

FINANCIAL STABILITY REPORT

Autumn
2020

BANCO DE **ESPAÑA**
Eurosistema



FINANCIAL STABILITY REPORT AUTUMN 2020

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MAIN RISKS TO THE STABILITY OF THE SPANISH FINANCIAL SYSTEM

MAIN RISKS TO THE STABILITY OF THE SPANISH FINANCIAL SYSTEM

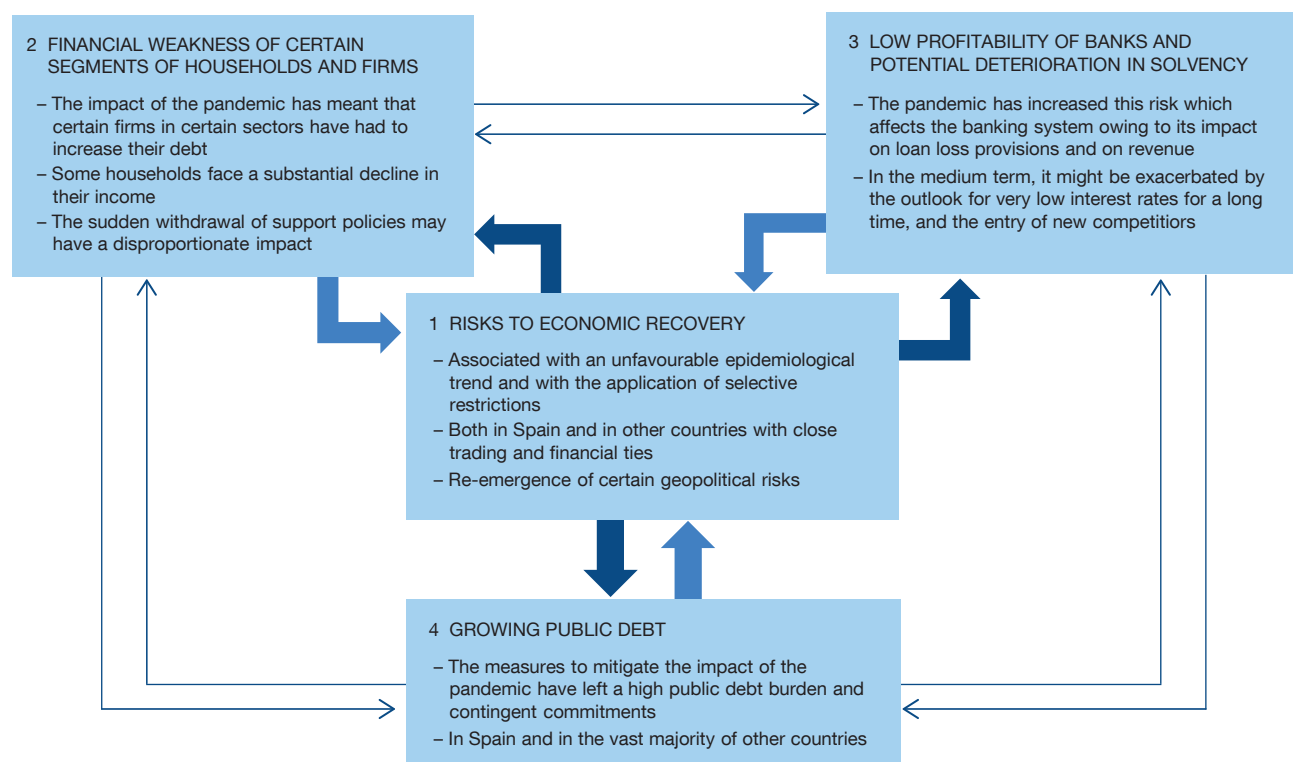
The COVID-19 pandemic and the restrictions implemented to contain it have had an unprecedented effect on global economic activity. They have likewise impacted Spain, notably raising the risks to financial stability, which have been mitigated by economic policy action. Specifically, the economic crisis prompted by the pandemic has significantly affected household and corporate income, although the economic policy measures have alleviated these effects through various means. In the case of non-financial corporations, the loss of revenue, which has been most significant in some productive sectors, has meant they have had to take on greater debt. However, the public guarantee programmes for bank lending have smoothed this process. As regards households, losses of income and jobs have run high, but would have been higher still had the various income support schemes not been implemented. Moreover, the possibility of postponing households' financial obligations by means of moratoria has also helped temporarily ease the pressure on their available funds.

The economic policy measures adopted have had a most significant mitigating effect on agents' incomes and on their financial position. In the absence of these measures, there would have been a marked and sudden increase in bad debts. That would have obliged financial institutions to assign a substantial volume of resources to provisioning, making it difficult for them to continue providing the funding needed to sustain productive activity. The outcome would have been a deepening of the recession and more lasting harm inflicted on the productive system. In any event, banks' income statements, which had already been squeezed before the pandemic, have been adversely affected by the crisis owing largely to extraordinary provisioning in anticipation of the potential credit impairment that might materialise in the coming quarters.

The economic downturn and the measures implemented by the different tiers of government are proving to have a high cost in terms of the increase in public debt. In the absence of the measures, the harm to the business sector and the loss of jobs would have been greater, foreseeably resulting in a more marked worsening in public finances. In any event, this increase in public debt is, looking ahead, a factor of vulnerability.

How the risks to financial stability evolve will largely depend on the pandemic and its economic effects. Following the period of confinement, lockdown-easing allowed for a rapid but partial rebound in activity. However, during the summer there were increasingly patent signs of a loss of momentum in the recovery, in step with the heightening resurgence of the pandemic. The fresh outbreaks entail adverse

MAIN RISKS TO FINANCIAL STABILITY IN AUTUMN 2020

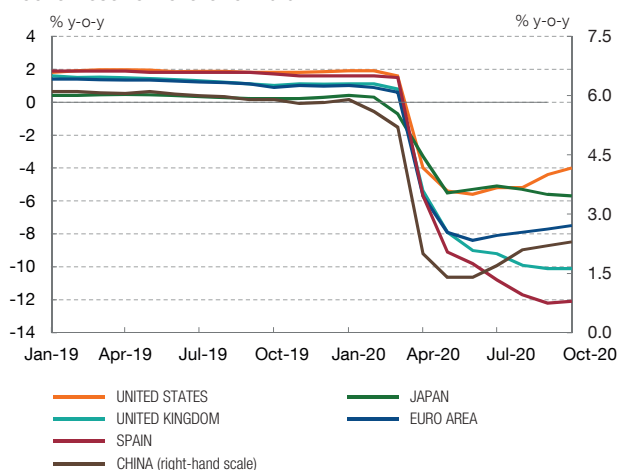


SOURCE: Banco de España.

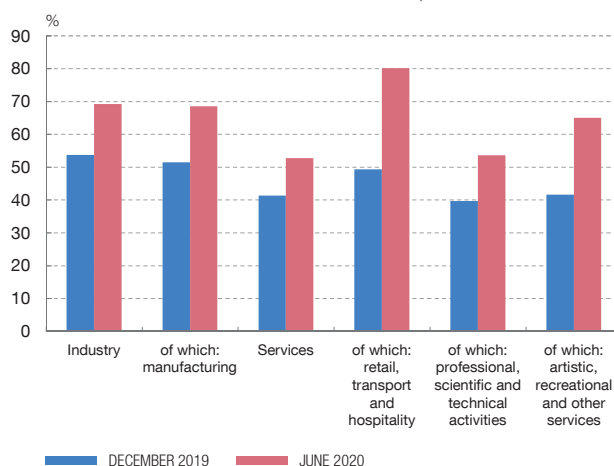
consequences for economic activity through various channels. These include the need to restore infection-containment restrictions, the unfavourable effects of uncertainty on spending decisions and the emergence of turbulence on financial markets. Such effects might heighten pre-existing risks, in particular the financial weakness of certain households and firms, the low profitability of financial institutions and the increase in public debt (see Scheme 1).

The materialisation of these risks will also hinge critically on the economic policy reaction. In the current situation of partial, uneven and uncertain recovery, maintaining stimuli is crucial. The stimuli should now be much more targeted on the agents most affected and their timescale adjusted to the duration of the crisis. The worsening of the crisis and of the risks to financial stability would call for an additional and forceful European response. In parallel, economic policy action should be geared to assisting and supporting the adaptation of the productive system and of workers to the structural changes and harm caused by the pandemic and the efficient cross-sectoral and cross firm reallocation of resources. The task is a complex one but it is crucial for rooting the recovery in the short term and consolidating future potential growth.

1 CONSENSUS FORECASTS FOR 2020



2 BANK LENDING RELATIVE TO GROSS VALUE ADDED, BY SECTOR OF ACTIVITY

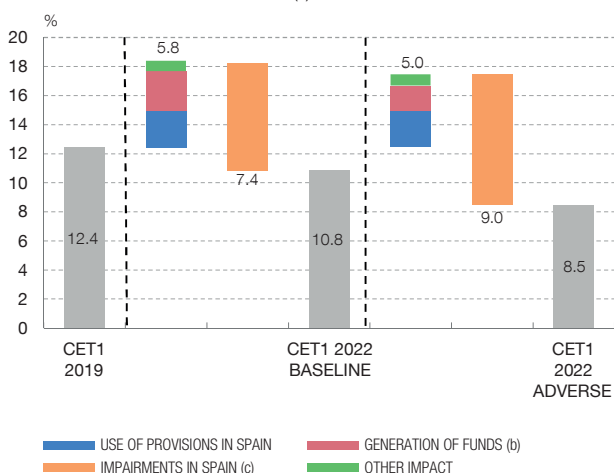


SOURCES: IHS Markit, Consensus Forecast, INE and Banco de España.

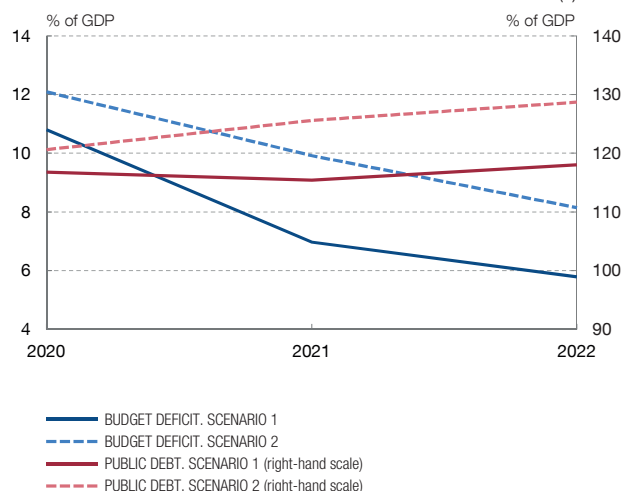
There follows a summary of the main risks to financial stability in the current environment:

- 1. Risks to economic recovery.** As indicated, the worsening of the pandemic already appears to have adversely impacted economic activity (see Chart 1). A slower than expected recovery would mean that household and corporate income would be more modest and their financial vulnerability greater, with the pick-up in employment and in spending on consumption and investment being further delayed. Financial institutions would also see their profitability decline as they had to assume greater costs relating to asset impairment. Finally, weaker activity would lead to a further worsening in public finances.
- 2. Financial weakness of certain segments of households and firms.** The crisis has prompted an increase in the debt of the business sector, whose financial vulnerability is, therefore, higher. The process has not been uniform. It is affecting small-sized companies to a greater extent and, especially, those operating in the sectors most affected by the shock (see Chart 2). In the case of households, the reduction in income is increasing the financial pressure borne by certain segments, especially those with higher debt and whose income has been more affected by the shock. Against this background, there is a risk of a slowdown in consumption and investment and an increase in non-performing loans that would directly impact banks' results and public finances.
- 3. Low profitability of banks and potential deterioration in solvency.** The risk associated with the low profitability of banks, which is below the cost of capital, had already become patent before the pandemic and was

3 FLESB PROJECTIONS. CET1 RATIO (a)



4 BANCO DE ESPAÑA BUDGET DEFICIT AND PUBLIC DEBT FORECASTS (d)



SOURCES: IGAE and Banco de España.

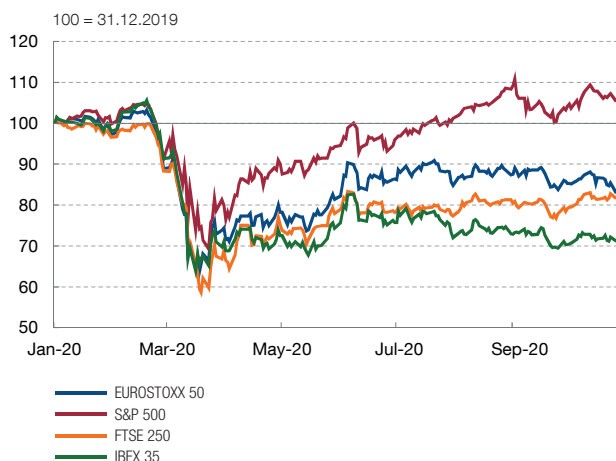
- a The net effect of positive (negative) flows is indicated in the data label above (below) the related bar. The initial and final CET1 ratios are presented as "fully loaded". The remaining impacts include, among other effects, the change in RWAs from 2019 to 2022.
- b This variable includes the operating margin in Spain and the net income attributable to business abroad.
- c This variable shows the projection for the three years of the exercise of the gross loss due to credit portfolio impairment for exposures in Spain and other types of losses (associated with the fixed-income portfolio, with the management of foreclosures and with the sovereign portfolio).
- d Macroeconomic scenarios of the Banco de España projections published in September 2020. Scenario 1 envisages the emergence of fresh outbreaks which, however, will solely require limited containment measures, both from the standpoint of regions and of the sectors affected. Scenario 2 envisages greater intensity of the fresh pandemic outbreaks which, nonetheless, would not need such strict and widespread containment measures as those in force prior to lockdown-easing.

common to most European banking systems. The crisis is expected to exacerbate this situation as a result of the increase in loan impairment provisioning, the reduction in revenue and the additional adjustments in the valuation of other assets. Against this backdrop, the stress tests performed anticipate adverse effects on banks' solvency ratios, on a scale that depends on the scenario considered (see Chart 3).

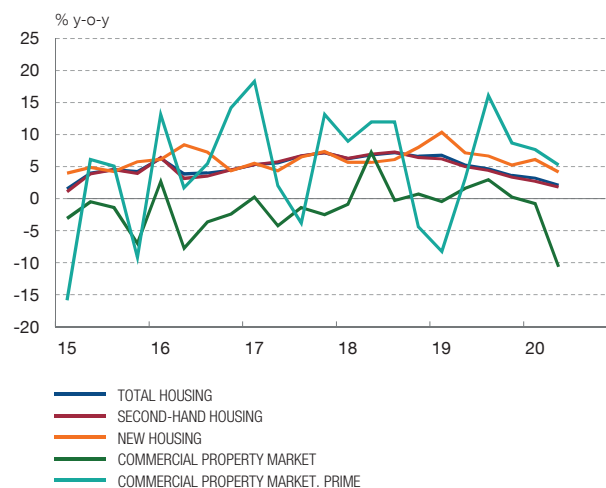
4. **Growing public debt.** The general government response to the crisis has served largely to mitigate the initial sudden impact of the pandemic on households and firms, but it has resulted in a sizeable increase in public debt (see Chart 4). Action by the European Central Bank (ECB) and the European fiscal response have so far prevented this deterioration in public finances from translating into an increase in the yields demanded on sovereign debt. But maintaining high public debt over time is a factor of chronic vulnerability to changes in market sentiment. Accordingly, a plan is needed to re-balance public finances. It should be launched once a path of economic recovery has firmed and should gradually, but in a sustained fashion over time, reduce the debt to which the crisis has given rise.

Beyond these risks, in recent months the prices of risky assets on international financial markets have recovered significantly from their slump at the start of the pandemic. This recovery has been assisted by the unprecedented economic

5 STOCK MARKET INDICES



6 HOUSING AND COMMERCIAL PROPERTY MARKET PRICES



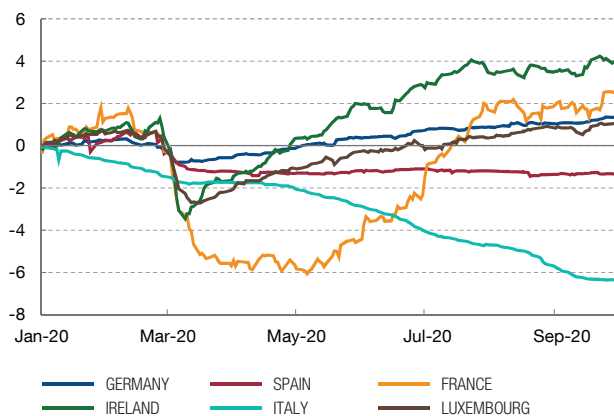
SOURCES: Thomson Reuters Datastream, Tinsa and Colegio de Registradores.

policies implemented. They include most notably more expansionary monetary policies, conventional and unconventional alike. In some cases assets have appreciated most considerably, posing the possibility of a disconnect between financial markets and real activity. So far, this risk appears to be concentrated in certain geographical areas, sectors and instruments (see Chart 5).

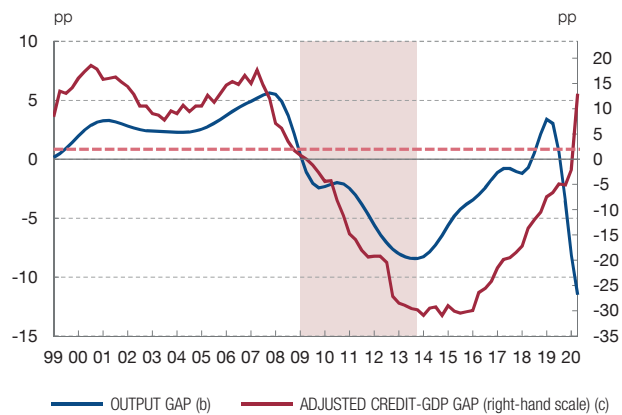
In Spain's real estate market there has been a significant decline in transactions and in the residential segment's activity during the lockdown, while the adjustment in prices has been on a lesser scale. The initial contraction in activity in the sector has been followed by a partial recovery as the restrictive measures eased. Prices have slowed, but an across-the-board decline has not been observed so far. In the commercial property segment, the fall-off in activity has also been very significant and accompanied by declines in valuations; that said, prices in prime zones have shown greater downward stickiness (see Chart 6).

The potential withdrawal from funds by collective investment institutions and the forced disposal of assets appear to be the main risks in the non-bank financial sector. At the onset of the pandemic a substantial withdrawal of funds by holders was witnessed. In many cases these funds were used to cover liquidity needs, but in others they sought to reduce the associated losses, shifting these funds – inter alia – to bank deposits. This meant collective investment institutions had to put a portion of their assets up for sale, exerting further pressure on market prices. Currently, these withdrawals have declined substantially (see Chart 7), but many of these funds have significant investments in assets whose risk rating is just above investment-grade. In this respect, an across-the-board downgrade to these securities by the main rating agencies, which have so far acted fairly selectively, would entail a risk to the system as a whole.

7 CUMULATIVE NET INVESTMENT INFLOWS SINCE 15 JANUARY 2020
As a % of initial wealth



8 OUTPUT AND CREDIT-GDP GAPS (a)



SOURCES: Refinitiv and Banco de España.

- a The shaded area shows the last systemic banking crisis period (2009 Q1 to 2013 Q4). The horizontal dotted line represents the activation threshold of the CCyB equal to 2 pp.
- b The output gap depicts the percentage difference between actual GDP and its potential value. Values calculated at 2010 constant prices. See Cuadrado, P., and E. Moral-Benito (2016). *Potential growth of the Spanish economy*. Occasional Paper No. 1603, Banco de España.
- c The adjusted credit-GDP gap is calculated as the difference in percentage points between the actual ratio and its long-term trend, calculated applying a one-sided Hodrick-Prescott filter with a smoothing parameter equal to 25,000. This value fits the financial cycles historically observed in Spain better.

Changes in the systemic risk indicators are being influenced by the strong decline in GDP prompted by the pandemic. Indeed, many of these indicators are designed to capture the endogenous build-up in systemic risk. This is why they are directly influenced by variables that mark the economy’s position in the financial cycle, such as credit and house prices, and are inversely related to the variables that allow their course to be relativised, usually GDP, household income and business revenue. The use of these indicators to activate preventive macroprudential tools is not appropriate when it is the latter variables that collapse, as is the case at present (see Chart 8), with the indicators that reflect the impact of the crisis on economic activity – such as the output gap – taking on much more importance. Consequently, the activation of the countercyclical capital buffer or other macroprudential capital buffers is not foreseen for a prolonged period, until the main effects of the pandemic on the economy have abated.

In the coming quarters, further credit impairment on bank balance sheets could materialise, and the authorities should be ready to respond appropriately so as to prevent this leading to an interruption in the flow of financing to the economy that adversely affects the recovery. Banks have significant capital buffers to absorb these potential losses and the supervisory authorities have reiterated that, if they fall below the previously set levels, banks will have sufficient time to replenish them. However, the use of the buffers also depends on the markets’ reaction. And this is largely determined by banks’ capacity to restore to health their income statements in the future. In this respect, banks have room to improve their efficiency, by cutting costs and using new technologies more intensively.

Consolidation processes in the banking sector might prove to be a useful response to the crisis, provided that banks submit a business plan that generates value and allows for the harnessing of existing synergies. Corporate operations are the responsibility of bank management teams and owners, but it is for supervisors to assess their viability case-by-case. In this connection they use cost-benefit analysis, which tests the potential benefits of the operations for financial stability, and cost and revenue synergies, against potential adverse impacts. Prudential measures can mitigate these potentially adverse effects, by being adapted to the risk profile of the merged banks and to the systemic risk resulting from the sector's consolidation.

In any event, the European policy response in respect of the banking sector should also play a key role, as monetary and fiscal policy are doing. This response might include, for example, the completion of the Banking Union with the launch of the European Deposit Guarantee Scheme. That would smooth transnational corporate operations, with greater potential for risk diversification and revenue synergies than national operations, but with a lesser immediate impact in terms of cost-cutting. So far, discussions have begun in the European setting on the need to set in place additional measures to those envisaged to date, should more adverse than expected scenarios materialise.

1

RISKS LINKED TO THE MACROFINANCIAL ENVIRONMENT

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As usual, this first chapter of the FSR analyses the macrofinancial environment of the Spanish economy in the recent period, highlighting the most significant risks. Emphasis is duly placed on the harsh impact the pandemic has had on activity and the restrictions introduced to contain it in Spain and in the countries with which Spain has the closest trading and financial links. The progressive lifting of these restrictions allowed for a significant pick-up in GDP, but the new wave of infections appears to have checked the path of recovery to some extent. The financial markets have recovered from their initial fall-off, with some disparity in the improvements seen by asset, country and sector. Turning to the real estate sector, there has been a notable slowdown in house prices, but to date with no across-the-board declines. The last section of this chapter highlights the increase in financial vulnerability for certain households and firms as a result of the crisis, and for the public sector, which has seen its debt climb significantly.

1.1 Macroeconomic environment

1.1.1 Systemic and materially significant countries

Developments in the international economy in the first half of 2020 were influenced by the spread of COVID-19 and by the implementation of the measures adopted to halt the pandemic. The adverse impact on global economic activity was very marked in the first half of the year (see Chart 1.1), although something of a recovery ensued following the lifting of the strictest lockdown measures as from May. GDP estimates for Q2 showed historical declines in most countries. In the United States, GDP fell at a quarter-on-quarter rate of 7.1%, much less than the 19.8% collapse in the United Kingdom, and similar to the fall in Japan (-7.9%), which thus posted three consecutive quarters of declines. In China, the first economy to be affected by the pandemic, the figures for Q2 and Q3 denoted a substantial improvement in activity, with growth of 11.7% and 2.7% quarter-on-quarter, respectively, compared with the 10% contraction recorded in Q1. Most analysts' forecasts for the change in GDP this year are very negative, as they indicate that the main economies, with the exception of China, will have gone into recession in 2020 (see Chart 1.1). They foresee a partial recovery in activity in 2021.

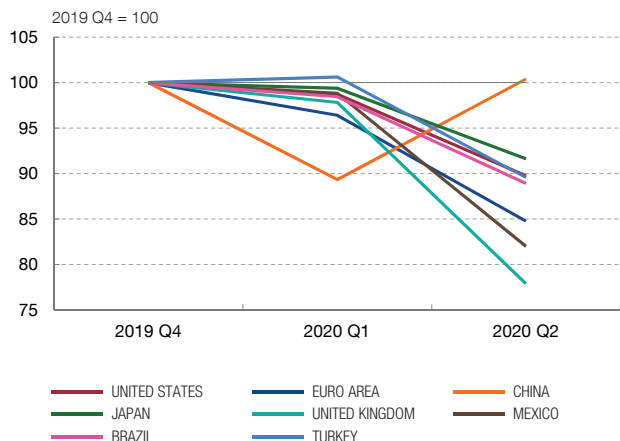
The pick-up in global activity, following an initial phase of a certain degree of control of the pandemic and easing of the lockdown measures initially adopted, is proving very uneven across regions and sectors. The pandemic has still not been fully contained worldwide, and the absence of a comprehensive medical

Chart 1.1

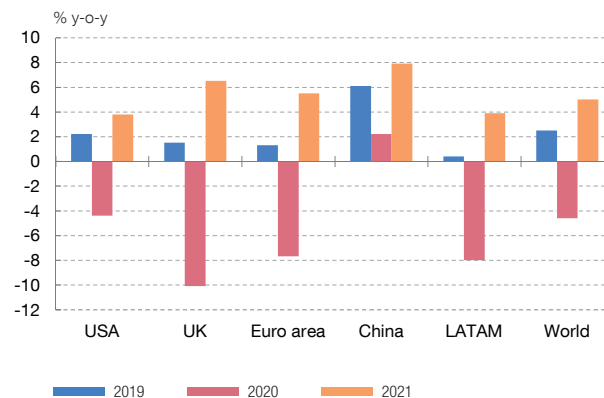
THE HEALTH CRISIS AND THE STRINGENT LOCKDOWN MEASURES ADOPTED PROMPTED SHARP FALLS IN ACTIVITY WORLDWIDE IN THE FIRST HALF OF THE YEAR. SINCE JUNE, ACTIVITY HAS PICKED UP SOMEWHAT, BUT AGAINST A BACKDROP OF CONSIDERABLE UNCERTAINTY

The pandemic continues to spread worldwide, although lockdown measures have been eased in most countries, prompting a pick-up in global economic activity. This recovery has been uneven by region and sector and influenced by the delicate balance between getting the economy moving again and controlling the pandemic. In any event, there has been a very severe negative impact on activity and the expectations as to the duration and intensity of the effects are still clouded with great uncertainty.

