a comparatively much higher proportion, essentially owing to non-bank financial institutions (see Chart 2.20.2). The structure of

²⁷ The volume of commodity derivatives held for trading by Spanish banks, according to their notional value, is equal to €5 billion (this category includes commodities related to fossil fuels and also products of mineral, vegetable or animal origin). However, tensions in the derivatives markets could pose indirect risks for the banking sector. Thus, the spike in commodity price volatility has increased the size of margin calls in this market, and in the event that participants suffer significant losses, risks could arise for banks with credit exposures to affected counterparties.

shareholders may affect the stability of the net inflows received by investment funds at times of crisis. For example, the holdings of households may be more stable than those of financial institutions during episodes of financial stress. Indeed, during such episodes, financial institutions may be forced to reduce their holdings, to meet capital requirements if the funds' credit quality is impaired, or if they have liquidity needs.²⁸ Holders in Spain, Italy and Germany own practically all the shares issued by the funds domiciled in their respective countries. In France, the percentage is close to 85%. By contrast, the weight of domestic shareholders is notably lower in Luxembourg (16%) and Ireland (12%), suggesting that they channel part of savings from the rest of the world, particularly those of other euro area countries.

The direct credit exposure to Russia of Spanish financial intermediaries is very low, although there may be a higher degree of indirect exposure through holdings in investment funds domiciled outside the European Union. The armed conflict initiated by Russia and the sanctions imposed in response by various countries (see Chapter 1) heighten the financial risks related to exposures to Russian counterparties. According to information from the Bank for International Settlements (BIS), the EU banking sector's total exposure to Russia amounted to €70 billion in 2021 Q3. The relative weight of Spanish banks' exposure in total EU exposures is lower than 1% (see Chart 2.21.1), the equivalent of close to 0.05% of the Spanish banking system's RWAs. The possible direct holdings of fixed-income securities issued by NFCs, financial intermediaries and the public sector in Russia constitute a second source of exposure, which is also low for non-bank financial sectors domiciled in the EU. These holdings were estimated at €25 billion in 2021 Q4 (see Chart 2.21.2). In Europe, investment funds are the main holders of such securities. In turn, the total holdings of non bank financial intermediaries resident in Spain are very small (0.4% of total holdings in the EU). Indirect exposure could be higher since, according to BIS data, Russian institutions have issued bonds amounting to €175 billion to raise international financing. Of these, 85% would be found in the portfolios of financial intermediaries domiciled outside the EU, and intermediaries in Spain and other European countries could be exposed to them through their holdings in these intermediaries (e.g. in funds of funds).

Spanish banks' activity in the leveraged loan market increased in 2021, standing close to pre-pandemic levels, while the volume structured in such loans worldwide marked a new record.²⁹ According to Refinitiv data, Spanish banks acted as bookrunner to structure €21 billion in leveraged loans, less than 1% of

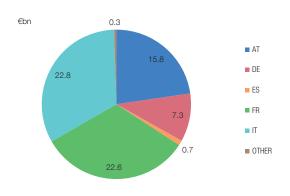
²⁸ To determine whether such interconnections favour the transmission of tensions or generate vulnerabilities for the financial system, a systematic analysis is required. However, recent developments provide some evidence that this is the case. For example, at the height of the health crisis, several euro area funds were affected by sudden withdrawals associated with insurance companies' liquidity needs. For further information, see Rousová et al. (2020). See also, Mayordomo et al. (2020) or Cella et al. (2013).

²⁹ Given the high level of activity in this market, the ECB has issued a supervisory opinion warning of the possible build-up of risks and the need to monitor this credit segment.

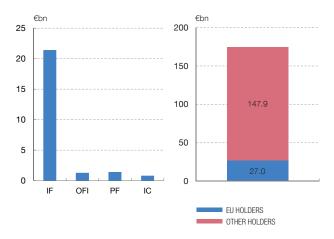
THE DIRECT CREDIT EXPOSURE OF EU-RESIDENT FINANCIAL INTERMEDIARIES TO RUSSIAN NATIONALS IS LIMITED

The exposure of the EU-resident banking sector to Russian nationals is mainly concentrated in Austria, Germany, France and Italy. Non-bank financial intermediaries notably include investment funds (IF) as the main holders of fixed-income securities issued by Russian nationals. The indirect exposure to these issuers could also be significant, materialising through investments in other intermediaries with direct exposure.

1 EXPOSURE OF THE EU BANKING SECTOR TO RUSSIAN NATIONALS (a) 2021 Q3



2 BREAKDOWN OF NON-BANK FINANCIAL HOLDERS RESIDENT IN THE EU (2021 Q4) AND BREAKDOWN BY EU VS NON-EU HOLDERS OF FIXED-INCOME SECURITIES ISSUED BY RUSSIAN NATIONALS (2021 Q3) (b) (c)



SOURCES: BIS, Securities Holdings Statistics by Sector (SHSS) and Refinitiv.

- a Exposures include loans and bond holdings vis-à-vis all Russian nationals, regardless of their country of residence.
- b Holders resident in the European Union are shown according to the information on direct holders available in the SHSS database at December 2021. It has not been possible to identify other holders based on the available information. The total amount corresponds to the information provided by the BIS on the nominal amount of international issues of Russian nationals in force at December 2021.
- c A breakdown is provided of the holdings of non-bank financial sectors in Spain and in the five countries with the highest volume of holdings. The abbreviations refer to investment funds (IF), other financial intermediaries (OFI), pension funds (PF) and insurance companies (IC).

the total in 2021 (€2.6 trillion).³⁰ The activity of Spanish banks in this market increased by 20% on 2020, thus standing close to pre-pandemic levels. Spanish banks also have exposures to this segment through loans originated in previous years or acquired in the secondary market; accordingly, developments will have to be monitored closely. Leveraged loans generate important interconnections with other banks participating in these exposures and drive up exposure to global financial conditions.

³⁰ This volume includes total leveraged loans, covering both term loans and credit lines, regardless of whether they have been used.