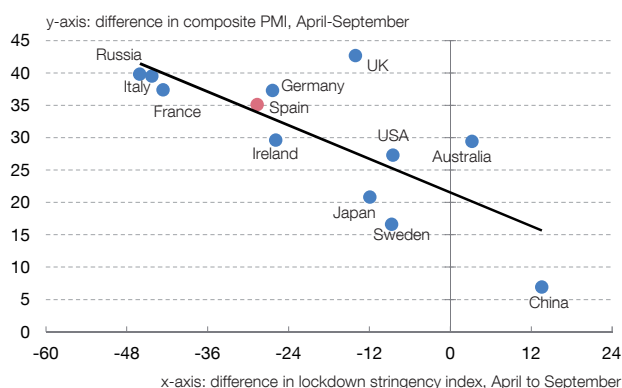
1 GDP: MAIN WORLD ECONOMIES



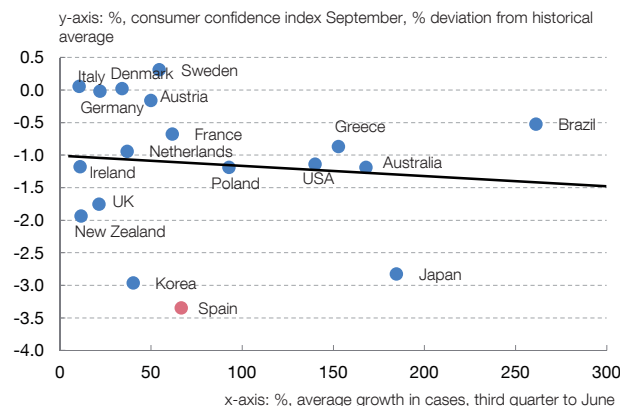
2 REAL GDP GROWTH FORECASTS. CONSENSUS SEPTEMBER 2020



3 LOCKDOWN STRINGENCY (a) AND ECONOMIC ACTIVITY



4 INFECTION AND CONSUMER CONFIDENCE



SOURCES: Consensus, national statistics, IHS Markit, OECD and Oxford COVID-19 Government Response Tracker.

a The lockdown stringency index measures the severity of the measures taken to contain the spread of the disease, taking values between 0 (zero measures) and 100 (total lockdown).

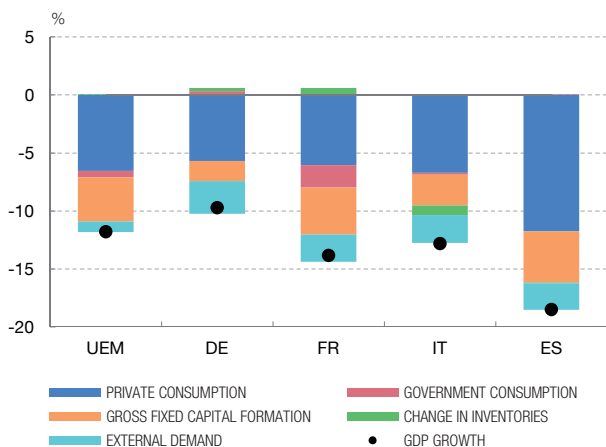
solution means that economic uncertainty is very high. The evidence available on global economic activity for Q3 shows a very limited recovery in consumption and investment. The easing of the restrictions on movement has prompted a rise in the demand for goods (see Chart 1.1), especially for durable goods such as vehicles and small electrical household appliances. However, in the case of services consumption, progress has remained more limited, given that certain social distancing measures have been maintained (see Chart 1.1). In this respect, the increase in infections in

Chart 1.2

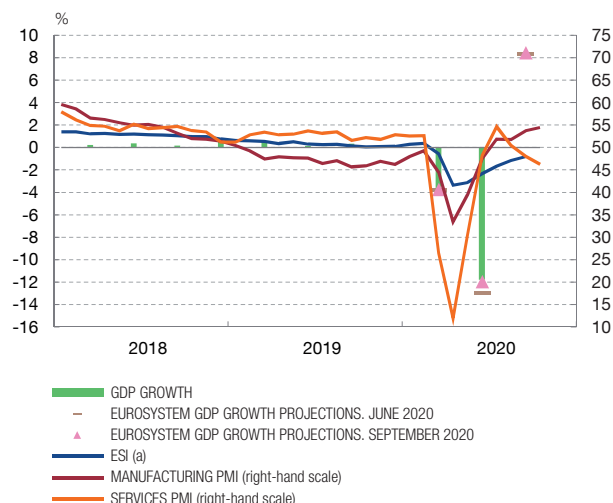
ECONOMIC ACTIVITY IN THE EURO AREA HAS SUFFERED A HISTORICAL CONTRACTION OWING TO THE ONSET OF THE PANDEMIC

Euro area GDP fell by 11.8% in 2020 Q2, with particularly sharp declines in Spain, France and Italy. By component, private consumption declined the most, mainly weighed down by the stringency of the containment measures and the deterioration of confidence owing to the health crisis. The latest information points to a partial recovery in 2020 Q3.

1 GDP AND CONTRIBUTIONS - 2020 Q2
Quarter-on-quarter rate



2 GDP AND SURVEY INDICATORS
Quarter-on-quarter rate (forecasts and ESI) and levels (PMI)



SOURCES: Eurostat, European Commission, Markit Economics and ECB.

a Economic Sentiment Indicator of the European Commission. Normalised series.

some countries since July has checked the recovery of the purchasing managers' indices, especially in the services sector, after they had returned to close to their pre-pandemic levels.

Euro area GDP contracted by 11.8% in Q2, whereas a substantial increase – albeit subject to high uncertainty – is expected in Q3. The decline in output in Q2 was uneven across countries, varying as a function of the stringency of the lockdown measures and the dynamics of the spread of the virus. In terms of components, the contraction in private consumption and gross fixed capital formation was compounded by the negative contribution of the external sector, with exports falling strongly (see Chart 1.2). Activity rebounded robustly early in Q3, although it slowed somewhat in August against the backdrop of an increase in infections (see Chart 1.2) and an appreciating exchange rate, in conjunction with the possibility of a no-deal Brexit. Nonetheless, the monetary, fiscal and labour market policy measures adopted will foreseeably continue to support agents' incomes. As a result, the Eurosystem's September forecasting exercise points to a decline in GDP of 8% in 2020, with a recovery as from Q3, and an increase of 5% in 2021.

The risks facing the global and European economies are essentially associated with the uncertainty over how the pandemic will unfold. The longer this situation

lasts, the more persistent the effects on firms' investment and hiring decisions and on consumer spending decisions will be. Conversely, the recession might be less severe if economic normalisation comes about more quickly than expected. The development of a safe and effective vaccine might likewise boost confidence and growth in 2021. But certain geopolitical risks have re-emerged: some are more specific to Europe, such as the lack of agreement on the new UK-EU economic relationship (or even that there may be a breach of part of the Brexit withdrawal agreement), and others more global, such as the political uncertainty over the US presidential elections or the increase in US-China trade tensions. Lastly, high public and private debt, in a low-growth environment, may fuel financial difficulties and bear down on the prospects of recovery in the world economy.

The main emerging market economies with a significant Spanish banking presence¹ also witnessed an unprecedented collapse in their GDP in Q2 (see Chart 1.1). In Mexico, GDP fell by 17.1% in Q2, with an especially marked decline in the manufacturing sector, although since June it has posted a stronger recovery. The economic policy response to the crisis has been more muted in Mexico than in other emerging market economies.² The Mexican central bank is the only one in Latin America that has not cut its official interest rate to a record low and maintains it above zero in real terms. In addition, the high debt of PEMEX, the State oil company, could have a negative impact on the sovereign risk outlook.³ In Brazil, GDP fell at a quarter-on-quarter rate of 9.7%, compared with -16% on average for the other five biggest Latin American economies. This better relative performance would be due, on one hand, to the short-term economic benefits of less severe containment measures being imposed, with the ensuing social cost; and, on the other, to the notable monetary and fiscal stimuli, on a similar scale to those of the developed countries. In Turkey, GDP fell by 11% quarter-on-quarter in Q2, although the decline in activity was partly cushioned by the stimulus measures for credit to the private sector adopted before and during the pandemic, which gave rise to very high growth rates in credit to the private sector (30% in real terms in lending to households). This has exacerbated the imbalances of the Turkish economy even further. For its part, since August, the Turkish central bank has begun to reverse its expansionary monetary policy (see Chart 1.3), without having managed until now to significantly reduce inflation or mitigate depreciation pressures on the Turkish lira.

The financial variables in the emerging market economies have continued along the recovery path that emerged after the initial shock of the pandemic.

1 Each year the Banco de España identifies the countries that are most significant for Spain from the financial stability standpoint, according to the proportion of the Spanish banking system's international exposures. This exercise is conducted in accordance with the recommendations of the European Systemic Risk Board (ESRB). In 2020, six emerging market countries have been identified in this category: Mexico, Brazil, Turkey, Chile, Peru and Colombia.

2 See the IMF's "[Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic](#)".

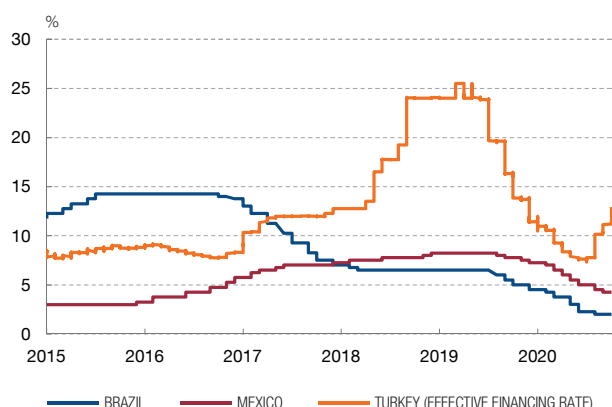
3 In their recent credit rating downgrades, Fitch Ratings and Moody's point to this factor as the possible catalyst for a further downgrade.

Chart 1.3

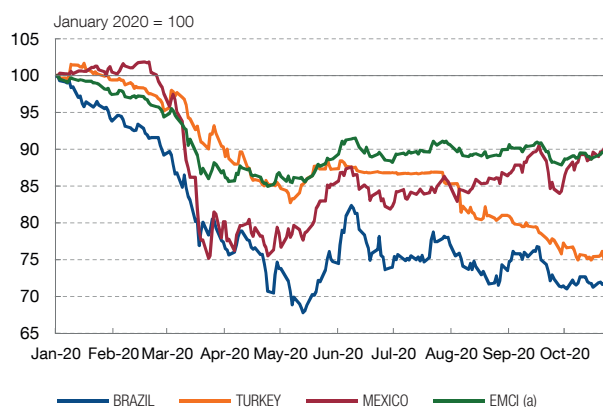
THE CENTRAL BANKS OF THE EMERGING MARKET ECONOMIES FURTHER EASED THEIR ECONOMIC POLICY, ALTHOUGH THIS DID NOT PREVENT A WIDESPREAD STABILISATION OF THEIR CURRENCIES

The central banks of Brazil and Mexico continued to reduce their official interest rates, in the case of Brazil to a record low, against a backdrop of a strong fall in activity and absence of inflationary pressures. In September, Turkey's central bank raised the effective interest rate at which it provides liquidity to contend with the downward pressures on the Turkish lira, since the net international reserves continued to decline, moving to negative territory, with the Turkish lira depreciating further over the summer and autumn. Exchange rates of other emerging economies appreciated, although without recovering their pre-pandemic levels.

1 OFFICIAL INTEREST RATES



2 EXCHANGE RATES AGAINST THE DOLLAR



SOURCE: Reuters.

a Aggregate index of exchange rates of emerging market economies vis-à-vis the dollar. A fall indicates depreciation.

The battery of measures adopted by the fiscal, macroprudential and monetary authorities of the emerging market economies has contributed to this. These measures include cuts in official interest rates, in some cases to record lows (see Chart 1.3), the launch in some countries of programmes for purchase both of public and private debt securities in secondary markets,⁴ and credit support programmes. Naturally, the measures implemented in the advanced economies are also affecting the emerging market economies. Thus, in September, the stock market indices were at levels similar to those observed before the onset of the pandemic, while exchange rates, with the exception of Turkey (see Chart 1.3), and sovereign spreads have recovered some of the ground lost between end-February and end-March. In addition, the high portfolio capital outflows recorded in March were offset in part in the following months by capital inflows, with a larger share of debt securities than equities. Lastly, issues of debt securities in the international markets and, in particular, sovereign issues recovered momentum as from April, posting record highs in cumulative terms.

4 See Box “Asset purchase programmes of Latin American central banks” in “Report on the Latin American Economy. Second Half of 2020”, Analytical Articles, Economic Bulletin 4/2020, Banco de España.

1.1.2 Spain

Spanish GDP will record its largest fall in recent history in 2020. The slump in activity, concentrated in the first half of the year, is a direct consequence of the pandemic and of the measures taken to halt its spread. Specifically, GDP fell in quarter-on-quarter terms by 5.2% in Q1 and by 17.8% in Q2 (see Chart 1.4). In the components of domestic demand, the decline was very pronounced. Consumption and private investment were dragged down by spending decisions being deferred as a result of the lockdown measures and the increased uncertainty about the economic outlook for households and firms. Net external demand also made a negative contribution, albeit to a lesser extent, since the sharp decrease in exports was largely offset by the fall in imports. In particular, tourism flows collapsed as the spread of the pandemic led to borders being closed and restrictions being placed on international movements.

Activity has fallen more in Spain than in other European countries. In addition to the greater relative stringency of the lockdown measures, the reasons for this include: the larger relative importance in Spain of retail, accommodation and food service activities and other sectors linked to tourism and recreation (the sectors hit hardest by the health crisis), a productive structure that is dominated by small firms, and a higher level of temporary employment (see Chart 1.4).

Activity picked up in Q3, but without returning to its pre-crisis level. The improvement in activity in Q3 lost momentum, in any event, towards the end of the quarter, as a consequence of the course taken by the pandemic. The information available shows that activity began to pick up as the lockdown easing began at the end of Q2 and that it continued to improve gradually. However, according to most of the available indicators, the recovery appears to have lost momentum since the end of July, especially in tourism and leisure activities. According to the Banco de España's latest projections, GDP will climb by between 13% and 16.6% in quarter-on-quarter terms in Q3, under the two scenarios envisaged.⁵ But the levels of activity reached would still be some 10% lower than those recorded in the same period a year earlier.

At end-2022 activity is still expected to be below its pre-crisis level. The Banco de España's projection scenarios assume that as from the second half of 2021, a safe and effective remedy will have been made available for widespread distribution to the population. Under this assumption, it would no longer be necessary to maintain

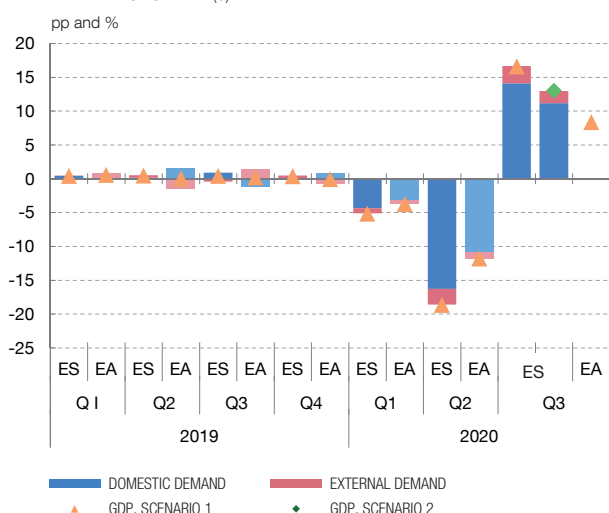
⁵ The reason for this GDP growth range is the uncertainty, at the time of preparation of the projections, about the impact of fresh outbreaks of the disease on activity in the part of the quarter already elapsed and about the course of the disease and the stringency of the measures required to contain it in the remainder of the quarter. Hence two alternative scenarios were drawn up for Q3, each of which represents a different starting point for the rest of the projection period. For more details, see Box 1 of the [Quarterly Report on the Spanish Economy](#), Economic Bulletin 3/2020, Banco de España.

Chart 1.4

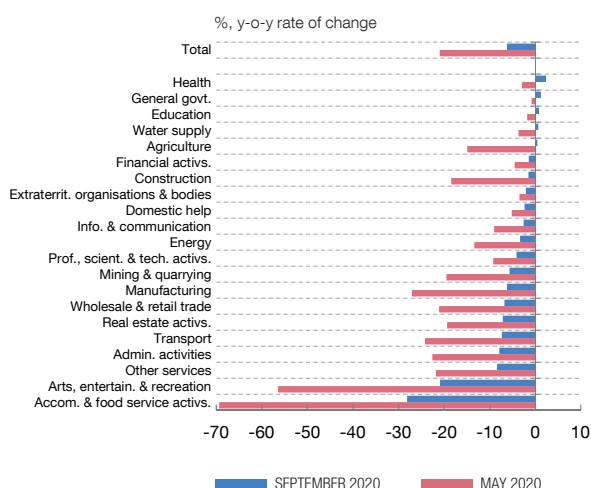
THE SPANISH ECONOMY WILL ALSO SEE A SHARP CONTRACTION IN 2020, CONCENTRATED ON H1, OWING TO THE EFFECTS OF THE LOCKDOWN MEASURES AND THE DETERIORATION IN AGENTS' CONFIDENCE (a)

The health crisis is having a greater economic impact in Spain than in other countries. This is due, among other factors, to the nature of the Spanish productive system which has a higher share of the sectors that have been hit hardest by the measures taken to contain the pandemic. The pick-up in activity that began towards the end of Q2 has slowed in recent weeks, in the light of fresh outbreaks of the disease and increased uncertainty about the economic outlook for households and firms. A return to pre-pandemic activity levels is not expected before 2023. The risks are on the downside, in view of the possibility of the pandemic taking an adverse course and of the negative effects of the crisis being more persistent.

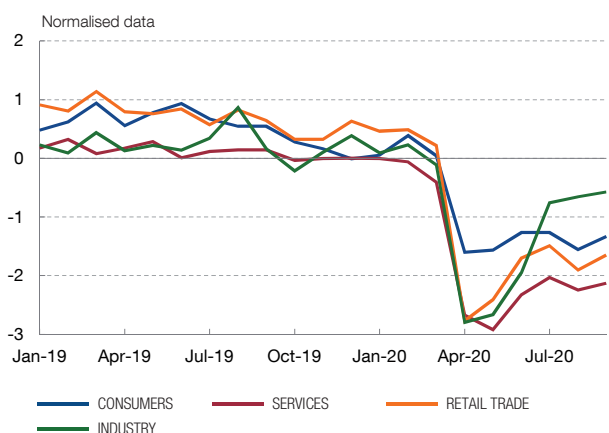
1 CONTRIBUTIONS TO QUARTERLY GROWTH OF REAL GDP IN SPAIN AND IN THE EURO AREA (b)



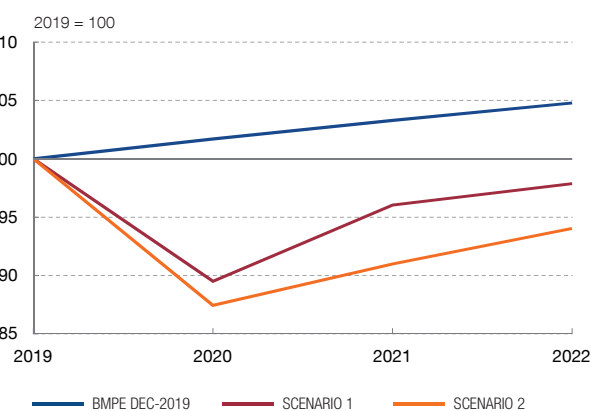
2 ACTUAL SOCIAL SECURITY REGISTRATIONS BY SECTOR (c)



3 CONFIDENCE INDICATORS (d)



4 ANNUAL GDP LEVELS



SOURCES: Banco de España, European Commission, INE and Ministerio de Inclusión, Seguridad Social y Migraciones.

- a Two GDP growth scenarios are simulated up to 2022, according to the intensity of the outbreaks of the disease and the potential measures rolled out to contain it. Scenario 1 incorporates a series of assumptions on the course of the pandemic similar to those envisaged in the gradual recovery scenario in the June projections. In particular, it is assumed that any outbreaks will require only limited lockdown measures in terms of their geographical and sectoral scope. Scenario 2 envisages more serious outbreaks that will require more stringent measures, but not to the extent of those taken during the state of alert. In consequence, the impact on the economy is more pronounced and more protracted than in scenario 1. For more details, see [Box 1 of the Quarterly Report on the Spanish Economy](#), Economic Bulletin 3/2020, Banco de España.
- b For 2020 Q3, Banco de España projections for the Spanish economy and ECB projections for the euro area.
- c Actual Social Security registrations are defined as total registrations less the number of workers subject to short-time work arrangements.
- d Series obtained by subtracting the average and dividing by the standard deviation. Latest observation September 2020.

any kind of restrictions on mobility or activity. However, the damage to employment and the productive system is expected to be more persistent, impeding a rapid and comprehensive recovery in activity (see Chart 1.4).

The downside risks to the above-mentioned macroeconomic scenarios look more likely than the upside risks. As in the rest of the world, the downside risks relate primarily to the course taken by the pandemic. If infection rates rise, with the ensuing restrictions on activity, or the pandemic becomes protracted, the effects on the productive capacity of the economy could be much longer lasting. The destruction of firms and jobs could lead to a loss of both physical and human capital, which would ultimately impact potential growth. By contrast, the scenarios used do not factor in the positive effects of the future implementation of the new temporary pan-European recovery package (NGEU) approved in the summer by the European Council. This is a temporary instrument that will be funded by the European Commission through debt issuance in an amount of up to €750 billion, of which more than €300 billion will be provided to Member States in the form of grants, distributed according to the severity of the impact of the pandemic on the activity of each Member State.⁶

1.2 Financial markets and the real estate sector

1.2.1 Financial markets

The economic policies adopted and lower investor risk aversion have prompted a recovery in the price of risk assets in the international financial markets in recent months, reversing, to some extent, the decreases observed since the onset of the health crisis. Thus, the main stock market indices have risen and credit risk premia have fallen (see Chart 1.5). This more optimistic market sentiment has also been reflected in lower asset price volatility, although it has recently risen again in some markets, such as the foreign exchange market, and higher-rated long-term sovereign yields have increased (see Chart 1.5). That said, these yields are low and below the pre-pandemic levels, especially in the United States, in keeping with the expectations that monetary policy will remain accommodative for some time, expectations which have been revised to a greater extent for the US economy. In recent months, this has led to dollar depreciation against the currencies of the other developed economies (see Chart 1.6).

The stock market recovery has been uneven across geographical areas, as a consequence of the differences in the macroeconomic impact of the health

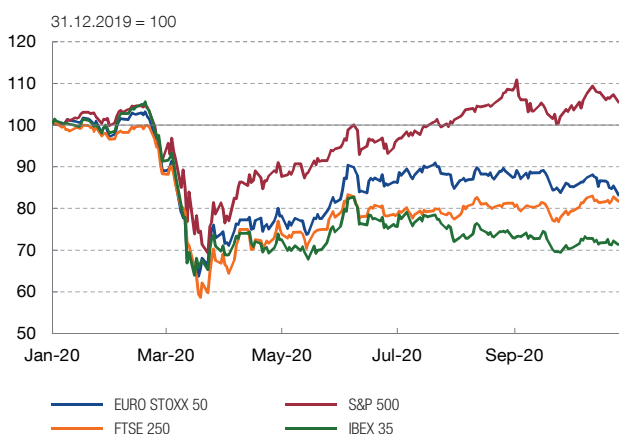
⁶ The lack of specifics of the programme advised its non-inclusion in the projection scenarios. Box 9, *The macroeconomic impact of the Next Generation EU programme under various alternative scenarios*, in the Quarterly Report on the Spanish Economy, Economic Bulletin 3/2020, Banco de España, presents a series of simulations on the effects of the programme on the Spanish economy.

Chart 1.5

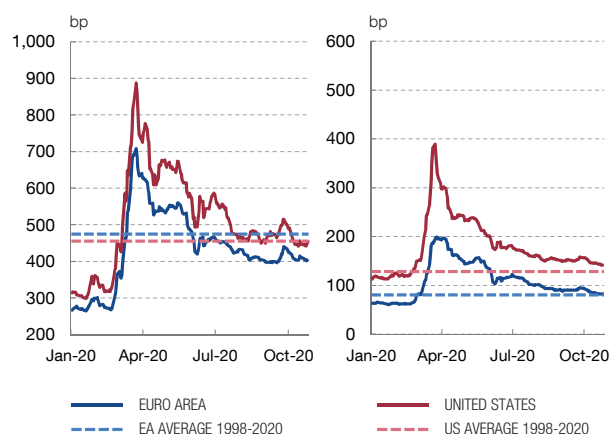
FINANCIAL ASSET PRICES HAVE TENDED TO RECOVER IN RECENT MONTHS, AFTER THE SHARP INITIAL CORRECTION FOLLOWING THE OUTBREAK OF THE HEALTH CRISIS

In recent months, stock market indices have risen, albeit with differences across geographies, and credit spreads and price volatilities have fallen, while higher-rated long-term sovereign yields have remained at low levels, although somewhat above the lows observed at times of maximum risk aversion.

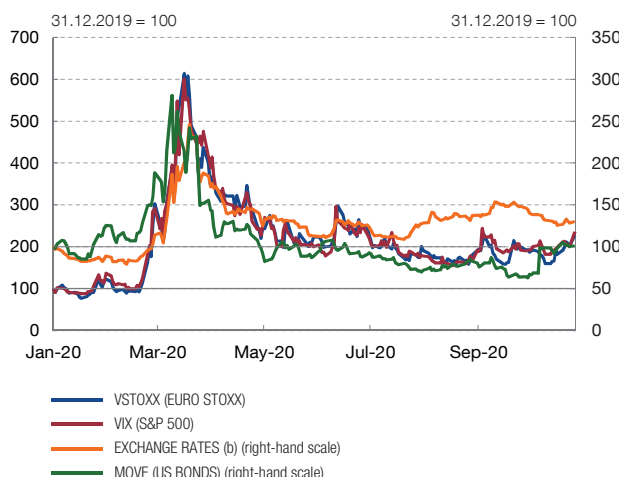
1 STOCK MARKET INDICES



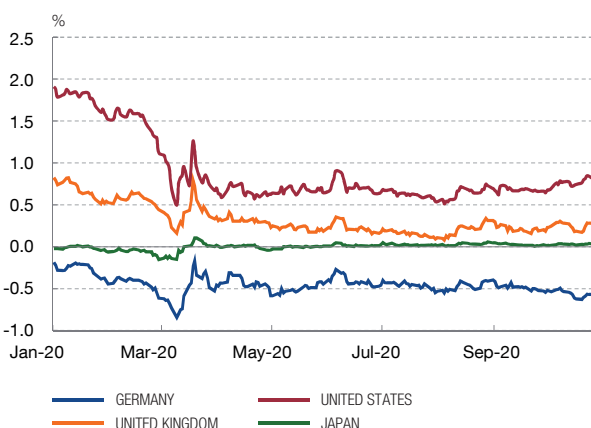
2 CORPORATE BOND YIELD SPREADS RELATIVE TO SWAP CURVE (a) HIGH YIELD (left) AND INVESTMENT GRADE (right)



3 VOLATILITIES



4 10-YEAR BOND YIELDS



SOURCE: Thomson Reuters Datastream.

a High yield: ICE Bank of America Merrill Lynch High Yield Index. Investment grade: ICE Bank of America Merrill Lynch Corporate Index.
 b Average of 3-month volatilities for USD/EUR, USD/GBP and JPY/USD.

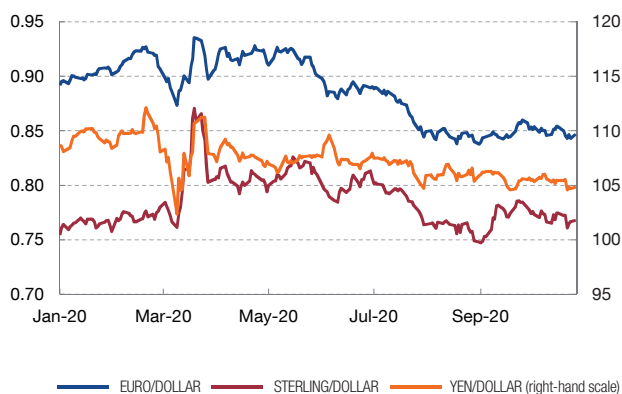
crisis and the sectoral composition of stock markets. In the United States, stock market indices have risen very sharply: the S&P 500 reached all-time highs over the summer and at the cut-off date for this report was slightly above the highs recorded in February. This performance has been led by the technology stocks, which account for a high share of the US stock market indices and whose profitability outlook has been comparatively less affected by the crisis. In the euro area, the EURO STOXX 50 posted a robust recovery up to early June but has since come to a halt, partly

Chart 1.6

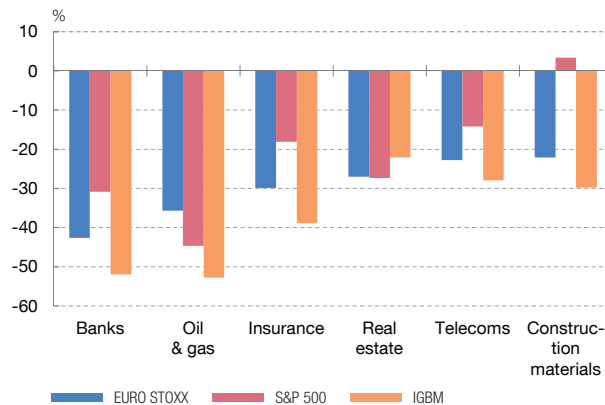
AGAINST THE BACKDROP OF US DOLLAR DEPRECIATION, AN UNEVEN SHARE PRICE RECOVERY BY SECTOR AND GEOGRAPHY HAS BEEN OBSERVED, WHILE SOVEREIGN RISK PREMIA DECLINED IN THE EURO AREA

US dollar depreciation against the other currencies is associated with the Federal Reserve’s more accommodative monetary policy. The stock market recovery has been uneven by sector and geography; the banking sector in particular has posted a negative performance. US stock prices are high compared with listed company earnings, which is not the case in the euro area and Spanish stock markets. Sovereign risk premia in the euro area have declined, assisted by the ECB’s asset purchase programme and the agreement adopted on the European fund to tackle the crisis caused by the pandemic.

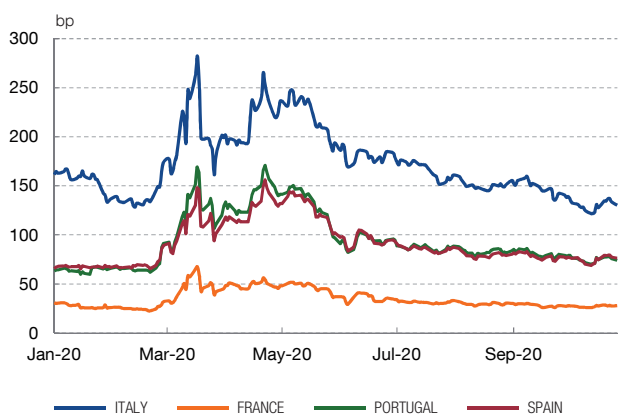
1 BILATERAL EXCHANGE RATES AGAINST THE DOLLAR



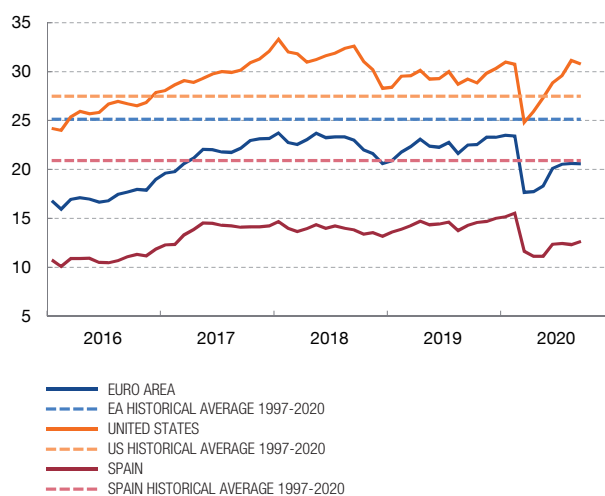
2 EURO STOXX SECTORS WITH MOST LOSSES AND EQUIVALENT FOR S&P 500 AND IGBM (FROM 21.2.2020 TO 26.10.2020)



3 10-YEAR YIELD SPREAD OVER GERMAN BENCHMARK



4 CYCLICALLY-ADJUSTED P/E (a)



SOURCES: Robert J. Shiller and Thomson Reuters Datastream.

a Cyclically-adjusted P/E is calculated as the share price to the 10-year moving average of earnings.

influenced by the worsening of the health crisis in some countries. At the cut-off date for this report, it stood 19.6% below the highs recorded in February (see Chart 1.5). By country, the stock market recovery appears to show a clear connection with the incidence of the pandemic on the respective economies.

The recovery in the stock markets has also been very uneven across sectors, with bank share prices still very much below their pre-crisis levels. Market

concern for the quality of banks' credit portfolios going forward, the pressure on their net interest income and the modest profitability outlook in the medium term all explain why bank share prices are recovering more slowly. At the cut-off date for this report, banking sector indices were down by more than 30% in the United States and 40% in the euro area, compared with February (see Chart 1.6). The fall is even more pronounced – above 50% – in the case of the Spanish stock market.

The decline in corporate credit risk premia has been most acute among high-yield bonds, whose premia rose the most when the crisis hit. Specifically, investment-grade bond premia have fallen compared with their highs in March, by 247 bp in the United States and by 117 bp in the euro area, while those of high-yield bonds, with a lower credit rating, have fallen by 429 bp and 303 bp, respectively. Central banks' asset purchase programmes have been pivotal in this development, along with improved market sentiment. These premia are still above the levels observed prior to the climbs recorded in late February and early March, although in the high-yield segment they are close to or below their historical average (see Chart 1.5).

This improvement in financing conditions in corporate debt markets has been accompanied by an increase in funds raised; part of firms' high liquidity needs have been met in this way. The volume of investment-grade corporate bond issuance in the year to September is significantly higher than that of the same period in previous years, in the United States and, to a lesser extent, in the euro area. The issuance volume in the United States is also higher than in previous years in the high-yield segment, by contrast to the case of the euro area. One possible reason for the greater dynamism in the US high-yield market could be that these securities are included in the central bank's asset purchase programme,⁷ which is not the case in the euro area.

The number of corporate bond downgrades has fallen significantly in recent months. In cumulative terms since the start of the crisis, the number of downgrades globally and in the euro area is 28% and 34.7% lower, respectively, than that observed in a period of the same length following the collapse of Lehman Brothers in September 2008. Moreover, in this case to date, downgrades from investment grade to high yield account for 4.6% globally and 5.3% in the euro area, figures which are lower than those observed following the collapse of Lehman Brothers (7.2% and 6.9%, respectively). In any event, further deterioration in the macroeconomic outlook could translate into renewed downgrades. In addition, the credit ratings of a large proportion of issues at the low end of investment grade have negative outlook.

Long-term yield spreads in the euro area sovereign debt markets have also narrowed, assisted by the ECB's asset purchase programme and by the European Union's decision to mobilise €750 billion to ease the economic

⁷ The Federal Reserve does not purchase these securities directly, but through ETFs.

damage caused by the pandemic. These spreads narrowed further following the ECB's announcement on 4 June that it was to extend the Pandemic Emergency Purchase Programme (PEPP) by €600 billion, and also following the European Council's agreement to create the NGEU Fund referred to above.⁸ At the cut-off date for this report, 10-year yield spreads over the German benchmark were still somewhat wider (some 10 bp wider in the case of Spanish yields) than those recorded before the increase in late February and early March (see Chart 1.6).

The rapid rise in the prices of risk assets in some segments, against a backdrop marked by persistent high uncertainty about the economic effects of the pandemic, has generated doubts as to their sustainability. The signs of high valuations are not widespread, and are most evident in certain markets, such as corporate high-yield, where yield spreads are close to or even below their historical average (see Chart 1.5) or in the US stock markets where the price-to-earnings ratio (P/E), in cyclically-adjusted terms,⁹ is somewhat above its historical average. By contrast, in the euro area and in Spain share prices do not seem high in comparison with listed company profits, in cyclically-adjusted terms (see Chart 1.6).

Any deterioration in the favourable expectations that seem to underlie the current price of certain assets, materialisation of any of the risks described in the previous section or large-scale corporate bond downgrades could prompt a correction in some asset valuations. In the case of credit rating downgrades, the effect would be especially acute if they represent a shift from investment grade to high yield. This is because some regulations and the investment mandates of some investors, including some central banks such as the ECB, require that investments be made exclusively in high-rated assets. Accordingly, any assets that lose their investment-grade status must be disposed of. As a result, the value of these securities could suddenly fall, which would have an adverse impact on financial stability through various channels. First, it would entail a tightening of financing conditions for the different agents, hampering their ability to repay their debts, on account of both the direct and indirect impact of the consequent macroeconomic deterioration. Second, financial intermediaries would suffer losses on their portfolios that included assets affected by the fall in value.

1.2.2 The real estate market in Spain

Housing demand is recovering slowly, after collapsing in the early months of the health crisis. Thus, as Chart 1.7 shows, registered housing sales fell by more

⁸ For more details, see Box 5, "Next Generation EU: Main characteristics and impact of its announcement on financial conditions", in the Quarterly Report on the Spanish Economy, Economic Bulletin 3/2020, Banco de España.

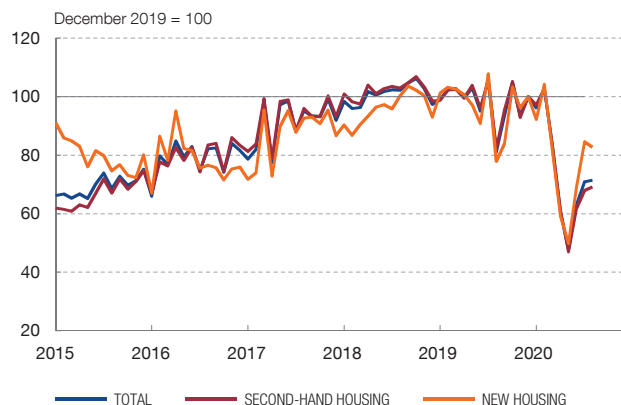
⁹ Cyclically-adjusted P/E is calculated as the share price to the 10-year moving average of corporate earnings.

Chart 1.7

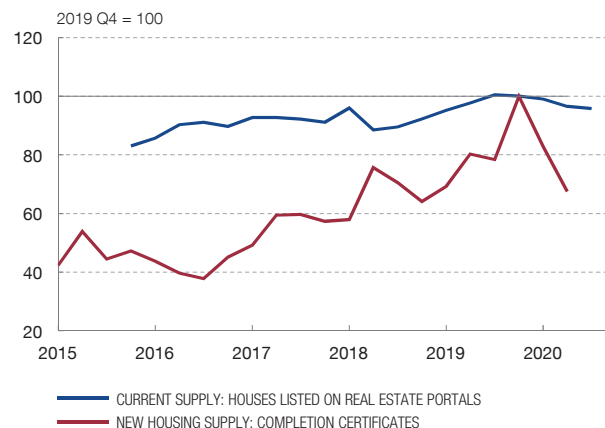
HOUSING MARKET SALES RECOVERED PARTIALLY FOLLOWING THE INITIAL IMPACT OF THE HEALTH CRISIS, WHICH INTENSIFIED THE SLOWDOWN IN PRICES IN THIS SECTOR (a)

Demand is showing more relative weakness than supply, against a backdrop of high uncertainty regarding how the pandemic unfolds and its potential impact on households' labour and financial situation. In this setting, the slowdown in the growth of housing prices already observed in 2019 has intensified.

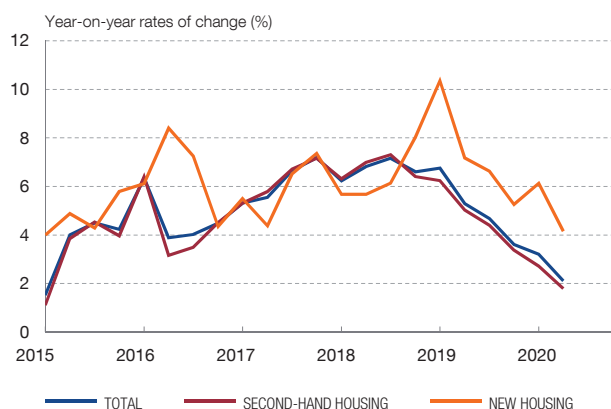
1 HOUSING SALES (b)



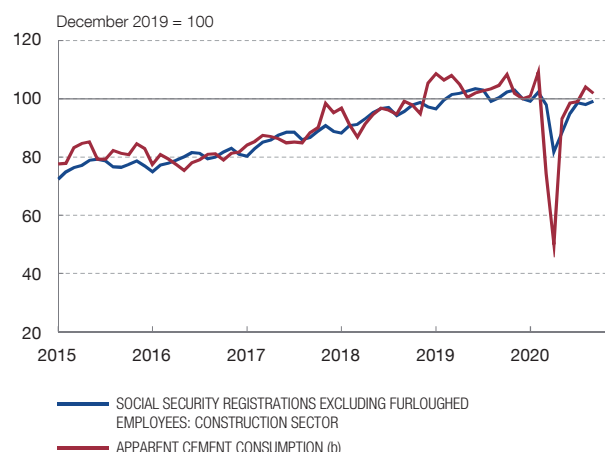
2 HOUSING SUPPLY



3 HOUSING PRICES



4 EFFECTIVE SOCIAL SECURITY REGISTRATIONS AND CEMENT PRODUCTION



SOURCES: Banco de España, Instituto Nacional de Estadística, Ministerio de Asuntos Económicos y Transformación Digital, Ministerio de Inclusión, Seguridad Social y Migraciones, Ministerio de Transportes, Movilidad y Agenda Urbana, and Tinsa.

- a Latest observation: 2020 Q2 (completion certificates, housing prices), Q3 (current housing supply), August (housing sales), September (social security registrations, apparent cement consumption).
- b Seasonally adjusted series.

than 50% year-on-year in May, the largest drop in the available historical series. Since then, sales have started to recover, assisted by the completion of house purchases that had been deferred during lockdown. Nevertheless, the figures remain below their pre-crisis levels.

Housing supply has contracted less than housing demand since the start of the pandemic (see Chart 1.7). Thus, the number of residential properties for sale on

the main real estate portals¹⁰ fell by something less than 5% in 2020 Q3 compared with the figure a year earlier. The supply of new housing, proxied by completion certificates, fell more acutely (by almost 16% year-on-year in Q2), although to a lesser extent than housing sales. The latest figures (to September) on other production indicators point to a significant recovery, to levels close to those of the same period a year earlier (see Chart 1.7).

The growth in house prices continued to moderate in 2020 H1, although with no sign of widespread decreases, on National Statistics Institute (INE) data to June. The average price of housing scarcely changed in Q2 in comparison with three months earlier, while the year-on-year rate of growth fell to 2.1%, compared with 3.6% at end-2019. The relative resilience of house prices to date compared with how they performed during the global financial crisis is due to various factors. The present crisis did not originate as a result of financial excesses and an oversized real estate sector. Moreover, although the decline in GDP has been more acute than in previous crises, the recovery is expected to be faster, although the outlook is clouded by great uncertainty. In addition, before the onset of the pandemic, there were no clear signs that the real estate market was either overvalued or oversized.

By contrast, rental market prices appear to have begun to fall in some areas. Specifically, according to figures from the main real estate portals to September, in recent months rental prices appear to be falling in most provincial capitals, especially in Catalonia, the Madrid region and the Balearic and Canary Islands. The increase in the residential rental supply to the detriment of the holiday rental supply triggered by the health crisis¹¹ appears to have contributed to the recent drop in prices in cities that have historically recorded more tourism activity. This is in addition to the deterioration in the labour market, which has had most impact on young people who are precisely those most likely to demand rental housing.

In the real estate credit market, credit standards have tightened somewhat and this, together with the sudden fall in demand for credit, has led to a sharp decline in new lending, even though the terms and conditions of loans granted appear to have barely changed since the onset of the pandemic. Thus, the Bank Lending Survey shows that financial institutions applied stricter credit standards in Q2 and Q3 as a consequence of the higher risks perceived. These intermediaries also indicated that loan applications had fallen dramatically between March and June, affected by the restrictions on mobility and the greater uncertainty. Interest rates on loans granted remained relatively stable and there was also little change in other conditions, such as the loan-to-price (LTP) ratio.

10 Information provided by Tinsa.

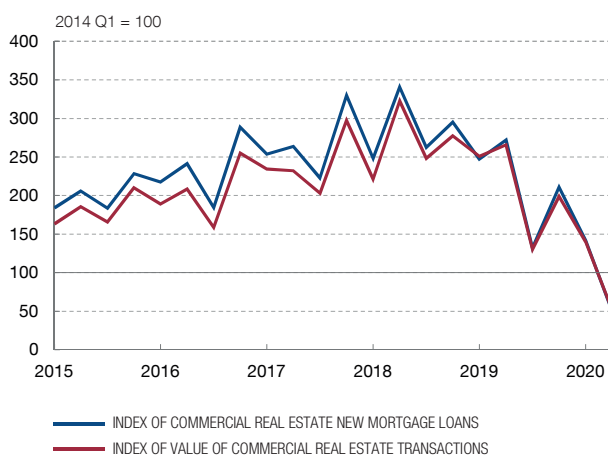
11 According to AirDNA data on two of the most active digital platforms in this segment (Airbnb and Vrbo), from the start of the pandemic to end-August the number of holiday rental properties in Spain fell by more than 8%.

Chart 1.8

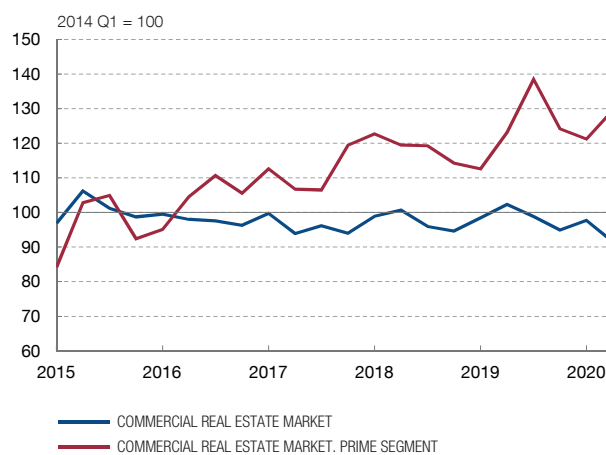
THE OUTBREAK OF THE PANDEMIC LED TO A SHARP FALL IN SALES IN THE COMMERCIAL REAL ESTATE MARKET AND A MORE MODERATE DECLINE IN SALE PRICES

The pandemic led to a sharp fall in transactions in 2020 H1. The contraction was more moderate in terms of prices, with differing developments in the prime segment.

1 NEW TRANSACTIONS IN THE COMMERCIAL REAL ESTATE SECTOR (a)



2 PRICE PER M2 IN THE COMMERCIAL REAL ESTATE MARKET (b)



SOURCE: Association of Registrars.

- a The credit includes any loan collateralised by commercial real estate. The value of commercial real estate transactions is obtained based on the number and price of these transactions, taking into account the aggregate value of all the transactions.
- b The indices of commercial real estate prices are calculated based on the median values of the prices of commercial real estate transactions in Spain as a whole or in prime locations. The prime segment refers mainly to sales of commercial premises in the main central business sectors of Madrid, Barcelona, Bilbao, Palma de Mallorca, Valencia and Málaga.

Sales also fell sharply in the commercial real estate market in 2020 Q2, down to levels close to those of the post-crisis trough in 2013. As Chart 1.8 shows, the total sales value fell by 80% year-on-year in Q2, on data from the Association of Registrars. This same source points to a similar drop in new credit transactions.¹² The breakdown by asset type shows similar decreases in all three market segments (offices, retail and industrial premises).

Sale prices in the commercial real estate market fell in Q2 (see Chart 1.8). According to data from the Association of Registrars, between March and June the median price per m2 in new transactions declined in all three segments in quarter-on-quarter terms, falling more sharply in offices (15.2%) than in retail (5.7%) or industrial premises (5.9%). By contrast, in the prime segment,¹³ this same indicator showed a positive change, although it is important to note that this series is more volatile.

12 Note that this figure, which comes from the Association of Registrars, may change owing to the delays in registrations in recent months.

13 The prime segment is defined (in accordance with the classification used by various specialist real estate consultancy firms) as the central business districts of six large cities: Madrid, Barcelona, Bilbao, Palma de Mallorca, Valencia and Málaga.

Credit standards in the commercial real estate market appear to have remained stable in 2020 Q2. In comparison with the housing market, transactions where LTP is under 80% continue to account for a much higher share in this segment, amounting to some three-quarters of all new transactions, compared with one-half in the residential segment. The stricter credit standards in the commercial real estate market are designed to offset to a certain extent the higher relative risk of these transactions, given borrowers' limited liability.

1.3 The non-financial sectors

1.3.1 Non-financial corporations and households

The increase in Spanish non-financial corporations' liquidity needs as a result of the COVID-19 crisis is mainly being covered through bank lending on very favourable conditions. This has been supported by the measures adopted by the authorities, including the ICO's guarantee facility and the improvement in the conditions of the ECB's longer-term refinancing operations.¹⁴ Against this backdrop, the balance of lending to non-financial corporations by domestic credit institutions increased at a record pace, from a year-on-year contraction of 1.1% in February to year-on-year growth of 8.1% in June, although this rate of growth has moderated slightly in the following months (see Chart 1.9).¹⁵ Fund raising in the capital markets recovered as financing conditions normalised, with the outstanding amount of this type of financing posting year-on-year growth of 8.4% in June, moderating somewhat in the following months, in line with bank lending. Part of this funding is being used by firms to maintain their liquidity buffers, often in the form of bank deposits, in view of the high level of uncertainty.

The impact of the COVID-19 crisis on corporate profits is proving to be very negative and uneven by sector and size. Although public income support measures such as the furlough schemes and moratoria on tax payments and social contributions have cushioned the impact of the fall in company turnover on profits, the information available for H1 evidences a strong contraction of corporate earnings. Thus, the average return on assets (ROA) halved, decreasing from 4% to 2%,¹⁶ while the percentage of firms with low returns increased (see Chart 1.9). The simulations performed and presented in Chart 1.9 point to a sharp contraction of firms' profitability

14 For more details on the characteristics of the loans benefiting from State guarantees, see Box 4.3 in Banco de España Annual Report 2019: "Developments in bank finance for productive activities in the context of the COVID-19 crisis".

15 In line with these developments, the Bank Lending Survey (BLS) for Q2 indicated an easing of credit standards both for large corporations and for SMEs and a strong increase in the demand for funds by the latter.

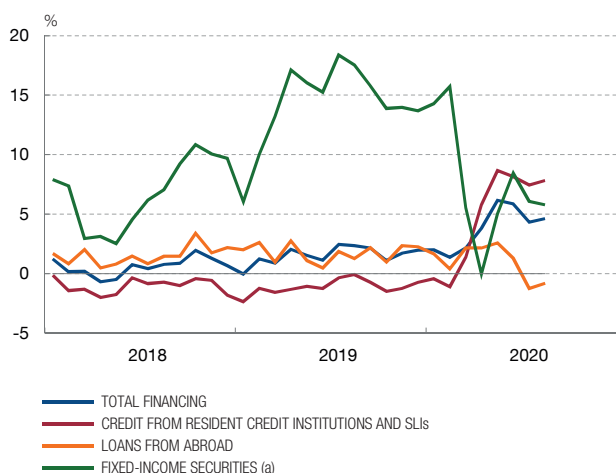
16 Data from the sample of companies from the Banco de España Central Balance Sheet Data Office (CBSO) database. For further details, see A. Menéndez and M. Mulino: "Results of non-financial corporations to 2020 Q2", Economic Bulletin 3/2020, Banco de España.

Chart 1.9

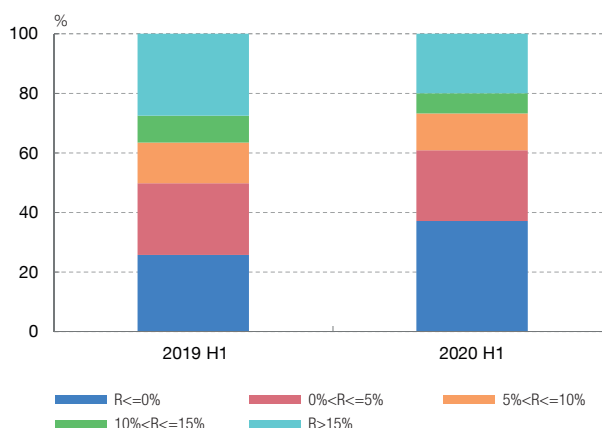
THE DEBT LEVEL OF FIRMS INCREASES IN RESPONSE TO THE LIQUIDITY NEEDS DERIVING FROM THE CRISIS, WHICH HAS ALSO STRONGLY REDUCED THEIR PROFITABILITY

The COVID-19 pandemic is generating an increase in the liquidity needs of Spanish companies in order to meet their payment commitments. These financing needs are being covered by means of bank loans and corporate debt issuance, a process that has been fostered by public guarantee programmes and by various measures adopted by the ECB. Also, the COVID-19 crisis is causing a strong fall in firms' income, profits and returns. At the aggregate level, the debt and financial burden ratios have also grown, in terms of GDP, likewise conditioned by the strong fall in output.

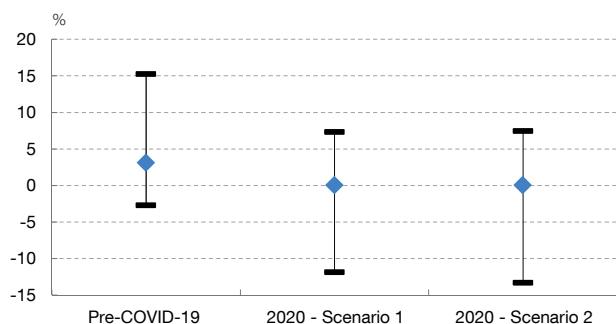
1 FINANCING OF NON-FINANCIAL CORPORATIONS
Year-on-year change



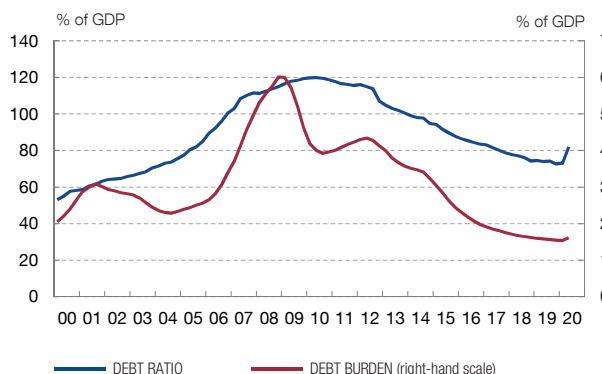
2 PERCENTAGE OF FIRMS BY RANGE OF RETURN ON ASSETS (b)



3 DISTRIBUTION OF RETURN ON ASSETS (c)



4 DEBT AND DEBT BURDEN RATIOS (d)



SOURCE: Banco de España.

- a The fixed-income securities series relates to net issuances.
- b The data are from the Central Balance Sheet Data Office quarterly survey (CBQ). Return on assets = (Ordinary net profit + Financial costs) / Assets net of non-interest-bearing borrowing.
- c Results obtained from the simulation of the income of Spanish non-financial corporations under two scenarios based on the extent of the fall in such income as a result of the health crisis. The points relate to the 25th percentile, the median and the 75th percentile. This exercise was carried out using the Central Balance Sheet Data Office integrated database (CBI) for 2018 and the same methodology was applied in R. Blanco, S. Mayordomo, A. Menéndez and M. Mulino (2020), "Spanish non-financial corporations' liquidity needs and solvency after the COVID-19 shock", Occasional Paper No 2020, Banco de España.
- d The debt burden of firms only includes interest payments, given the difficulty of reliably estimating the amount of repayment instalments.

in 2020 as a whole, although with a high degree of heterogeneity. The breakdown by firm type evidences that SMEs appear to be the ones trending most unfavourably as regards profitability, particularly companies in the accommodation and food service activities, leisure, motor vehicle, retail, transport and storage sectors.¹⁷

The increase in indebtedness and the decline in corporate earnings appear to be greater for SMEs and for firms operating in the sectors most affected by the pandemic. The aggregate debt ratio for the sector in terms of GDP has rebounded for the first time since 2010, to stand at 81% in 2020 Q2 (the highest level since 2017), owing to both the increase in debt and the fall in GDP (see Chart 1.9). These developments also seem to have resulted in a slight increase in the interest burden ratio, defined as interest payments relative to GDP, because the effect of the increase in debt on interest payments is recorded more gradually over time. Although the intensity of these increases will be corrected to some extent as the GDP data for the coming quarters are incorporated, the simulations shown in Box 1 also point to an impairment of the financial position, measured as the ratio of net debt to net assets at each firm, which would be worse in the SME segment and in the sectors most affected by the pandemic.

Aggregate household indebtedness has decreased in recent months as a result of the fall in new lending. The contraction was sharper in the consumer credit segment (see Chart 1.10), as a result of the decline in both demand and supply, the latter owing to greater risks perceived by lenders,¹⁸ affecting above all the most vulnerable groups. As mentioned earlier, new lending for house purchase also decreased, although less markedly. The only component that showed greater buoyancy was that of loans granted to sole proprietors, who were able to access both the State guarantee programme and the moratoria on financial obligations. Although loan moratoria, which affect 7% of the outstanding amount of loans to households,¹⁹ have slowed the fall in credit to this sector by reducing the volume of repayments, the year-on-year growth rate declined to -0.9% in August, compared with the increase of 0.3% recorded in February (see Box 1.2).

The crisis is also having a major impact on household income. Gross disposable income (GDI) in this sector declined by 8.8% in 2020 Q2 in year-on-year terms. This is mainly explained by the increase in unemployment, which rose from 14% at end-2019 to 16.3% in 2020 Q3, and by the number of workers subject to furlough schemes or short-time work arrangements, which peaked at around 3 million at end-May. This

17 For further details, see R. Blanco, S. Mayordomo, A. Menéndez and M. Mulino (2020): “Spanish non-financial corporations’ liquidity needs and solvency after the COVID-19 shock”, Occasional Paper No 2020, Banco de España.

18 See A. Menéndez (2020): “Bank Lending Survey in Spain: June 2020”. Economic Bulletin 3/2020, Banco de España,

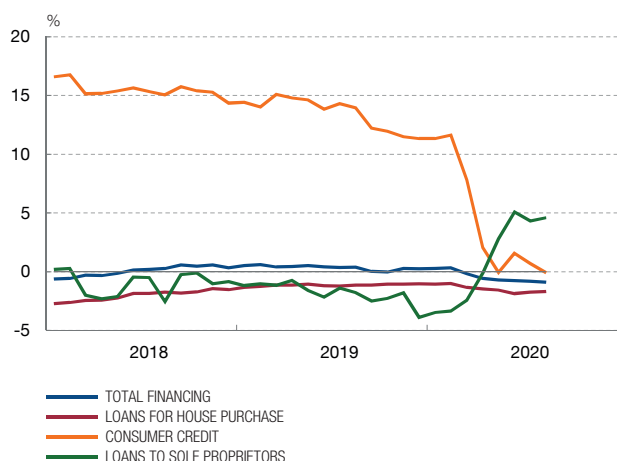
19 See Box 2, “Analysis of the loan moratorium schemes adopted in Spain in response to the COVID-19 crisis”, in the Analytical Article “Recent developments in financing and bank lending to the non-financial private sector”.

Chart 1.10

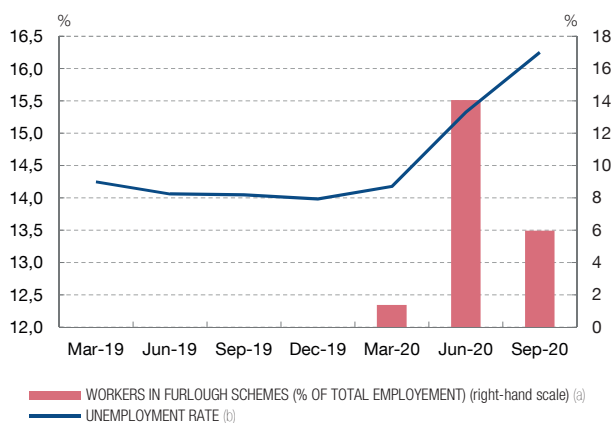
THE FINANCIAL SITUATION OF HOUSEHOLDS IS DETERIORATING OWING TO THE ADVERSE PERFORMANCE OF INCOME, DESPITE A REDUCTION IN DEBT

Lending to households has decreased owing to supply and demand factors. In spite of this, the debt and debt burden to gross disposable income ratios increased as a result of the decline in income. Savings increased significantly in Q2 for precautionary reasons resulting from the high uncertainty linked to the pandemic and owing to the lockdown measures, leading to a reduction in the consumption of certain goods and services. These savings were mainly channeled through bank deposits.

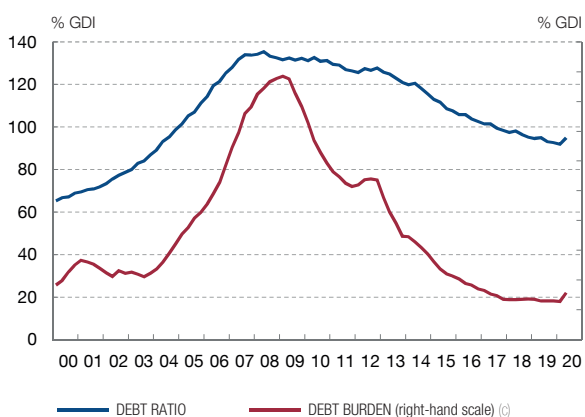
1 HOUSEHOLD FINANCING
Year-on-year change



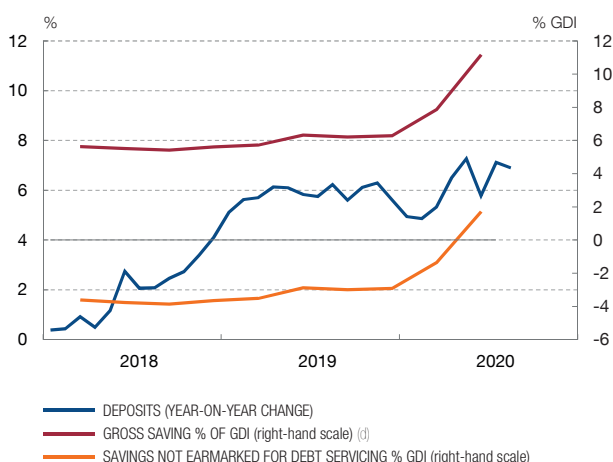
2 WORKERS IN FURLOUGH SCHEMES AND UNEMPLOYMENT RATE



3 DEBT AND DEBT BURDEN RATIOS



4 DEPOSITS AND GROSS SAVING RATE



SOURCE: Banco de España.

- a Furlough schemes (% of employment): monthly averages for Q1, Q2 and Q3.
- b The unemployment rate is seasonally adjusted.
- c The household financial burden comprises interest and debt principal repayments.
- d Gross saving % GDI: four quarters are accumulated for calculating gross disposable income.

figure has since declined gradually to somewhat more than 725,000 in late September (see Chart 1.10).²⁰

²⁰ Under current regulations, after six months, benefits under these schemes drop from 70% to 50% of salary. Unemployment benefits are lower than the previous salary and last according to each worker's circumstances.

This fall in income increases financial pressure on households. Although household debt has not risen in the wake of the crisis, the drop in income hampers households' ability to repay their debts. Thus, the debt-to-GDI ratio for the sector as a whole increased by nearly 2 pp in H1 to 95% (see Chart 1.10). These developments also resulted in an increase in the debt burden ratio (defined as interest payments and debt repayments as a percentage of GDI), which rose by 28 bp to 11.6%, despite the fact that average financial costs have not increased. Once again, the scale of this increase will moderate to some extent with GDI Q3 data. Also, loan moratoria for the most vulnerable households have helped mitigate these effects to date, but their duration is limited. Thus, financial pressure for some groups might rise once the moratoria expire. The increase in household savings not earmarked for debt servicing, resulting from the strong fall in consumption, seems to have been channelled towards bank deposits, which posted year-on-year growth of 6.9% in August (see Chart 1.10). However, there is no up-to-date information on the distribution of these savings in the household sector, making it difficult to assess the degree to which this development may mitigate the higher degree of financial pressure for certain household groups.

1.3.2 General government in Spain

Recent developments in public finances reflect the impact of the pandemic, which has been particularly severe in Spain, and of the measures adopted to contain it. The latest information available reflects a substantial increase in the general government deficit, which in June stood, in cumulative 12-month terms, at 6.9% of GDP, somewhat more than 4 pp above the level recorded in 2019 (see Chart 1.11). This figure reflects, in part, the fall in income, especially concentrated during the spring, when there were more restrictions in place, and the increase in expenditure. Somewhat more than 70% of this increase in expenses is explained by the discretionary measures adopted in response to COVID-19. General government debt rose in June to 110% of GDP (14.6 pp more than in December 2019), in part as a result of the public finances shortfall in H1. However, this was also due to debt issuances scheduled for the year being brought forward, leading to an increase in the financial assets held by general government vis-à-vis the other sectors of 3 pp of GDP in H1.

The latest scenarios published by the Banco de España in September²¹ anticipate a very pronounced shortfall in the general government balance for 2020 as a whole and a partial correction over the following two years. In comparison with those published in June, the latest scenarios include the new budgetary measures approved over the summer (the minimum income scheme,

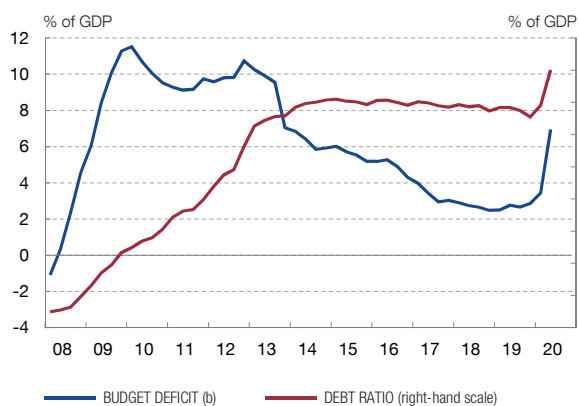
²¹ See [Macroeconomic scenarios for the Spanish economy \(2020-2022\)](#).

Chart 1.11

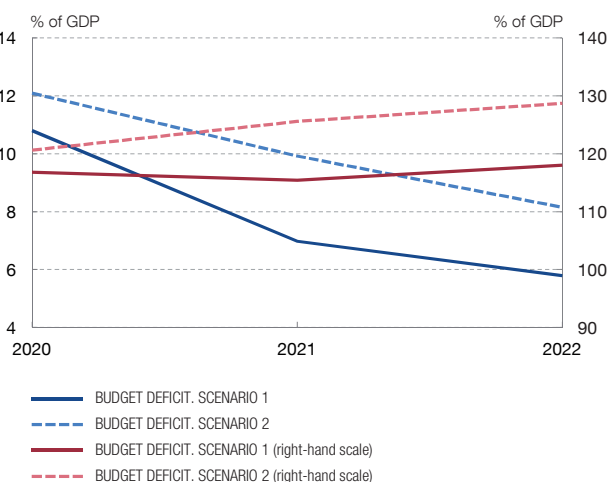
THE COVID-19 PANDEMIC WILL HAVE A STRONG NEGATIVE IMPACT ON THE SPANISH GENERAL GOVERNMENT'S FINANCIAL POSITION

The high impact of the COVID-19 pandemic on Spanish public finances increases the vulnerability of Spanish general government to possible additional shocks. The response of the European authorities significantly mitigates these risks in the short term, but it does not prevent the need for a consolidation process that is credible and sustained over the medium term, once the effects of the crisis have been overcome.

1 GENERAL GOVERNMENT FINANCIAL POSITION



2 BANCO DE ESPAÑA FORECASTS (a)



SOURCES: Intervención General de la Administración del Estado and Banco de España.

a Macroeconomic scenarios of the Banco de España projections published in September 2020. Scenario 1 envisages the emergence of fresh outbreaks that would only require containment measures of limited scope, both from a geographical standpoint and in terms of the sectors affected. Scenario 2 envisages more intense outbreaks of the pandemic which, nonetheless, would not require the application of such strict and widespread containment measures as those that were in force before lockdown began to be eased.

b Four-quarter cumulative data.

extension from 30 June to 30 September of the extraordinary measures relating to the furlough and temporary discontinuation of activity schemes for the self-employed, the regional government financing fund and extension of the guarantee facilities for loans to firms). In accordance with the assumptions used, the general government balance in 2020 could stand at -10.8% or -12.1% of GDP, depending on whether the macroeconomic scenario that ultimately materialises is closer to the first or the second scenario considered in September by the Banco de España (see Chart 1.11). The temporary nature of the bulk of the discretionary measures approved this year, together with the expected cyclical improvement, would help correct the public finances shortfall in 2021 and 2022, although in 2022 it would still stand above 5% of GDP under either scenario, significantly higher than in 2019.

The increase in public debt will be very pronounced in 2020, heightening the challenges facing Spanish public finances. The debt ratio this year would grow by more than 20 pp under scenario 1 and by around 25 pp under scenario 2, to stand at 116.8% and 120.6% of GDP, respectively. The ratio would continue to increase, in cumulative terms, during the following two-year period, particularly under scenario 2. The crisis has a temporary component, which would allow for a significant recovery

of the general government balance in the coming years, once the crisis is over. However, general government will emerge from this crisis in a vulnerable position for several reasons. These include the foreseeably high debt level that will be reached, the probable existence of persistent negative effects of the crisis on economic activity, the high structural component present in the budget deficit even before the COVID-19 outbreak, the significant contingent commitments arising from the measures implemented and the challenges derived from population ageing.²²

The European authorities' response significantly mitigates short-term risks.

This response has been forceful, largely because the COVID-19 shock is common to the EU as a whole. In turn, the actions taken acknowledge the different needs of the Member States based on how hard they have been hit by the pandemic, thus supporting the construction of the European project. The monetary measures adopted by the ECB, particularly the PEPP, are helping to prevent tensions in the sovereign debt markets, fostering very favourable financing conditions which will foreseeably remain in place in the coming quarters. In the fiscal field, in addition to the support measures adopted by the European institutions in spring, there is the aforementioned NGEU fund, from which Spain could receive up to €140 billion through loans and grants, roughly in equal parts.

Once the current crisis has been overcome, restoring Spanish public finances will require a considerable effort. When the pandemic is over, general government will foreseeably have very high financing needs and debt levels, which will require a very large effort to correct. However, this effort should be delayed until the Spanish economy has fully recovered from the effects of the crisis. Authorities will then have to implement a credible and sufficient consolidation programme over a protracted period, providing headroom to respond to other possible shocks and fostering long-term growth.

1.3.3 Financial flows vis-à-vis the rest of the world and the international investment position

The health crisis has also affected financial flows between the Spanish economy and the rest of the world. In 2020 Q2 the financial account of the balance of payments, excluding the Banco de España, had a credit balance of €43 billion, the highest since 2017 Q1 (see Chart 1.12). There were substantial divestments out of non-residents' portfolios in the early months of the pandemic, which subsequently reversed, in line with the easing of tensions on the international financial markets. As regards other investments, in April there was a strong drop in deposits of foreign nationals at Spanish banks. Overall, these declines in foreign liabilities, together with

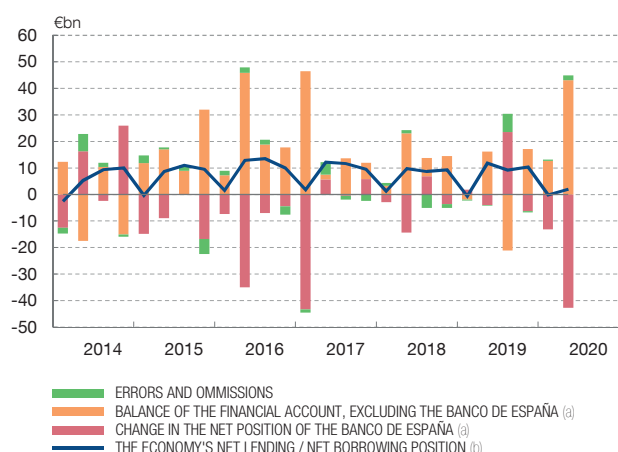
22 See [Chapter 4](#) of Banco de España Annual Report 2018.

Chart 1.12

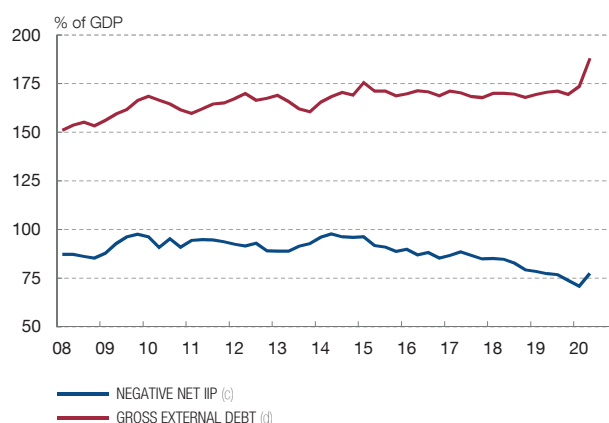
FOREIGN CAPITAL INFLOWS DECLINED IN THE EARLY MONTHS OF THE HEALTH CRISIS, WHILE THE NEGATIVE NET IIP AND THE GROSS EXTERNAL DEBT OF THE ECONOMY INCREASED

Following the outbreak of the health crisis, the credit balance of the financial account increased, mainly owing to the divestment of the rest of the world in Spain, a movement that reversed subsequently. This increase was concentrated in March and, especially, April, reversing in May and June.

1 THE ECONOMY'S NET LENDING/NET BORROWING POSITION AND FINANCIAL TRANSACTIONS WITH THE REST OF THE WORLD



2 NEGATIVE NET IIP AND GROSS EXTERNAL DEBT



SOURCE: Banco de España.

- a Net change in assets less net change in liabilities.
- b A positive (negative) value in the series denotes a credit (debit) position.
- c The negative net IIP is the difference between the value of the external liabilities of the resident sectors and that of the assets to the rest of the world.
- d External debt comprises the balance of all liabilities that entail future repayment of principal, interest or both (i.e. all final instruments, except equity securities, financial derivatives and monetary gold bullion).

the Eurosystem's asset purchase programmes, seem to have conditioned the performance of the financial account of the Banco de España. Since March, it has shown a high debit balance, although it has moderated in recent months since external capital inflows into the Spanish economy resumed.

The negative net international investment position of the Spanish economy and the external debt have risen, in terms of GDP, owing to valuation effects and the decline in output. The Spanish economy's negative net IIP increased by €30 billion in 2020 Q2, owing to negative valuation effects and other adjustments, since the flow of financial transactions with the rest of the world was slightly positive. Relative to GDP, the negative net IIP stood at 77.5%, up 6.5 pp from the previous quarter, influenced by the strong contraction of output. The nation's gross external debt rose by €56.8 billion in 2020 Q2, owing to valuation effects, standing at 188.3% in terms of GDP, its all-time high (see Chart 1.12). The Spanish economy's high net debtor position continues to be an element of vulnerability, particularly in the current setting of high uncertainty about future economic developments.

THE INDEBTEDNESS OF THE SPANISH NON-FINANCIAL CORPORATE SECTOR: RECENT DEVELOPMENTS AND ECONOMIC IMPLICATIONS

The crisis triggered by the COVID-19 pandemic has led to a sharp loss of revenue for firms, which has meant that they have taken on greater debt to cover their short-term liquidity needs. This increase in borrowing by the corporate sector, along with the strong decline in GDP, resulted in a significant rise in this sector's debt ratio in H1 2020, breaking the downward trend observed since 2015.

In order to assess the economic and financial implications of the increase in corporate indebtedness, this indicator, which is based on aggregate data, should be complemented with a more granular analysis, to identify firms whose financial ratios exceed certain vulnerability thresholds.

Accordingly, this box shows the results of an exercise which simulates the changes in the distribution of two complementary corporate debt indicators in 2020, under two alternative macroeconomic scenarios.^{1,2} The first, more structural, indicator relates net debt (defined as interest-bearing liabilities minus liquid assets and short-term financial investments) to net assets (total assets minus non-interest-bearing liabilities), while the second indicator, calculated as the ratio of net debt to ordinary profit (defined as gross operating profit plus financial revenue), measures firms' ability to meet their debt obligations with the funds generated by their activities.

The first four charts present the results obtained using the first indicator. Chart 1 shows the distribution of firms according to different net debt-to-net asset ratio percentile ranges, before the health crisis³ and in 2020 under the two macroeconomic scenarios. In 2020, a shift in the distribution of firms towards higher debt ratio values is observed, with the increase concentrated in the upper percentile range (ratio above 0.75). The percentage of firms in this situation rises by six or seven percentage points to 20-21%, compared with pre-COVID-19 levels, depending on the scenario used. In terms of the number of firms and employment, the breakdown by size and sector reveals that the sectors recording the sharpest deterioration would be SMEs and the hospitality and

leisure, motor vehicles and, albeit to a lesser extent, transport and storage sectors (see Charts 2 and 3). Lastly, Chart 4 shows that the increase in debt would be more pronounced in the percentile ranges that include firms with lower debt ratios (below 0.25). This is consistent with the fact that smaller firms, which generally have lower levels of debt, would be the most affected by growing indebtedness.

Conversely, in the upper tail of the distribution the increases are very small, to some extent mitigating the incremental risks for financial stability, since it means that the debt of the most vulnerable firms according to this indicator would barely grow. In any event, it should be borne in mind that the volume of debt in this segment is relatively high, close to 20% GDP in 2019.

Charts 5 to 8 show the results obtained using the second indicator, which relates net debt to ordinary profit. Overall, the conclusions are similar to those drawn using the debt-to-asset ratio, although the increase in the number of firms whose ratio is higher than 10 or with profit in negative territory, is more marked (between 16 and 17 pp, depending on the scenario). The breakdown by size confirms that the largest increases, both in the number of firms and in terms of employment, would affect SMEs, although the differences are less marked than for the debt ratio. The most affected sectors would be those already mentioned using the debt-to-asset ratio (see Charts 6 and 7). Lastly, Chart 8 illustrates that, by contrast with the first indicator, the increase in debt is concentrated in the percentile range of firms in a more vulnerable financial position. In any event, it should be noted that these results are strongly influenced by firms' exceptionally low level of income in 2020, which in most cases is not representative of the expected levels for this variable in the medium and long term. Thus, in the current economic situation, this indicator tends to exaggerate firms' solvency problems.

Looking ahead, higher corporate indebtedness may have potentially adverse consequences for economic

1 This exercise was conducted using the annual Integrated Central Balance Sheet Data Office (CBSO) database, which provides individualised information on around 500,000 firms for 2018, the last available year, and extrapolating the results to the corporate sector as a whole. The methodology applied is the same as that used in Occasional Paper No. 2020 *Spanish non-financial corporations' liquidity needs and solvency after the COVID-19 shock*, by Roberto Blanco, Sergio Mayordomo, Álvaro Menéndez and Maristela Mulino, published by the Banco de España in July.

2 The two macroeconomic scenarios considered are those published by the Banco de España on 16 September (*Macroeconomic scenarios for the Spanish economy (2020-2022)*).

3 The pre-health crisis situation is based on the latest available data corresponding to 2018.

Box 1.1

THE INDEBTEDNESS OF THE SPANISH NON-FINANCIAL CORPORATE SECTOR: RECENT DEVELOPMENTS AND ECONOMIC IMPLICATIONS (cont'd)

Chart 1
PERCENTAGE OF FIRMS BY THE NET DEBT-TO-NET ASSETS RATIO DISTRIBUTION (a) (b)

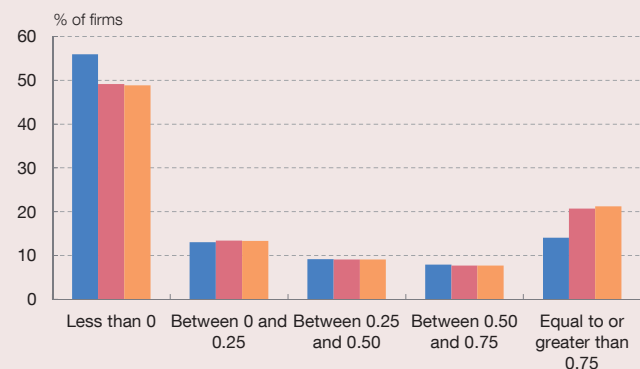


Chart 2
MOST VULNERABLE FIRMS ACCORDING TO THE NET DEBT-TO-NET ASSETS RATIO. PERCENTAGE (a) (b) (c)

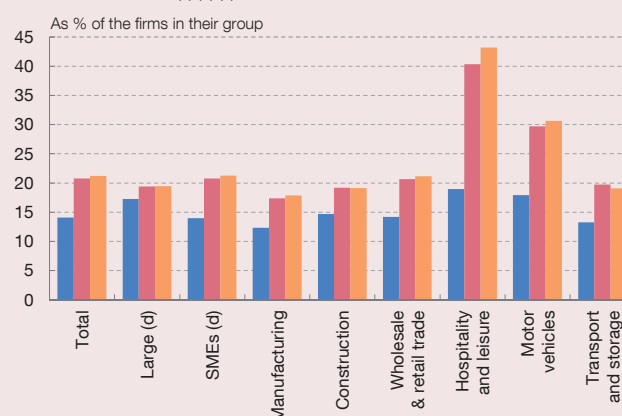


Chart 3
MOST VULNERABLE FIRMS ACCORDING TO THE NET DEBT-TO-NET ASSETS RATIO. SHARE OF EMPLOYMENT (a) (b) (c)

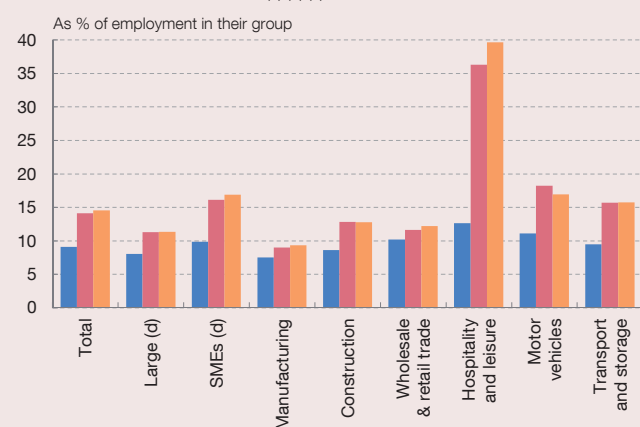
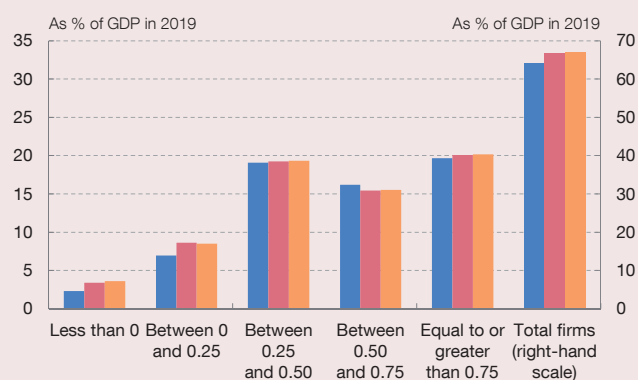


Chart 4
FIRMS' DEBT BY NET DEBT-TO-NET ASSETS RATIO DISTRIBUTION (a) (b) (c)



■ PRE-COVID-19 ■ 2020 - SCENARIO 1 ■ 2020 - SCENARIO 2

SOURCE: Banco de España.

- a Findings after December 2019 obtained on the basis of assumptions on two alternative macroeconomic scenarios, published by the Banco de España on 16 September (*Macroeconomic scenarios for the Spanish economy (2020-2022)*).
- b Net debt is defined as interest-bearing borrowing minus cash and other equivalent liquid assets and short-term financial investments. Net assets are defined as total assets net of non-interest-bearing borrowing.
- c The most vulnerable firms are those whose debt ratio exceeds 0.75. Excludes holding companies and financial services sector firms.
- d The definition of sizes is in line with European Commission Recommendation 2003/361/EC.

growth and financial stability. First, higher debt levels increase the debt burden arising both from interest payments (whose average rate will tend to rise *ceteris paribus*) and from principal repayments, which may diminish funds destined to finance new investments or for new hires. These contractionary effects will tend to

ease depending on the speed at which firms are able to recover their pre-crisis activity levels, allowing them to generate profits and gradually reduce their debt levels.

Given the current macroeconomic projections, which suggest that pre-crisis GDP levels will not be attained before 2022, presumably not all firms will be able to

Box 1.1

THE INDEBTEDNESS OF THE SPANISH NON-FINANCIAL CORPORATE SECTOR: RECENT DEVELOPMENTS AND ECONOMIC IMPLICATIONS (cont'd)

Chart 5
PERCENTAGE OF FIRMS BY THE NET DEBT-TO-(GROSS OPERATING PROFIT + FINANCIAL REVENUE) DISTRIBUTION (a) (b) (c)

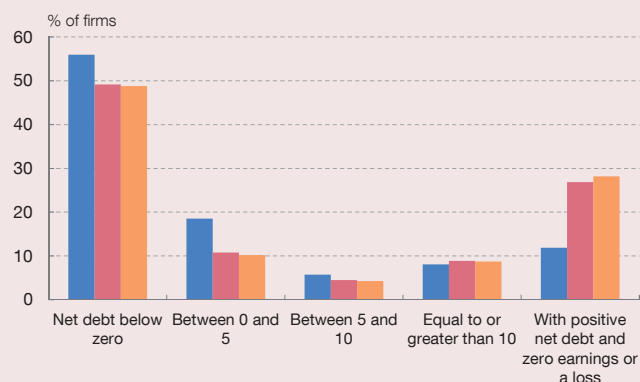


Chart 6
MOST VULNERABLE FIRMS ACCORDING TO THE NET DEBT-TO-ORDINARY PROFIT RATIO. PERCENTAGE (a) (b) (c)



Chart 7
MOST VULNERABLE FIRMS ACCORDING TO THE NET DEBT-TO-ORDINARY PROFIT RATIO. SHARE IN EMPLOYMENT (a) (b) (c)

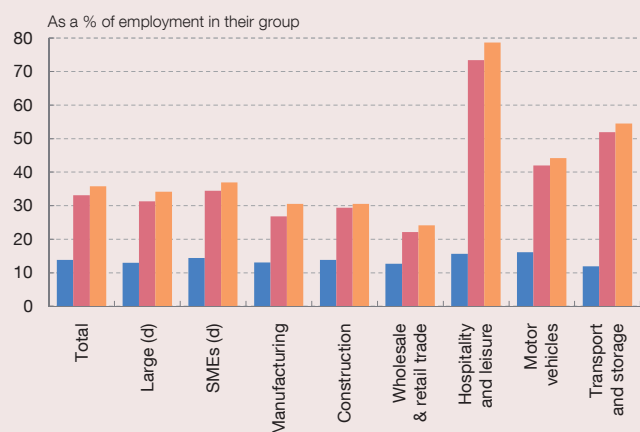
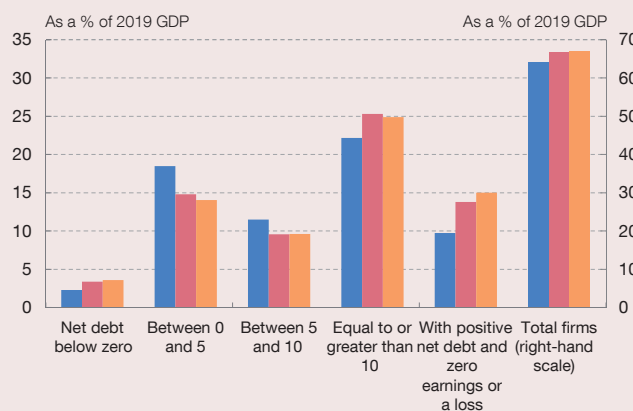


Chart 8
FIRMS' INDEBTEDNESS BY DEBT RATIO DISTRIBUTION (a) (b)



PRE-COVID-19 2020 - SCENARIO 1 2020 - SCENARIO 2

SOURCE: Banco de España.

- a Findings after December 2019 obtained on the basis of assumptions on two alternative macroeconomic scenarios, published by the Banco de España on 16 September (*Macroeconomic scenarios for the Spanish economy (2020-2022)*).
- b Net debt is defined as interest-bearing borrowing minus cash and other equivalent liquid assets and short-term financial investments.
- c The most vulnerable firms are those whose ratio of net debt to ordinary profit is higher than 10, or with positive net debt but zero earnings or a loss. Excludes holding companies and financial services sector firms.
- d The definition of sizes is in line with [European Commission Recommendation 2003/361/EC](#).

return to their pre-pandemic activity levels, at least in the short term. Firms with a weaker recovery or a higher accumulation of debt could face difficulties in meeting their financial commitments.

For firms in this situation whose viability is not compromised in the long term, a feasible alternative could be debt restructuring (by means of grace periods,

extended repayment periods, debt reductions or the conversion of debt into equity). Although this would entail losses for creditors, in many cases such losses would probably be lower than those incurred if the firms were wound up. Moreover, a firm's survival would prevent the economic cost of closing it down, in terms of job losses and depletion of the productive system.

Box 1.1

THE INDEBTEDNESS OF THE SPANISH NON-FINANCIAL CORPORATE SECTOR: RECENT DEVELOPMENTS AND ECONOMIC IMPLICATIONS (cont'd)

By contrast, firms with viability problems will have to close down and liquidate their assets, entailing short-term costs both for creditors, who will have to assume losses, and for the economy as a whole, as a result of the destruction of

jobs and of part of the productive system. The swift resolution of such processes would favour economic growth in the long term, enabling resources to be reallocated to more productive firms or firms with greater growth potential.

LOAN MORATORIA DEVELOPMENTS, ANALYSIS OF CHARACTERISTICS OF BENEFICIARIES AND OF THE POTENTIAL IMPACT ON DEFAULT

The measures approved to address the social and economic impact of the pandemic notably include moratoria on mortgage debts and other credit agreements. These measures suspend repayments of principal and/or interest payments on these loans. The box describes how the moratoria have evolved since they were approved.¹ It also presents an econometric analysis of the characteristics of the beneficiaries of the mortgage moratoria, and it concludes with a counterfactual analysis of banks' non-performing loan ratios in the extreme hypothesis that the moratoria measures were not approved and that all the borrowers benefiting from the moratoria defaulted on their loans. The box also provides for compliance with the ESRB recommendation of May 2020.²

To date, five different types of moratoria have been approved: (i) legislative moratoria for mortgage debts³ and (ii) for non-mortgage loan agreements;⁴ (iii) the special system for moratoria agreements between lenders and their customers through the banking sector associations,⁵ both for mortgage and non-mortgage loans; (iv) the specific moratoria for the tourism sector;⁶ and (v) the specific moratoria for the public transport of goods and the charter bus sector.⁷

Chart 1 shows how the total number of moratorium applications has risen over time, with acceptance rates remaining at high levels since May. Up to end-September, more than 1,507,000 moratorium applications had been presented, of which more than 89% had been granted. This extremely high percentage

of acceptance is common across institutions. The legislative moratoria on mortgage payments initially saw a very high rate of growth, but since May, less than two months after their approval, the number of applications has stabilised. In the case of the legislative moratoria on non-mortgage debts, applications continued to grow at a good pace up to June. Lastly, the rate of growth of the banking sector moratoria, which were the last to be approved, has outpaced that of the initial legislative moratoria and has not yet stabilised. Applications numbered more than 787,000 at end-September, with a high rate of acceptance (92.5%).⁸

In terms of the outstanding amount of the loans suspended, the mortgage moratoria have suspended loan payments in excess of €20.5 billion. This is very much above the almost €3 billion for the non-mortgage moratoria, but below the €28.7 billion suspended by the banking sector moratoria (see Chart 2). Overall, the outstanding amount of payments suspended by all types of moratoria⁹ exceeds €52 billion. This is 7.9% of the total credit stock currently on balance sheet granted by Spanish credit institutions in the loan portfolios eligible for the moratoria measures and 4.7% of bank credit to the non-financial private sector.

To describe the type of households that have accessed any of the legislative or non-legislative (banking sector) mortgage moratoria, an econometric analysis was performed with data from April to July 2020. The study drew on mortgage-level data taken from the Banco de España's Central Credit Register (CCR) and a linear

1 For a supplementary analysis of the moratoria programme, see Box 2 of "Recent developments in financing and bank lending to the non-financial private sector", Analytical Article, Economic Bulletin 4/2020, Banco de España

2 Recommendation ESRB/2020/8 of the European Systemic Risk Board of 27 May 2020 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic.

3 Royal Decree-Law 8/2020 of 17 March 2020 on extraordinary urgent measures to address the economic and social impact of COVID-19.

4 Royal Decree-Law 11/2020 of 31 March 2020 adopting supplementary urgent economic and social measures to address the impact of COVID-19.

5 Royal Decree-Law 19/2020 of 26 May 2020 adopting supplementary measures in the agricultural, scientific, economic, employment and social security and taxation sphere to alleviate the effects of COVID-19.

6 Royal Decree-Law 25/2020 of 3 July 2020 on urgent measures to support economic recovery and employment.

7 Royal Decree-Law 26/2020 of 7 July 2020 on economic recovery measures to address the impact of COVID-19 on transport and housing.

8 For the two most recent types of moratorium, related to the tourism and transport sectors, the number of applications received and granted is much lower. Specifically, at end-September, 816 applications for legislative moratoria for the tourism sector had been received, of which 376 had been granted, and 1,170 applications for legislative moratoria for the transport sector, of which 818 had been granted.

9 As indicated above, the number of applications received and granted for the last two types of moratorium is much lower: hence, the outstanding amount of loan repayments suspended by the respective moratoria measures is €575 million in the case of the tourism sector and €62 million in the case of the transport sector

Box 1.2

LOAN MORATORIA DEVELOPMENTS, ANALYSIS OF CHARACTERISTICS OF BENEFICIARIES AND OF THE POTENTIAL IMPACT ON DEFAULT (cont'd)

Chart 1
CHANGE IN CUMULATIVE TOTAL APPLICATIONS AND IN RATE OF ACCEPTANCE BY MORATORIUM TYPE (a) (b)

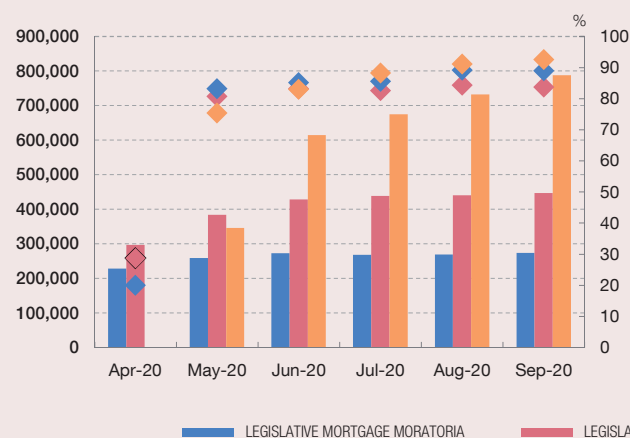
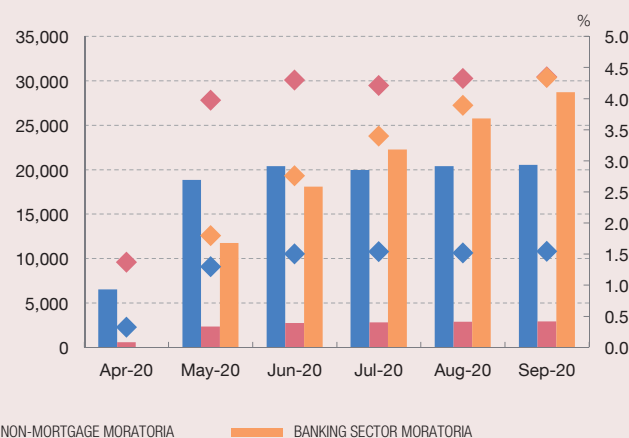


Chart 2
CHANGE IN AMOUNT OF MORATORIA AND IN ITS PROPORTION OF TOTAL ELIGIBLE CREDIT UNDER MORATORIUM PROGRAMMES (c) (d)



SOURCE: Banco de España.

- a The number of applications and the acceptance rate for legislative mortgage moratoria in July were slightly lower than in June because in July banks removed from their reported data applications that had been submitted but then withdrawn by customers.
- b For each moratorium programme, the bar depicts the cumulative total applications (left-hand axis) and the diamond (right-hand axis) the percentage of that cumulative volume approved.
- c For each moratorium programme, the bar depicts the credit volume subject to the programme (left-hand axis) and the diamond (right-hand axis) the percentage this represents of the total credit qualifying for moratoria (e.g. legislative mortgage moratoria as a percentage of total mortgage credit to individuals).
- d The outstanding amount and the percentage this represents of the total amount of legislative mortgage moratoria in July were slightly lower than in June because in July banks removed from their reported data applications that had been submitted but then withdrawn by customers.

probability model was estimated with more than 5.3 million observations corresponding to existing mortgages.

The dependent variable in the study is access to the moratoria programmes, while the explanatory variables include characteristics of the borrower, the mortgage agreement and the lending bank. For borrowers, these variables specifically include the economic situation of their home region, their average household income drawing on postcode level data from the National Statistics Institute (INE) for 2016, the age of the household head, their credit record and total bank debt-to-income ratio in 2019, and the profession of the household head or industry in which he/she works if self-employed. The loan data include the debt servicing-to-income ratio at origination, whether or not there is a guarantor, and the loan maturity. In addition, at the regional level, controls were included for the impact of the pandemic on employment, through the percentage of workers subject to short-time work arrangements and the unemployment rate (both statistics obtained from the National Public Employment Service (SEPE)). Lastly,

to test the level of heterogeneity across banks, the specification includes controls for the size of the bank and its leverage, liquidity, return on assets and non-performing loan ratios, among other factors.

The findings show very robustly that the households that were more disadvantaged or more vulnerable before the pandemic are those that have made most use of the moratoria. In this respect, it is important to recall that in order to qualify for moratoria, individuals must satisfy certain conditions relating to their purchasing power before the pandemic and the impact the pandemic has had on their economic situation. In consequence, lower income households with worse credit records or who are in default, with higher debt-to-income ratios in 2019, with higher mortgage debt service rates (at origination) and with mortgage guarantors are those most likely to obtain a moratorium on their mortgage payments.

If the differences between households in the first and fifth quintiles of the distribution are measured in terms of bank debt-to-average income at end-2019 (see Chart

Box 1.2

LOAN MORATORIA DEVELOPMENTS, ANALYSIS OF CHARACTERISTICS OF BENEFICIARIES AND OF THE POTENTIAL IMPACT ON DEFAULT (cont'd)

Chart 3
PERCENTAGE IN 2019 OF MORTGAGES SUBJECT TO MORATORIA BY QUINTILES OF TBD/AI RATIO (a) (b)

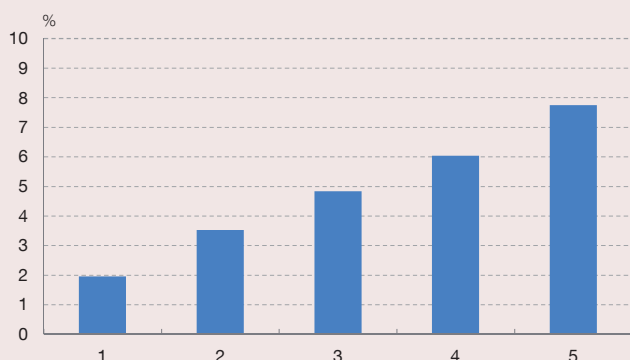


Chart 4
PERCENTAGE IN 2019 OF MORTGAGES SUBJECT TO MORATORIA BY QUINTILES OF TBD/AI RATIO AND AVERAGE HOUSEHOLD INCOME (b) (c)

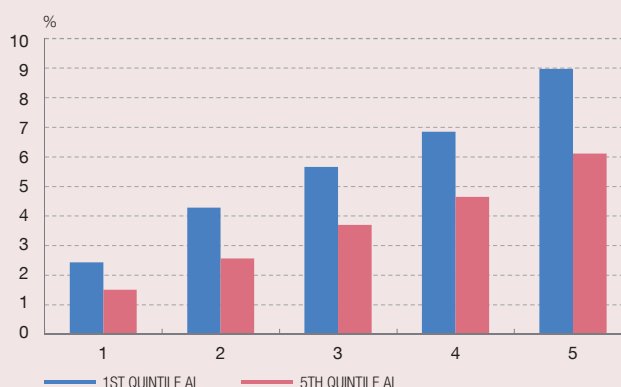
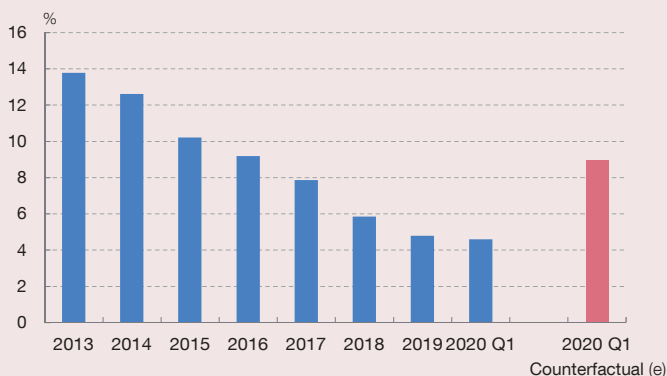


Chart 5
PERCENTAGE IN 2019 OF MORTGAGES SUBJECT TO MORATORIA BY QUINTILES OF TBD/AI RATIO, AVERAGE HOUSEHOLD INCOME AND MORTGAGE DEBT SERVICING (b) (d)



Chart 6
RATIO OF NON-PERFORMING CREDIT TO THE RESIDENT PRIVATE SECTOR: 2013-2020 DATA AND COUNTERFACTUAL IN EVENT OF NO MORATORIA AND MAXIMUM DEFAULT IN 2020 Q1



SOURCE: Banco de España.

- a For the TBD/AI ratio (total bank debt in 2019 to average household income), the quintiles of the distribution have been calculated. For each quintile the chart shows the mortgages subject to moratoria as a percentage of the total mortgages in the system corresponding to households in that quintile.
- b Average household income (AI) calculated drawing on INE 2016 postal code level data on the mortgaged property.
- c For the TBD/AI ratio (total bank debt in 2019 to average household income), the quintiles of the distribution have been calculated. For each quintile the chart shows the mortgages subject to moratoria as a percentage of the total mortgages in the system corresponding to households in that quintile and which, in addition, are in the first (blue) and fifth (red) quintile of the average income (AI) distribution.
- d For the TBD/AI ratio (total bank debt in 2019 to average household income), the quintiles of the distribution have been calculated. For each quintile the chart shows the mortgages subject to moratoria as a percentage of the total mortgages in the system corresponding to households in that quintile and which, in addition, are in the first quintile of the average income distribution and the fifth quintile of debt servicing (red).
- e The counterfactual NPL ratio is calculated under the assumption that no moratorium programme was approved and that all the borrowers that have obtained moratoria would have defaulted on their loans (an extreme hypothesis as the probability of default would not necessarily be equal to 1).

3), the probability of having a moratorium increases by 5.8 pp for the most indebted households. In addition, these differences in terms of probability of accessing moratoria are reinforced if households' different income levels and debt-servicing capacity are also considered (see Charts 4 and 5). The regression model confirms

that participation in moratoria is significantly sensitive to households' financial situation, which is consistent with this descriptive analysis. The regression model is also used to measure the impact of other explanatory variables. For example, if the household had a consumer loan at December 2019, the probability of it having a

LOAN MORATORIA DEVELOPMENTS, ANALYSIS OF CHARACTERISTICS OF BENEFICIARIES AND OF THE POTENTIAL IMPACT ON DEFAULT (cont'd)

moratorium on mortgage payments is 29% higher. Furthermore, having a poor past or current credit record can double that probability, while having a mortgage guarantor increases it by 19%.

Moreover, compared with wage and salaried workers, the probability of self-employed individuals obtaining moratoria is 58% higher. Among employees, public sector and banking group employees are those who have submitted the fewest moratoria applications, followed by pensioners. Among the self-employed, most applications have come from those belonging to the accommodation and food services sector, transport, retail and other services.

In addition, the probability of deferral of residential mortgage payments is highest in the regions where the pandemic has had the most impact on employment. For example, it is 21% higher in the case of workers on short-time work arrangements and 32% higher in the case of the unemployed, comparing the third quartile of the distribution by province with the first quartile.

Lastly, regarding the characteristics of the lender, the size of the bank and its non-performing loan ratio are significant factors. The proportion of moratoria is 35% higher among the larger banks and 10% higher among those with higher NPL ratios, comparing the banks in the third quartile of the distribution with those in the first quartile.

Accordingly, the empirical findings suggest that the most vulnerable households are those that have taken most advantage of the moratoria, in keeping with the purpose of these programmes. This in turn suggests that once the payment holiday comes to an end, there is a high risk that these households may default on their debts, if economic activity has not returned to normal.

In view of the findings of the econometric analysis, the counterfactual exercise was made to measure the

impact that an extreme hypothesis, i.e. that the total volume of loans covered by the moratoria would have resulted in default, would have had on banks' non-performing credit ratios. Specifically, given that loan volume, the non-performing ratio of business in Spain would have practically doubled, to almost 9% (see Chart 6). Under this hypothesis, the volume of non-performing assets would have increased by around 100%, up to just over €100 billion. This counterfactual analysis aims to estimate an upper bound for the impact of the moratorium programme on default, since had the moratoria not existed, the probability of borrowers defaulting on the mortgage loans that have taken advantage of the moratoria would feasibly be very high, although it would not reach 100% and it would presumably fall substantially as economic recovery took hold.

To sum up, the moratoria programmes were rolled out with considerable speed and have reached a significant portion of mortgage and non-mortgage loans to individuals, concentrated on the households that were most vulnerable before the pandemic and that have been most affected by it. In consequence, in the short term the programme has played a significant part in easing the economic situation of the most disadvantaged households and containing bank NPLs, especially in lending to households. Looking forward, these programmes should be adapted in a prudent and orderly fashion to economic developments, to avoid an abrupt withdrawal that might trigger potential liquidity crisis episodes that were the reason for the introduction of the programmes in the first place. In this respect, the information available indicates that a large proportion of borrowers who took advantage of the legislative moratoria, which had a duration of three months, are transforming them upon maturity into moratoria provided by the banking sector, which have a duration of up to one year.

2

RISKS TO THE FINANCIAL SECTOR AND ITS RESILIENCE

2 RISKS TO THE FINANCIAL SECTOR AND ITS RESILIENCE

This chapter analyses the situation and outlook for the banking sector and other financial intermediaries after the first few months have passed since the outbreak of the pandemic. The initial financial impact has been cushioned by the economic policy response, in particular, credit support programmes and expansionary monetary policy. In this context, bank lending has grown since the end of March and the volume of non-performing loans (NPLs) has, to date, increased moderately. However, the provisions already made anticipate poorer behaviour in the future and have contributed to the fall observed in bank profitability in the first half of 2020. The sector's solvency has increased slightly, supported by the changes in European regulation of capital requirements. The results of the stress tests performed show that Spanish banks have a high capacity to absorb losses under the central scenario, which has been significantly boosted by the support measures implemented. Nonetheless, capital depletion can be expected to be significantly higher than in recent years, given the severity of the macroeconomic scenarios posed by the health crisis, both in Spain and at global level. As regards the non-bank financial sector, there were also some tensions at the start of the crisis that prompted significant withdrawals from investment funds, although the situation subsequently returned to normal.

2.1 Deposit institutions

2.1.1 Balance sheet structure, risks and vulnerabilities

Credit risk

Lending in Spain increased in 2020 for the first time since the 2008 financial crisis, with a notable flow of new lending to productive activity, supported by the measures taken to mitigate the effect of the pandemic. The outstanding balance of lending by deposit institutions in Spain grew by 2.5% year-on-year in June (see Chart 2.1). At the end of March, following the confinement measures, the pick-up largely occurred as a result of the use of credit facilities by large companies. In Q2, the main factor behind the rise in lending was the progressive activation of public guarantee facilities, which especially favoured SMEs. Indeed, of the €174 billion of new business loans to non-financial corporations (NFCs) and sole proprietors between December 2019 and June 2020, €71.5 billion (41%) was guaranteed by this programme¹. This

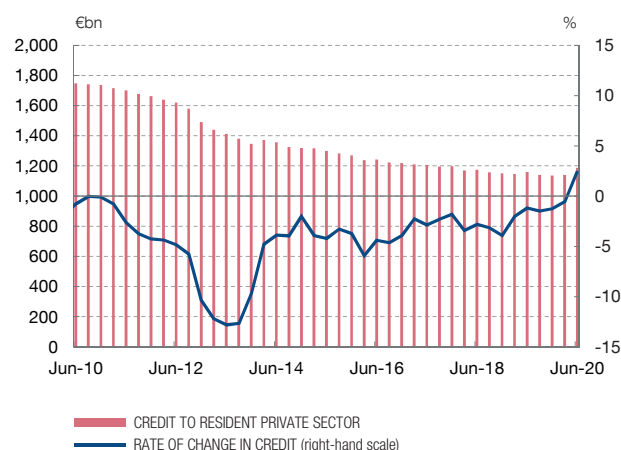
¹ According to the updated information at the cut-off date of this FSR, the volume of financing with ICO guarantees amounted to €87 billion in June 2020, of which €71.5 billion corresponded to drawn down amounts, the remaining balance being available to draw down. The incorporation of more complete information on this financing facility has raised the amount drawn down to the current figure from the previously estimated amount of €62 billion, which was published in the Analytical Article "[Recent developments in financing and bank lending to the non-financial private sector](#)" (Economic Bulletin, 4/2020, Banco de España).

Chart 2.1

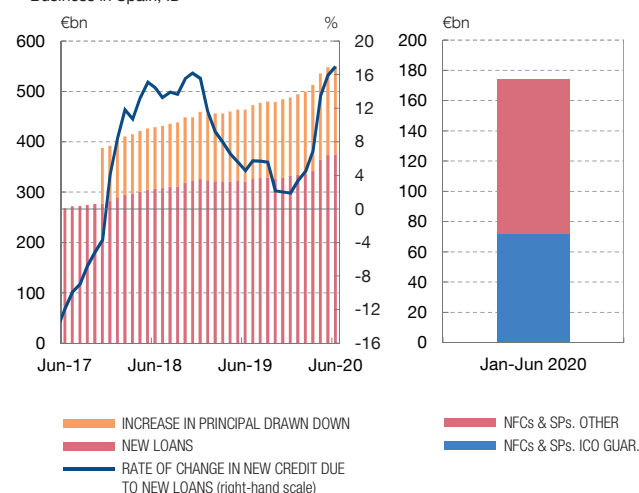
OWING TO THE IMPLICATIONS OF THE COVID-19 CRISIS, CREDIT HAS INCREASED IN YEAR-ON-YEAR TERMS FOR THE FIRST TIME SINCE THE END OF THE FINANCIAL CRISIS

Credit has increased over the past year, by 2.5%, for the first time since the end of the 2008 financial crisis. The use of credit lines in Q1 and the public guarantee programme managed by the ICO in Q2 have helped to sustain credit in this period, mitigating the adverse effect of the COVID-19 crisis on the real economy. A significant part of the new credit granted to productive activities in the first half of the year (approximately 41%) was guaranteed by the State.

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



2 VOLUME OF NEW CREDIT IN THE PAST 12 MONTHS AND YEAR-ON-YEAR RATE OF CHANGE. HOUSEHOLDS AND NON-FINANCIAL CORPORATIONS (a) (b) Business in Spain, ID



SOURCE: Banco de España.

- a Prior to 2017 information was not available on the increase in the principal drawn down against existing loans. Consequently, the first data item for this series, accumulated over twelve months, is represented in December 2017. The rate of change shown only refers to new loans.
- b The ancillary right-hand panel shows drawn down credit corresponding to new business (excluding increases in the amount of principal drawn down) with non-financial corporations and sole proprietors between January and June, distinguishing the portion covered by the ICO guarantee programme.

measure has played a key role in mitigating the effects of the pandemic on firms and, therefore, on economic activity in Spain. It should be noted that part of this credit is being held as liquidity buffers which, while unused, entail lower growth in net indebtedness (see sub-section 1.3.1 and the discussion of financing and liquidity conditions later on in this chapter). The deposits of the NFC sector at DIs increased by close to €32 billion between March and June 2020, with quarter-on-quarter growth of 12.1%. Conversely, the downward trend in lending to households intensified to some extent, with a significant fall in consumer credit.² As indicated in Chapter 1, households also increased their deposits with DIs, but not necessarily homogeneously.

The COVID-19 pandemic is having a very adverse impact on economic activity, although, so far, the pass-through to growth in NPLs has only been moderate.

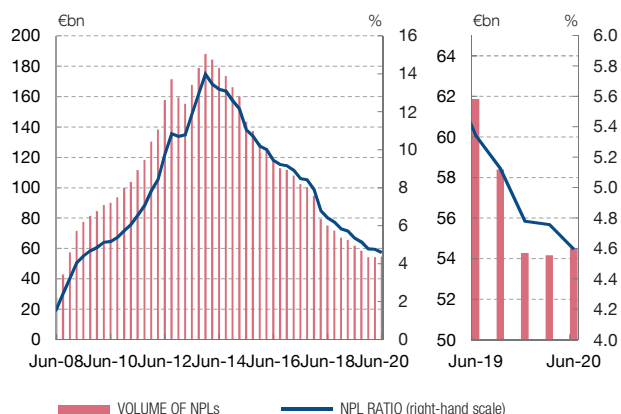
2 For a detailed analysis of credit developments by sector, see *Recent developments in financing and bank lending to the non-financial private sector*, Analytical Article, Economic Bulletin 4/2020, Banco de España.

Chart 2.2

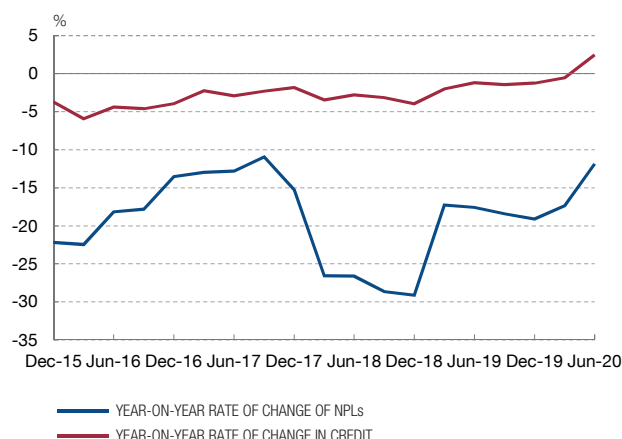
THE NPL RATIO CONTINUED TO DECLINE, OWING TO THE EXPANSION OF TOTAL BANK CREDIT, WHILE THE FALL IN FORBEARANCE SLOWED

Although the NPL ratio has continued to decline over the past year, a change has been observed in the dynamics of the numerator and denominator since the outbreak of the pandemic. While the fall in the ratio was previously based on a strong decline in NPLs and a more moderate fall in credit, it is now based on a significant rise in credit, which more than offsets the slowing of the year-on-year decline in NPLs and its slight quarter-on-quarter uptick. The rate of decline of forbearance slowed and this will foreseeably continue owing to the effects of the pandemic.

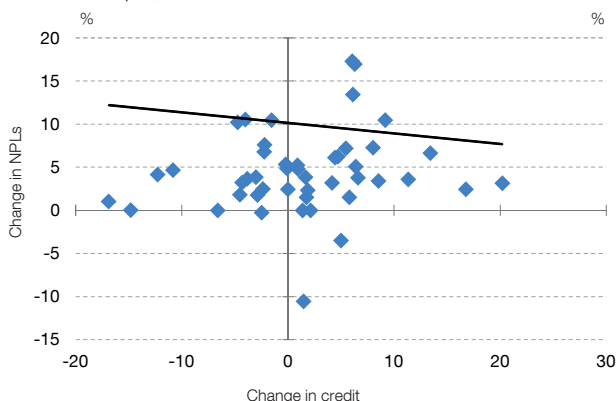
1 RESIDENT PRIVATE SECTOR'S NPLs AND NPL RATIO
Business in Spain, ID



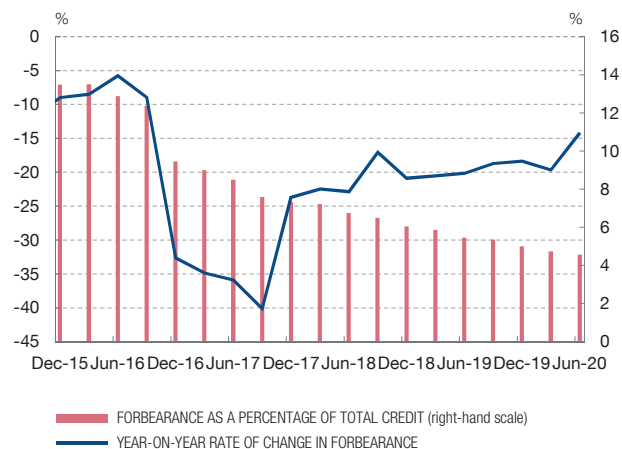
2 BEHAVIOUR OF NUMERATOR AND DENOMINATOR OF NPL RATIO
Business in Spain, ID



3 DISPERSION IN CHANGES IN CREDIT AND NPLs BETWEEN
DECEMBER 2019 AND JUNE 2020
Business in Spain, ID



4 RESIDENT PRIVATE SECTOR FORBEARANCE
Business in Spain, ID



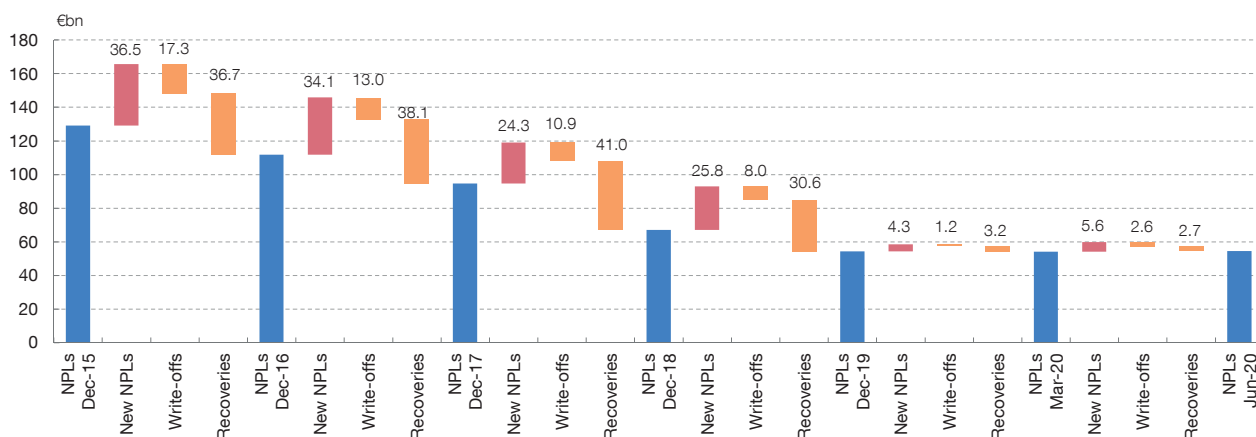
SOURCE: Banco de España.

The brake on activity may lead to a significant deterioration in the solvency of households and NFCs, which would affect their ability to meet their commitments to financial institutions. However, the fact that NPLs have only increased moderately so far (see Chart 2.2) would be due, first, to the above-mentioned measures to mitigate the effects of the crisis and, second, to there being some time lag between the deterioration in financial conditions for borrowers and the failure to pay a loan, and its classification as non-performing.

Chart 2.3

OWING TO THE PANDEMIC, LOAN RECOVERIES AND WRITE-OFFS HAVE FAILED TO FULLY OFFSET NEW NPLs, IN CONTRAST TO THE PERIOD SINCE 2013 (a)

In recent years new NPLs have been more than offset by write-offs and recoveries, which had been continuously reducing the outstanding balance of NPLs. In the last two quarters, however, this has not occurred, so that the volume of NPLs has stabilised. Although the inflow of new NPLs has not increased substantially in this period, the outflows of write-offs and recoveries have slowed notably.



SOURCE: Banco de España.

a The bars are presented together with the amount, in billions of euro, of each NPL inflow or outflow. The NPL recoveries include NPLs reclassified as performing, and foreclosed assets or potential sales of NPL portfolios to third parties.

The NPL ratio for loans to the resident private sector, in the case of business in Spain, continued to decline, albeit at a more moderate rate than in recent years.

Moreover, the behaviour of the determinants of its growth has changed. In recent years, the downward trend in the NPL ratio was based on sharp declines in the volume of NPLs (the numerator of the ratio), which more than offset the less significant reductions in total lending (the denominator, see Chart 2.2). Since December 2019, the decline in NPLs has been curbed, with a slight increase being recorded in 2020 Q2. However, the growth in lending mentioned above has enabled the ratio to continue to decline. It is possible that lending will be less expansionary in the second half of 2020 and that the deterioration in credit quality will be greater, in which case there would be upward pressure on the NPL ratio. It should be taken into account that both the guarantee programme for business loans and the loan moratoria programmes were launched rapidly in the preceding quarters and the same rate of growth cannot be expected for the rest of the year. Also, forbearance loans continued to decline year-on-year, although at slowing rates. Over the past 12 months, foreclosed assets fell by more than €11.6 billion (-28.9%). Real estate assets can be expected in this crisis to represent a smaller percentage of all problem assets than in the global financial crisis, and they will be concentrated to a greater extent in exposures to SMEs in the sectors most affected by the pandemic.

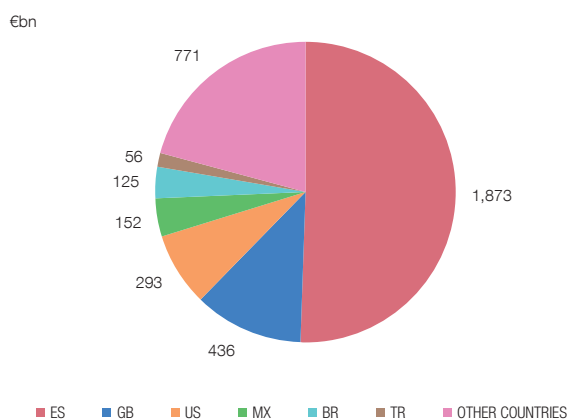
In the first half of 2020, and especially in Q2, new NPLs were not fully offset by recoveries and write-offs (see Chart 2.3). This contrasts with the developments

Chart 2.4

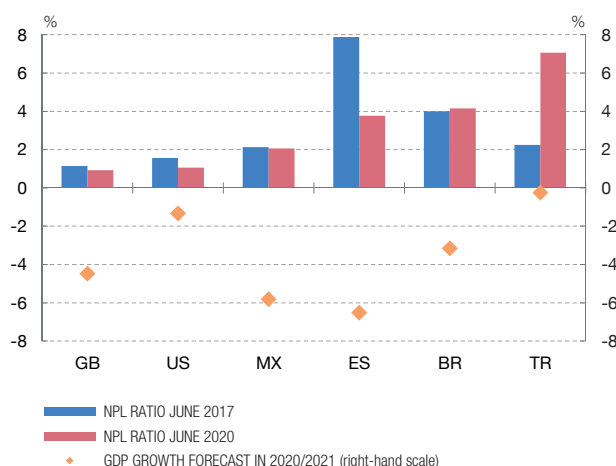
BUSINESS ABROAD MAKES UP HALF OF THE FINANCIAL ASSETS OF THE SPANISH BANKING SECTOR AND IS CONCENTRATED IN THE UNITED KINGDOM, UNITED STATES AND LATIN AMERICA

Financial assets abroad are concentrated in the United Kingdom, United States, Mexico and Brazil. In June 2020 these countries accounted for almost one third of the total financial assets of Spanish banks, while business in Spain accounted for approximately 50%. Business abroad is concentrated in larger institutions. The NPL ratio in Spain stood in June 2020 in an intermediate range in relation to other significant geographical areas. In recent years, NPL ratios abroad have remained steady (except in Turkey, where they have tripled over the last three years), but the deterioration in the macroeconomic outlook and financial situation of economic agents may lead to a marked deterioration in asset quality.

1 FINANCIAL ASSETS IN SPAIN AND ABROAD
Consolidated data. June 2020



2 NPL RATIO
Consolidated data



SOURCES: Banco de España and IMF (WEO October 2020).

since the end of the financial crisis of 2008, whereby recoveries and write-offs more than offset new NPLs in each period, leading to a constant decline in the stock of NPLs in Spain. The current crisis, may lead to a further increase in flows of new NPLs in coming quarters, which would be combined with greater difficulty for institutions to liquidate this type of problem assets through sales.

The consolidated assets of Spanish deposit institutions have also grown significantly over the last 12 months, at a year-on-year rate of 7% (see Annex 1). This growth was, first, the result of an increase in banking activity in Spain, where financial assets (mostly loans) increased in June 2020 by 10.8% year-on-year. At the same time, financial assets abroad, which account for half of consolidated financial assets, also grew, but to a lesser extent (6% year-on-year).

Given that the crisis is global, and highly synchronised, the foreign diversification of Spanish banking business may be less useful than in past crises to contain and mitigate risks. The foreign banking activity of Spanish deposit institutions continues to be concentrated in the United Kingdom, the United States, Mexico and Brazil (see Chart 2.4). The expansion of the pandemic globally has reduced economic growth expectations, severely affecting certain regions with a significant Spanish

bank presence, which may lead to a greater deterioration in the quality of bank assets. On a positive note, foreign banking business confronts this crisis with generally contained NPL ratios (2.9% on average in June 2020, 5 bp less than a year ago) except in Turkey (above 7%). Box 2.1 presents in greater detail the developments in banking sectors in which Spanish bank branches have significant activity.

Liquidity and financing conditions

The volumes allotted in the refinancing operations and the expansion of purchase programmes have involved a substantial increase in the liquidity provided by the Eurosystem (see Chart 2.5). The more favourable conditions³ for long-term refinancing operations (TLTRO III) prompted euro area banks to bid en masse at the latest tenders in June and September, where a net amount of €706 billion of liquidity was provided.⁴ Thus, more than 80% of the outstanding amount of refinancing operations is linked to the new, more favourable conditions. Spanish banks that had already obtained a significant volume of financing through the TLTRO IIs, refinanced these operations. However, their share of the total liquidity provided by the Eurosystem has fallen from 19% to 15%, owing to the increased share of other jurisdictions, where the relative increase in the need to resort to ECB liquidity has been greater than in the case of Spanish banks. Considering the different euro-denominated refinancing operations as a whole, the net financing obtained by European banks has increased by €861 billion,⁵ to a total of €1.75 trillion. The ECB balance sheet has also expanded as a consequence of the additional allotment⁶ of €120 billion until the end of the year for purchase programmes and the expansion⁷ of the PEPP programme to a total of €1.35 trillion. Thus, the outstanding balance of purchase programmes has been increased by €709 billion, to a total of €3.5 trillion, as at the cut-off date of this FSR.

The tensions in the money markets in March⁸ this year have not been repeated, despite fresh outbreaks of the pandemic, and a gradual reduction has been observed in the interest rates negotiated on money markets. The unsecured rate (€STR)⁹ has declined constantly in recent months, and currently

3 As a result of the decision of the Governing Council of the ECB of 30 April 2020. Notable were the reduction in the interest rate (by 50 bp) on TLTRO III operations between 24 June 2020 and 23 June 2021, and the increase in the maximum amount that may be applied for from 30% to 50% of the stock of eligible loans.

4 This is the net amount applied for in the fourth and fifth rounds of TLTRO III (+€1,308 bn and +€175 bn) less the repayments of TLTRO II (–€388 bn) and of LTRO (–€389 bn).

5 This refers to the change in net financing obtained since the last FSR, which has increased by the net provision of the last two rounds of TLTRO III (+€706 bn), the additional amounts applied for in the LTRO before its repayment (+€132 bn), the PELTROs (+€24 bn) and the MRO (+€1 bn) less the repayment of LTRO (–€1 bn).

6 As a result of the decision of the Governing Council of the ECB of 12 March 2020.

7 As a result of the decision of the Governing Council of the ECB of 4 June 2020.

8 See also *FSR, spring 2020*.

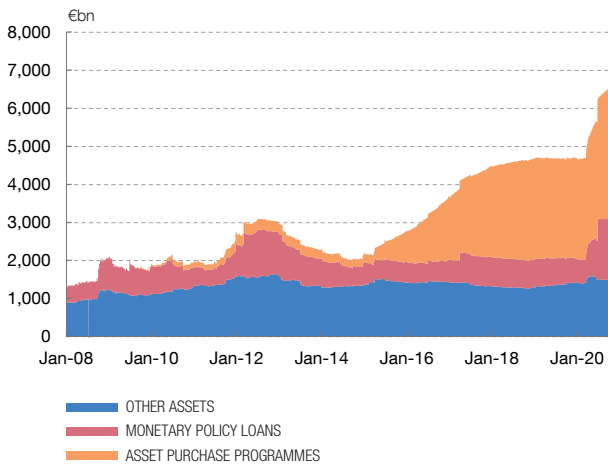
9 This refers to the transactions used to calculate the €STR, which reflects the wholesale euro unsecured overnight borrowing costs of banks located in the euro area. The €STR and trading volume are calculated and published each business day by the ECB based on the information provided by the 48 euro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

Chart 2.5

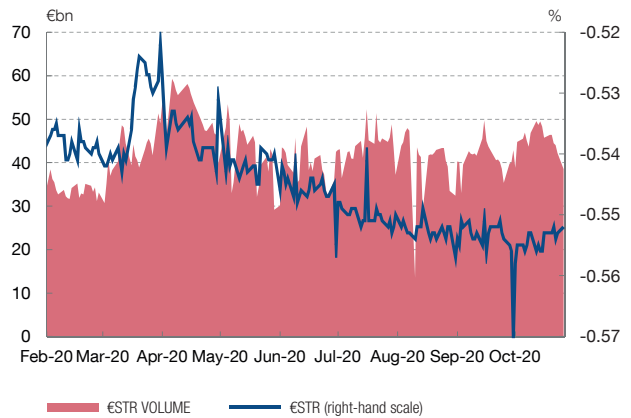
THE ECB'S REFINANCING OPERATIONS AND THE EXPANSION OF ITS PURCHASE PROGRAMMES HAVE DELIVERED MARKET CALM

The ECB's balance sheet has been expanded at an unprecedented rate, driven by the growth in refinancing operations and by the asset purchase programmes, reaching historic levels. This expansion has moderated the rates observed in the money markets and reduced tensions in currency transaction prices. Overall, European banks have increased their liquidity reserves and reduced their perception of the risk of their financing instruments.

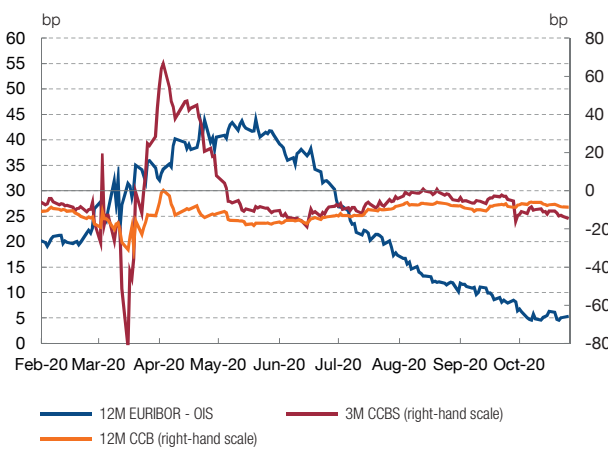
1 EUROSISTEM BALANCE SHEET AND LIQUIDITY SURPLUS



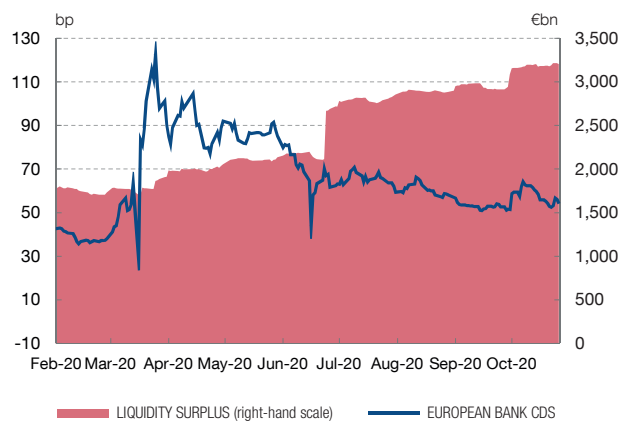
2 €STR VOLUMES AND RATES



3 EURIBOR-OIS SPREAD AND CROSS-CURRENCY BASIS (CCB) SWAP



4 LIQUIDITY AND CREDIT RISK



SOURCES: Bloomberg, Dealogic, Eikon, Thomson Reuters and Banco de España.

stands below the levels observed before the emergence of COVID-19 (see Chart 2.5).

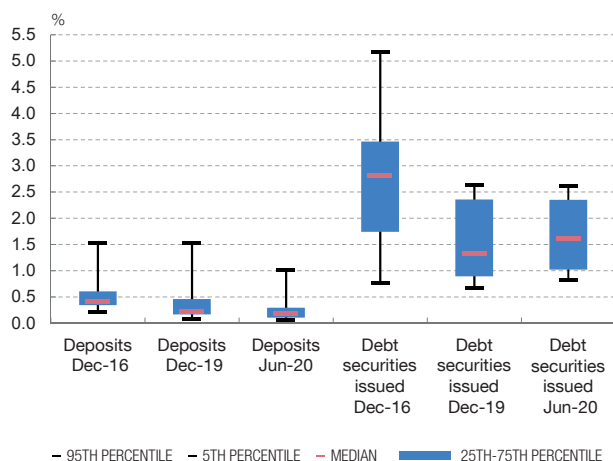
Central bank action has helped to reduce the EURIBOR-OIS spread, which currently stands below the levels observed in February. Upward pressure on the level of EURIBOR at the start of the pandemic has diminished due to the recovery in the volume traded on money markets at longer maturities, as well as the decline in

Chart 2.6

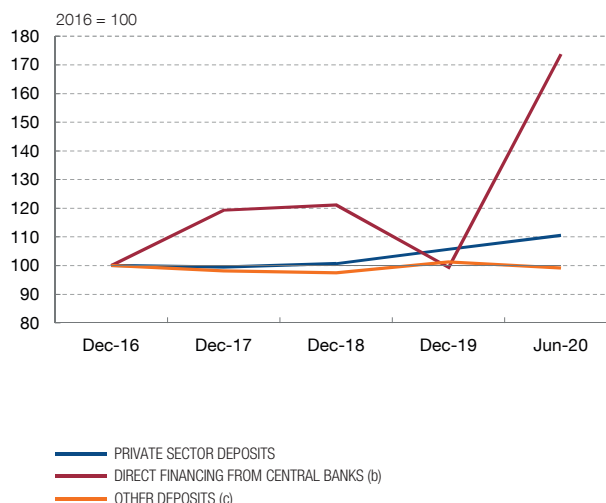
ALTHOUGH THE COST OF LIABILITIES REMAINS MODERATE, THE PANDEMIC HAS HAD AN ADVERSE IMPACT ON WHOLESALE FINANCING, WHICH HAS BEEN REDUCED BY CENTRAL BANK INTERVENTION

Spanish deposit institutions have a moderate cost of liabilities, both for deposits (main source of financing), with rates close to 0%, and debt instruments issued, the cost of which has risen slightly since the start of the pandemic (with a median level of 1.6%, but with crossbank heterogeneity, although the dispersion has been reduced since 2016). The volume of direct central bank financing on the liabilities side of the consolidated balance sheet of Spanish deposit institutions has increased markedly in the first half of 2020.

1 RATES ON DEPOSITS AND DEBT SECURITIES ISSUED (a)
Consolidated data



2 CENTRAL BANK DEPOSITS AND DIRECT FINANCING
Consolidated data



SOURCE: Banco de España.

- a The chart shows the dispersion of the deposit interest rates of Spanish deposit institutions and of the interest rates on debt securities for those institutions that issue them.
- b Includes loans received from and repo transactions with central banks.
- c Includes the deposits of credit institutions and general government.

bank credit risk observed through bank CDSs¹⁰ and the correction of tensions in the currency market¹¹ (see Chart 2.5). Likewise, activation of the dollar swap facilities¹² entailed a substantial reduction in the tensions in dollar financing, the premium on CCB swap contracts increasing from its low of –80 bp on 16 March to very close to zero a few days later.¹³ Since then, the frequency and use of dollar swap facilities has

10 Calculated as the average CDS for contracts with a 5-year maturity for a set of 18 listed banks of euro area countries, weighted by the stock market capitalisation of each institution.

11 The USD/EUR cross-currency basis swap spread is used, which measures the premium (positive or negative) required by the counterparty offering the dollars. In this type of transaction one party obtains dollars in exchange for the same amount converted into euro and must pay interest according to the euro reference rate (generally Euribor), and the other offers dollars in exchange for receiving interest (USD Libor). A negative value indicates that obtaining financing directly in dollars is cheaper than doing so by means of a swap while a positive value indicates that it is cheaper to obtain euro and enter into a swap.

12 On 15 March. The ECB announced a coordinated action with the central banks of the United States, Canada, the United Kingdom, Switzerland and Japan to enhance the provision of dollar financing. This measure reduced the cost of operations and extended their maturities, offering an 84-day maturity. A few days later (20 March) the frequency (daily) of 7-day US dollar operations was increased.

13 For further information, see García-Escudero, E. E., and E. Sánchez Pérez, 2020, “Central bank currency swap lines”, Occasional Paper, No 2025, Banco de España.

decreased. In addition, the ECB has progressively¹⁴ provided euro liquidity through swap facilities with other central banks.

Despite the pandemic, Spanish deposit institutions' financing costs remain at relatively low levels. Low interest rates have led to a reduction in the cost of financing in recent years. This situation has been compounded by the measures implemented by the different authorities and, especially, the ECB; in the first half of 2020, the cost of deposits of institutions declined and the behaviour of the cost of issued debt was contained (see Chart 2.6).

The financing raised by Spanish deposit institutions continued to grow in the first half of 2020, especially as a result of the higher household saving rate and the accumulation of liquidity reserves by firms, associated with the prevailing economic uncertainty. In June 2020, the stock of deposits increased by 9.1% year-on-year (as compared with 2.4% a year earlier). Retail financing (deposits of households and firms) continues to be the main source of financing for Spanish deposit institutions, accounting for 87% of their liabilities. This increase in the deposits of households and firms involves a moderation in their net indebtedness, despite the increase in their recourse to bank lending mentioned in the previous subsection. At the same time, largely as a result of the expansionary monetary policy implemented by the ECB and other central banks, direct central bank financing increased in June 2020 by 61.6% year-on-year, to €336 billion (see Chart 2.6).

2.1.2 Profitability and solvency

Profitability

In the first half of 2020, the consolidated net profit of the Spanish banking system as a whole was a negative amount of around €9.5 billion. This corresponded to a decline of almost €20 billion from the profit recorded in June 2019, translating into a return on assets (ROA) of -0.5% (1.1 pp less than in June 2019) and a return on equity (ROE) of -7.3% (15 pp less than a year earlier). The losses were concentrated in the two largest institutions, and were primarily due to the one-off deterioration in the goodwill of their foreign subsidiaries, an accounting item that is not reflected in the solvency of these banks. In fact, without this deterioration in goodwill the ROE of the sector would have been positive, standing at 2.1% (with the ROA at 0.14%). For other institutions, the decline in net profit, which remained positive in most cases, was smaller, but it was also significant due to the provisions made in anticipation of further financial deterioration. Chart 2.7 shows

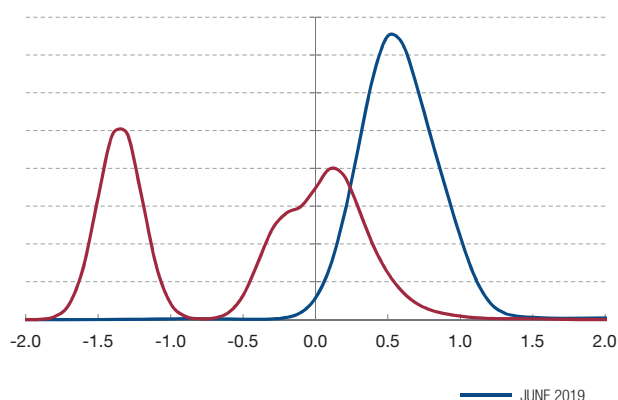
¹⁴ These facilities were activated progressively with the central banks of Denmark, Croatia, Bulgaria and Rumania on 20 March, 15 and 22 April and 20 August, respectively.

Chart 2.7

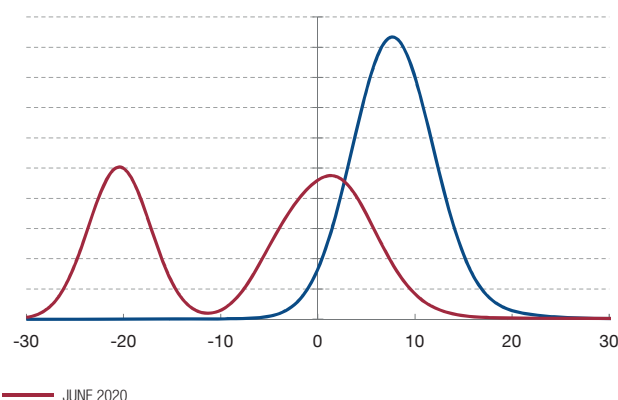
MOST INSTITUTIONS HAVE RECORDED A FALL IN NET PROFIT IN THE FIRST HALF OF 2020

Net accounting losses in the first half of 2020 were concentrated in the system's two largest institutions. However, the fall in profit between June 2019 and June 2020 has been broad based. The recording of losses by the largest institutions is explained mainly by the impairment of goodwill of various of their subsidiaries.

1 DISTRIBUTION OF THE ROA (a)



2 DISTRIBUTION OF THE ROE (a)



SOURCE: Banco de España.

a The charts show the ROA and ROE density functions for Spanish deposit institutions, weighted by the amount of average total assets and average equity, respectively. The density function is approximated by means of a kernel estimator, which enables non-parametric estimation and provides a continuous, smoothed graphic representation of the function.

how, both for the ROA and the ROE, the distribution of bank profitability in the first half of 2020 shifted significantly leftwards. At the same time, Chart 2.8 shows how most institutions (more than 70%) recorded a decline in net profit from the previous year, while their average total assets (ATAs) increased.

The impact of the pandemic on net interest income and commissions was especially strong in Q2 (see Chart 2.8). Net interest income and commissions both fell by slightly more than 5% in the first half of 2020, relative to the same period of 2019 (see Annex 2), especially due to the developments of the last three months. As a result of this decline and the growth in assets, these items fell significantly as a percentage of ATAs in the first half of 2020.

Gains on financial assets and liabilities improved significantly with respect to the previous year. Breaking the trend of recent years, these gains increased significantly between June 2019 and June 2020, with a rise of almost 71%. This increase helped limit the decline in gross income stemming from the fall in activity to 1.4% year-on-year.

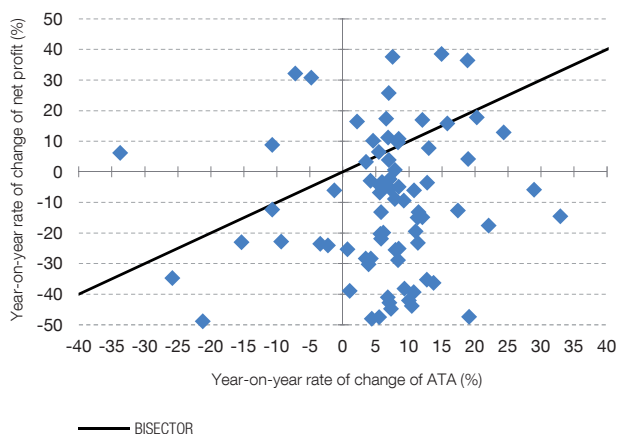
Operating expenses decreased by more than 8% year-on-year. This was largely due to the base effect of the extraordinary expenses relating to staff reductions incurred by some institutions in the same period of the previous year, although

Chart 2.8

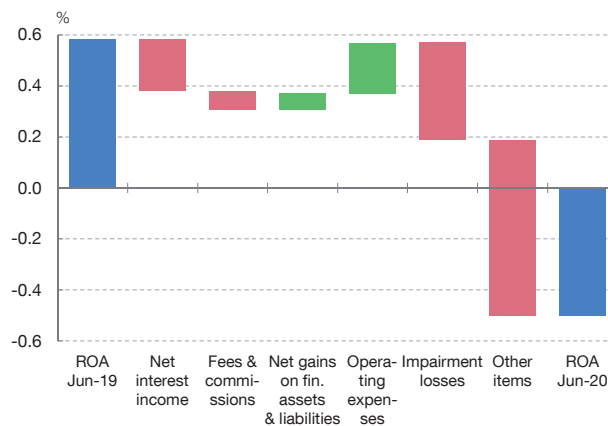
THE COVID-19 PANDEMIC HAS HAD A VERY SEVERE EFFECT ON THE PROFITABILITY OF THE SPANISH BANKING SECTOR, LARGELY DUE TO ACCOUNTING ADJUSTMENTS TO GOODWILL

Most institutions have recorded a fall in net profit relative to the previous year, while their ATA have increased. The main determinants of the sharp fall in profits include the increase in provisions and the notable adjustment to goodwill (included in other items), in both cases as a consequence of the expected deterioration in economic conditions due to the pandemic and its negative impact on credit quality, as well as the decline in net interest income and net fee and commission income owing to the decline in activity.

1 CHANGE IN ATA AND CHANGE IN PROFIT. JUNE 2020



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



SOURCE: Banco de España.

a The red (green) colour of the bars indicates a negative (positive) contribution of the item concerned to the change in consolidated profit in June 2020 with respect to June 2019.

ordinary operating expenses also decreased (2.8% year-on-year), to which these restructurings contributed. Overall, net operating income improved by 6%.

As a result of the potentially negative impact of the pandemic on credit quality institutions have doubled their provisions for impairment since last year. The impairment losses recorded by the Spanish banking sector in the first half of the year totalled €15.2 billion, double the €7.6 billion recorded in June 2019. As a result, they increased significantly as a percentage of ATAs, to stand close to their levels in June 2014, following five years of continuous decline. Such a significant increase in provisions, despite the moderate increase in NPLs is explained partly by the forward looking approach of the new IFRS 9 accounting standard, which requires provisions to be made for impairment losses before loans actually become non-performing. The recognition of extraordinary provisions by institutions, as an additional reserve for future losses, has also contributed to the increase in this item.

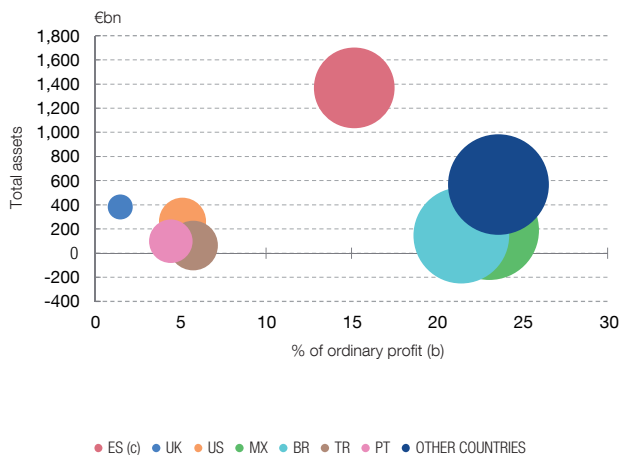
The negative adjustments to goodwill owing to the expected deterioration in economic conditions have had a very severe impact on the profitability of the sector, although they do not affect its solvency, since, under the current rules for calculating own funds, the entire amount of goodwill is deducted from

Chart 2.9

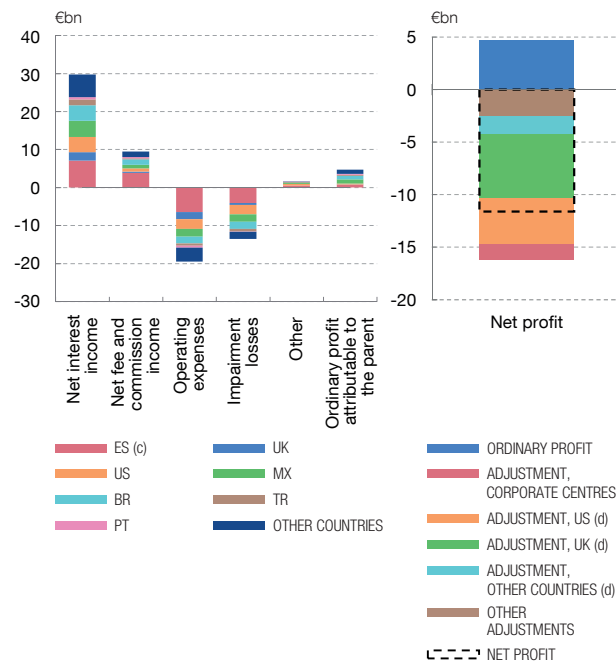
FOREIGN OPERATIONS' CONTRIBUTION TO THE MAIN SPANISH BANKS' PROFITABILITY REMAINED PARTICULARLY SIGNIFICANT, ALTHOUGH IT WAS UNDERMINED BY THE IMPAIRMENT OF GOODWILL

Profit attributable to the parent of the main Spanish banks with foreign operations in the first six months of 2020 was adversely affected by further impairment of the goodwill of their subsidiaries, mainly in the UK and the US. However, ordinary earnings, i.e. excluding impairment of goodwill and other additional adjustments, were positive, with Mexico and Brazil, along with Spain, making the largest contribution.

1 CONTRIBUTION TO ORDINARY PROFIT ATTRIBUTABLE TO THE PARENT (a)
Main banking groups with foreign operations. June 2020



2 MAIN INCOME STATEMENT HEADINGS (a)
Main banking groups with foreign operations. June 2020



SOURCE: CNMV.

- a Ordinary attributable profit does not include impairment of goodwill or other adjustments (e.g. restructuring costs, adjustments for deferred taxes, etc.).
- b Each circle's size reflects the respective country's ordinary attributable profit as a percentage of the aggregate total.
- c Spain's ordinary attributable profit does not include the contribution by the corporate centre.
- d Adjustments for the impairment of goodwill of the subsidiaries in the United Kingdom, the United States and other countries.

regulatory capital in any case. This adjustment has affected the two institutions with the largest international presence, which have reduced their goodwill by more than €12 billion (as reflected under the heading "Other income (net)" in Annex 2). In accordance with international accounting standards, goodwill is not depreciated. However, in the event of any signs of impairment, this should be estimated so that the value of goodwill can be adjusted.¹⁵ In the case of Spanish banks, the importance of goodwill has in recent years been greater than for their European peers,¹⁶ as a result of an international expansion strategy involving the purchase of subsidiaries. This strategy is based on autonomous risk management, and seeks to take full

15 This estimate of impairment should be made at least once a year.

16 According to data published by the European Banking Authority in its latest transparency exercise (<https://eba.europa.eu/risk-analysis-and-data/eu-wide-transparency-exercise>), intangible assets (of which goodwill makes up the largest part) represented 3.1% of the risk weighted assets of the Spanish banks, more than double the average for the countries participating in this exercise (1.3%).

advantage of the acquired institutions' greater experience and knowledge of the local market.

Business abroad continued to contribute significantly to Spanish bank profitability in the first half of 2020, despite the impairment of goodwill and other extraordinary adjustments. Chart 2.9 shows the contribution of the main countries (including Spain) to ordinary profit attributable to the parent of Spanish banks with significant activity abroad in the first half of 2020. The countries with the largest contributions are Mexico, Brazil and Spain which, in absolute terms, account for more than half of the ordinary profit attributable to the parent (23.1%, 21.4% and 15.2%, respectively). In fact, the subsidiaries with the highest ROA are those of Brazil and Mexico, with 1.4% and 1.1%, well above Spain (0.1%).

The decline in profitability was broad-based at European level, with negative net income in the banking systems of some countries. According to European Banking Authority (EBA) data,¹⁷ in the first half of 2020, the ROE of the banking sector fell in practically all European countries, including the largest. The ROE of the Spanish banking sector stood below its average level in Europe and in the main European countries. Conversely, the efficiency ratio of the Spanish banking system continued to be the lowest (the best) among the main European countries. Box 2.2 analyses how analysts' opinions of the situation of the banking systems of various European countries have changed and their interrelation with their stock market valuations.

Solvency

The CET1 ratio of the Spanish banking system has increased over the past 12 months to stand at 12.6%. For the Spanish banking system as a whole, this ratio was 37 basis points higher than a year earlier (see Chart 2.10). The increase was due to the decline in risk weighted assets (–3.1% year-on-year), since CET1 capital remained steady. Risk weighted assets (RWAs) were affected by the measures implemented by the authorities (guarantee programmes and regulatory changes), but their decline was not across the board (see Chart 2.11), being concentrated among large institutions. The latter were also affected by the exchange rate devaluation in the emerging countries in which they have a significant presence, so that the negative effects that these exchange-rate movements had on the volume of euro-denominated CET1 were partially offset. Also, a large proportion of institutions have increased the volume of their CET1 over the past year, although the sector total hardly changed (–0.2% year-on-year). The tier 1 capital ratio and the total capital ratio have also increased over the past year, to stand at 13.9% and 16%, respectively (up from 13.6% and 15.4% in June 2019).

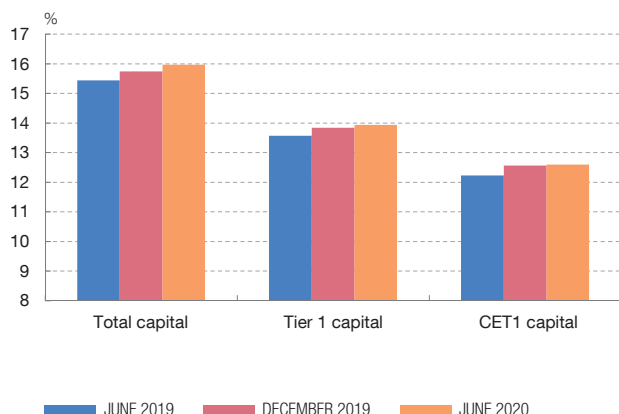
¹⁷ See <https://eba.europa.eu/risk-analysis-and-data/risk-dashboard>.

Chart 2.10

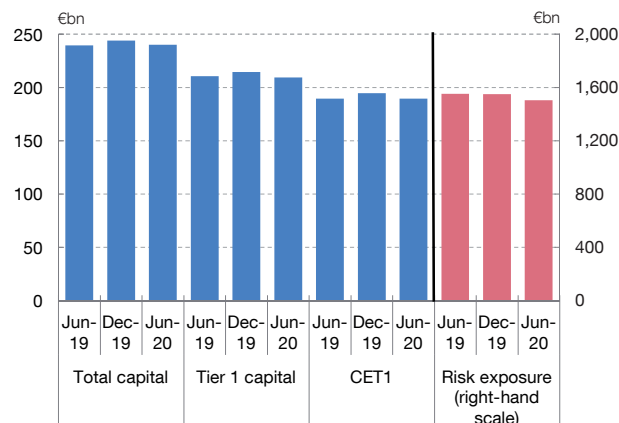
THE SPANISH BANKING SECTOR'S AGGREGATE CAPITAL RATIOS HAVE INCREASED OVER THE LAST 12 MONTHS DESPITE THE OUTBREAK OF THE PANDEMIC

Between June 2019 and June 2020, the CET1 ratio rose by 37 bp to 12.6%. This increase was recorded in the second half of 2019, and was due to a drop in risk-weighted assets, while CET1 held relatively stable. The tier 1 and total capital ratios also rose over the last year.

1 CAPITAL RATIOS



2 CAPITAL AND RISK EXPOSURE LEVELS



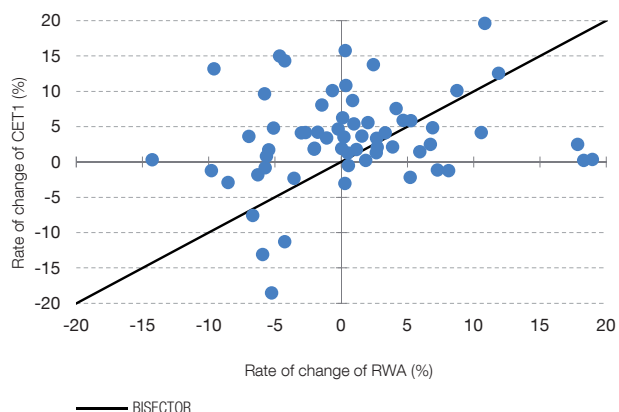
SOURCE: Banco de España.

Chart 2.11

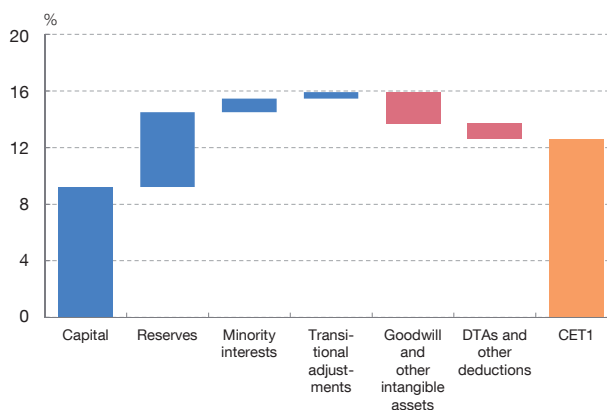
A LARGE PORTION OF SPANISH BANKS HAVE INCREASED THEIR CET1 SINCE JUNE 2019

A large portion of banks have increased their CET1 over the last 12 months, while positive and negative changes in RWA were distributed more uniformly. These increases were concentrated in smaller banks; therefore, aggregate CET1 remained stable (see Chart 2.10). Capital instruments and reserves accounted for more than 90% of eligible CET1 components. Deductions associated with goodwill decreased on account of the significant impairment of this component in the first six months of 2020.

1 RATE OF CHANGE OF CET1 AND RWA BETWEEN JUNE 2019 AND JUNE 2020 (a)



2 BREAKDOWN OF THE CET1 RATIO AS A % OF RWA



SOURCE: Banco de España.

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

As regards the composition of the CET1 ratio, capital instruments and reserves account for more than 90% of its eligible items (see Chart 2.11). However, over the past year there has been some change in the relative weights of these two items, with that of capital rising and that of reserves declining. As regards deductions, the decrease in those deriving from goodwill is notable, as a consequence of the downward adjustment to this item recorded by the two institutions with the largest international presence. As already noted, this adjustment has no effect on the solvency ratio (since goodwill is now included as a reduction in income on account of its impairment).

The CET1 ratio of Spanish institutions is lower than that of those of other European countries, while in terms of the leverage ratio, the position of the Spanish banking sector is better than that of the European set. On the information published by the EBA in its risk dashboard as at June 2020,¹⁸ the CET1 ratio of the main Spanish institutions is the lowest in the EU, standing 2.8 percentage points below the European average. This is largely a result of the greater density of the assets of Spanish banks, which make less intensive use of internal models to calculate their capital requirements. In fact, the leverage ratio of the main Spanish institutions (5%) stands slightly below the European average (5.3%), but above those of the main European countries, except for Italy and the United Kingdom.

2.1.3 Forward looking assessment of the resilience of the Spanish banking system

Methodology applied. The FLESB framework

Faced with the uncertainty posed by the current health crisis for the future performance of the economy, the analysis of Spanish banks by means of stress tests is especially important, given the forward looking nature of these tools. The Banco de España has applied its own methodological framework known as FLESB (Forward Looking Exercise on Spanish Banks) to analyse the scenarios raised by the COVID-19 crisis. This exercise has been especially complex, given the special nature of this crisis, which includes a sudden, unprecedented impact on the economy at global level, as well as a rapid and decisive economic policy response by different national and international authorities. Its main characteristics can be summarised as follows:

- **Top-down framework, underpinned by granular information.** The FLESB methodology uses a set of quantitative models developed internally and applied to the granular information with a time dimension

¹⁸ See [EBA Risk Dashboard](#).

that is available through regulatory and supervisory reporting.¹⁹ This methodology is used to make a dynamic projection of the balance sheet and income statement of banks for the period 2020-2022. With respect to the previous exercise, improvements have been made to the modelling of the net interest income of business in Spain²⁰ and of business outside Spain of internationally active institutions.²¹ This latter development is especially important given the synchronised, global nature of the COVID-19 crisis, the impact which on business abroad is potentially larger than in the past.

- **Macroeconomic scenarios for assessing solvency.** Two scenarios are used, with different degrees of contraction of GDP in 2020, and speeds of recovery in 2021-2022. The baseline scenario for the Spanish economy (see Table 2.1) has a steeper recovery path, although cumulative real GDP growth is negative for the period as a whole (–1.6%), while the adverse scenario envisages that the health crisis will have a greater impact in 2020, the recovery will be weaker and the cumulative fall in GDP will be larger (–5.7%), this being the risk scenario of the exercise. On the other hand, there is no upward pressure on reference interest rates in these scenarios, given the expectation that the expansionary stance of monetary policy will be maintained, and the correction of house prices is smaller than in historic episodes with greater built-up imbalances in this sector.

The macroeconomic paths for Spain in these exercises correspond to the June 2020 BMPE, which were used in turn in the ECB's July analysis of European bank vulnerability.²² The same level of severity as in the European exercise is thus applied. The new projection scenarios for Spain, published in September 2020 by the Banco de España show a comparable decline in activity for the purposes of assessing solvency. In addition, the scenario for Spain is completed with consistent international macroeconomic scenarios developed by the Banco de España (see Chart 2.12), which envisage sharp declines in activity, both in advanced and emerging economies. In the case of GDP, cumulative growth in the

19 The information available on credit exposures in Spain through the CCR and supervisory data is highly granular and reaches the level of transactions, guarantees and individual borrowers, and covers the period 2000-2019. The data available for foreign business are less granular and reach at most the level of portfolio by type and geographical origin of counterparty, and they have a more limited historical depth.

20 Greater disaggregation by counterparty and purpose (firms, households-housing, households-other) is considered in the modelling of private sector loan income, with the productive volume of loans also depending on the result of the credit risk models.

21 A more granular treatment of the credit loss in foreign business has been incorporated, with a limited model for the generation of net operating income maintained. Information on exposures by counterparty, purpose (firms, households-housing, households-other) and geographical situation is used.

22 See [ECB Vulnerability Analysis](#), 28 July 2020.

Table 2.1

MACROECONOMIC SCENARIOS

	Baseline scenario 2020-2022	Adverse scenario 2020-2022
GDP (cumulative growth)	-1.6	-5.7
Unemployment rate (% of labour force) (average)	18.6	23.5
Price of housing (cumulative growth)	-3.8	-11.6
Lending to households for house purchase (cumulative growth)	-5.4	-11.1
Lending to households for other purposes (cumulative growth)	-12.0	-17.6
Lending to businesses (cumulative growth)	-2.2	-5.9
12-month interbank interest rate (average)	-0.3	-0.2
10-year sovereign bond interest rate (average)	1.0	1.3

SOURCE: Banco de España.

baseline (adverse) scenario is: -1.6 % (-3.1 %) in Brazil, -2.8 % (-3.6 %) in the United Kingdom, -3.2 % (-5.0 %) in Mexico, 6.2 % (4.5 %) in Turkey and -0.9 % (-2.3 %) in the United States. Only Turkey has positive average growth thanks to a potentially vigorous recovery. These falls in GDP are consistent with the marked increase in unemployment rates in the scenarios.

- **Segmentation of institutions.** The findings are presented, as in previous years, in aggregate form for three groups of institutions to facilitate their interpretation, since their business models and sources of risk are different. The first group consists of the Spanish institutions directly supervised by the Single Supervisory Mechanism (SSM) that have significant international activity. The second group includes the rest of the institutions supervised directly by the SSM. Lastly, the third group is made up of institutions supervised directly by the Banco de España, which are small and have no appreciable international activity.²³
- **Modelling the impact of the support measures deployed to mitigate the impact of the pandemic.** The mitigation policies implemented at national and international level include diverse facilities such as bank loan payment moratoria, public guarantees for loans for productive activities, in the case of monetary policy, a new TLTRO programme and, in the prudential area, the recommendation not to make dividend payments. By incorporating

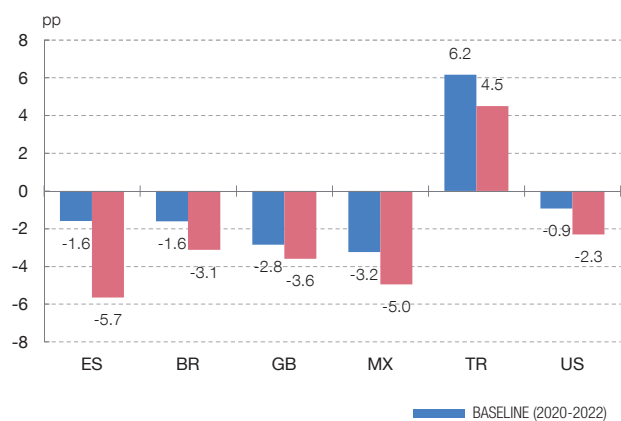
²³ This group includes 45 LSIs (less significant institutions, according to the SSM's supervisory classification), which include savings banks and credit cooperatives, as well as other less significant institutions (OLSIs).

Chart 2.12

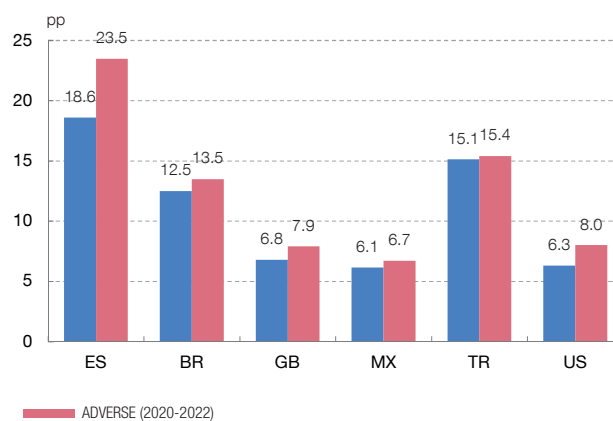
THE MACROECONOMIC SCENARIOS USED TO MEASURE SPANISH BANKS' RESILIENCE ENVISAGE SHARP DECLINES IN ECONOMIC ACTIVITY IN THE GEOGRAPHICAL AREAS WITH A SIGNIFICANT SPANISH BANK PRESENCE

The global nature of the health crisis has triggered a sharp and sudden downturn in the global economic environment, resulting in severe macroeconomic scenarios being considered for the period 2020-2022. Under the baseline and adverse scenarios, activity and employment appear to worsen markedly relative to the pre-pandemic situation. The adverse scenario reflects an even more severe initial impact and a slower recovery.

1 YEAR-ON-YEAR RATE OF CHANGE OF GDP UNDER THE BASELINE AND ADVERSE SCENARIOS (a)



2 UNEMPLOYMENT RATE UNDER THE BASELINE AND ADVERSE SCENARIOS (b)



SOURCE: Banco de España.

- a Cumulative GDP growth over the exercise's three-year horizon (2020-2022).
- b Average unemployment rate for the exercise's three-year horizon (2020-2022).

these measures into the exercise a more complete estimate of the impact of the crisis on bank solvency is obtained.²⁴

Results of the stress tests

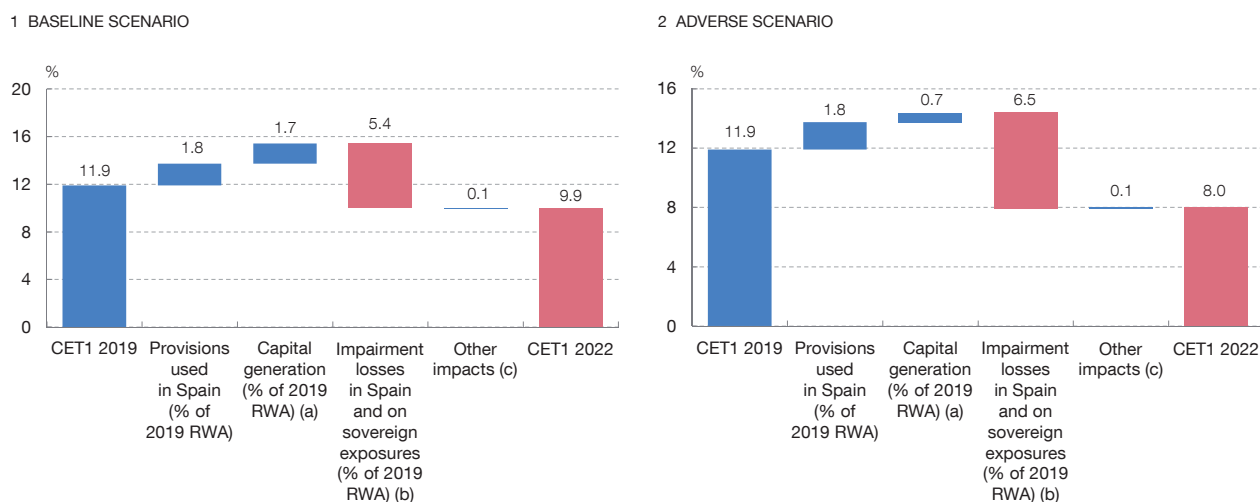
The group of institutions supervised by the SSM with significant international activity recorded a 2 pp decrease in the CET1 ratio under the baseline scenario and a 3.9 pp decrease under the adverse scenario. This group's starting CET1 ratio was 11.9 pp, which was lower than that of the other two groups of institutions. Under the baseline scenario (see Chart 2.13), available provisions (1.8% of RWA) to cover impairment losses in Spain and the reduced capacity to generate new capital (1.7% of RWA) cannot offset the volume of impairment losses in operations in Spain and, to an even lesser extent, sovereign exposure valuation adjustments (overall,

24 The support measures have been modelled in detail for the case of Spain, as the information available permits a more precise treatment, while for other relevant jurisdictions they have been incorporated implicitly in the macro scenarios, and also in the incorporation of the effects of the guarantee schemes and other support programmes for SMEs in the most important countries (United States, United Kingdom, Brazil, Turkey). See Table 1 of Box 2.1 for an estimation of these effects.

Chart 2.13

FOR THE MOST INTERNATIONALLY ACTIVE INSTITUTIONS, THE GLOBAL ECONOMIC CONTRACTION APPEARS TO LIMIT THE GENERATION OF NEW CAPITAL IN FOREIGN OPERATIONS WITH WHICH TO OFFSET THE IMPACT OF IMPAIRMENT LOSSES IN BUSINESS IN SPAIN

Institutions with significant international exposure appear to display notable resilience to the grave economic impact of the global crisis associated with the pandemic, which severely limits the capacity to generate new capital, through net operating income in Spain and subsidiaries' net profit, and increases impairment losses on assets in business in Spain.



SOURCE: Banco de España.

- a The generation of loss-absorbing capital in the case of institutions with significant international activity includes net operating income in Spain and net profits obtained in foreign operations.
- b Impairment losses on loans and foreclosed assets in business in Spain, and the impact on capital of the potential impairment of sovereign exposures at the consolidated level.
- c Other consolidated gains and losses, taxes, translation differences, dividend distribution and changes in RWA.

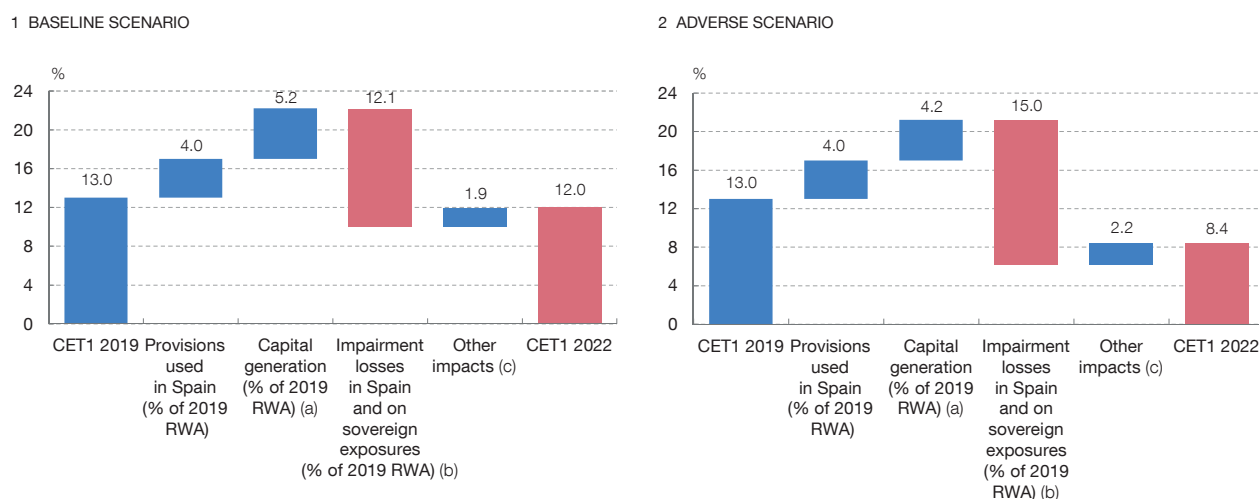
5.4% of RWA).²⁵ The contraction in economic activity in the period 2020-2022 in most of the main countries where this group of institutions conducts foreign operations (Brazil, Mexico, the UK and the US) and the moderate cumulative growth in other areas of operations (e.g. Turkey) will result in credit losses. These absorb the net operating income generated in Spain and abroad, explaining the aforementioned reduced capital generation (1.7%), lower than in previous exercises. The other impacts make a modest, albeit adverse, contribution (0.1% of RWA), undermining solvency, owing to unfavourable changes in exchange rates and other gains and losses. The final result is a CET1 ratio of 9.9 pp in 2022. Under the adverse scenario, the aforementioned contributions are exacerbated on account of the greater initial shock to activity and its persistence. First, capital generation decreases (0.7% of RWA), owing mainly to greater impairment losses in foreign operations, and, second,

25 The capital generation variable includes net operating income in Spain (similar to pre-provision operating profit) and the contribution to net profit/loss of foreign operations, i.e. net operating income from foreign operations less impairment losses, non-operating income and taxes.

Chart 2.14

THE OTHER SSM INSTITUTIONS, CONCENTRATED IN BUSINESS IN SPAIN, APPEAR TO ENDURE A HIGH VOLUME OF IMPAIRMENT LOSSES, MITIGATED BY A HIGHER STARTING CET1 RATIO AND SOME DELEVERAGING

The other SSM institutions endure a high volume of impairment losses in business in Spain in both scenarios, partially offset by the provisions used and the net operating income generated, and also by some deleveraging, included in the other impacts. The additional impairment losses under the adverse scenario result in the difference between the starting and 2022 CET1 ratios (4.6 pp) being higher than the difference for the other two groups.



SOURCE: Banco de España.

- a The generation of loss-absorbing capital in the case of the other SSM institutions includes mainly net operating income in Spain, with a very limited contribution by net profit from foreign operations.
- b Impairment losses on loans and foreclosed assets in business in Spain, and the impact on capital of the potential impairment of sovereign exposures at the consolidated level.
- c Other consolidated gains and losses, taxes, translation differences, dividend distribution and changes in RWA.

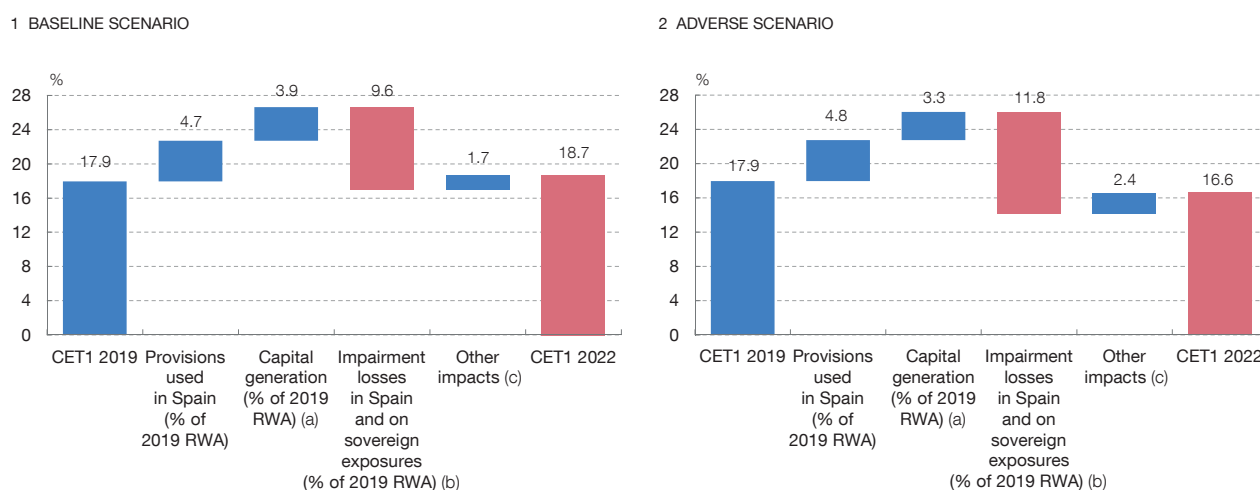
impairment losses in Spain increase to 6.5% of RWA. Under the adverse scenario, the final CET1 ratio is 8%.

Under the baseline and adverse scenarios, the other SSM supervised institutions' CET1 ratio fell by 1 pp and 4.6 pp, respectively. The impacts for this group of institutions, whose starting CET1 ratio was 13 pp, 1 pp higher than that of the first group, are shown in Chart 2.14. Under the baseline scenario, the depletion of the CET1 ratio (1 pp) is lower than that of the institutions with significant international activity, despite larger impairment losses in Spain (12.1%) and impairment losses relative to the use of provisions (4%) and the generation of new capital (5.2%) being less favourable, 2.9 pp versus 1.9 pp for the first group of institutions. The drop in lending in Spain over the period 2020-2022, and the resulting fall in RWA, increase the positive effect of the other impacts (1.9%) and offsets this group's disadvantage compared with the first group in terms of net profit. Under the adverse scenario, capital generation through net operating income declines compared with the baseline scenario (4.2% of RWA) and impairment losses increase (15% of RWA) owing to the macroeconomic downturn in Spain, undermining solvency to a greater extent. The other effects (2.2% of RWA) increase slightly

Chart 2.15

DIRECTLY SUPERVISED INSTITUTIONS HAVE A CONSERVATIVE BUSINESS MODEL, WITH A HIGH LEVEL OF CAPITAL AND EXPOSURE TO LOWER RISK ASSETS. THIS LIMITS IMPAIRMENT LOSSES, WHICH NONETHELESS ARE SIGNIFICANT DUE TO THE STEEP DECLINE IN ECONOMIC ACTIVITY IN SPAIN

The group of institutions under direct national supervision maintains a notable level of solvency under both scenarios, despite also enduring very significant impairment losses. In addition to having a substantially higher starting CET1 ratio, this group of institutions, whose business model is conservative, incurs lower impairment losses than the significant institutions concentrated in Spain.



SOURCE: Banco de España.

- a The generation of loss-absorbing capital is determined by net operating income in Spain.
- b Impairment losses on loans and foreclosed assets in business in Spain, and the impact on capital of the potential impairment of the group's sovereign exposures.
- c Other consolidated gains and losses, taxes, translation differences, dividend distribution and changes in RWA.

compared with the baseline scenario due to the greater decline in lending. The final outcome is a CET1 ratio of 8.4 pp. Capital depletion under this scenario is greater than that of the group of institutions with significant international activity and the directly supervised institutions.

The CET1 ratio of institutions supervised directly by the Banco de España increases by 0.8 pp under the baseline scenario, while under the adverse scenario the ratio drops by 1.3 pp. Chart 2.15 shows the results of the third group, which has the highest starting CET1 ratio (17.9 pp). These institutions, whose business model focuses on simpler and more conservative products (a greater relative weight of mortgage loans and government debt holdings) and who operate in a reduced geographical area, improve their solvency position under the baseline scenario and deplete the least amount of capital under the adverse scenario. Under the baseline scenario, existing provisions (4.7% of RWA) and generated capital (3.9% of RWA) absorb most of the impairment losses (9.6% of RWA). The other impacts make a moderate positive contribution (1.7% of RWA), on account of the drop in lending, yet it is sufficient to end the exercise with an aggregate CET1 ratio of 18.7 pp, up from the starting ratio. Under the adverse scenario, the generation of new loss-

absorbing capital decreases (3.3% of RWA) and impairment losses increase (11.8% of RWA), prompting a depletion of capital that is somewhat mitigated by the other effects (2.4% of RWA). The CET1 ratio ends the exercise at 16.6 pp, the highest final ratio of the three groups.

The Spanish banking sector thus shows in this exercise that it can withstand the severe economic impact of the health crisis, supported by the mitigating effect of the measures implemented by the economic authorities. Under the baseline and adverse scenarios, the three groups of institutions end the test with final CET1 ratios above 6 pp. Compared with past exercises, the deterioration under the baseline scenario, which now contains a much severer initial shock, is noteworthy. As regards the adverse scenario, declines in the CET1 ratio are steeper than in the previous exercise, influenced by the extreme severity of the scenario. However, the falls are mitigated significantly by the support measures, as analysed in detail further on.

Taking into consideration the notable uncertainty the banking sector faces is necessary when assessing the results. The typical caveats from past exercises apply, such as heterogeneity across individual institution's results with respect to the group average, or the possibility of a concrete institution undergoing a specific disruption in addition to the systemic shock upon which the exercise is based. However, caveats specific to the current environment should also be highlighted. For example, the estimated impact on banks' solvency may vary if the economic and financial support programmes are reduced or modified. The estimated effect of the programmes already implemented is also subject to a degree of uncertainty. The adverse effects of the pandemic on economic activity persisting longer than considered in the test's scenarios would pose an additional significant challenge to the sector's solvency. It is therefore advisable that institutions remain vigilant vis-à-vis changes in their assets, manage risk flexibly and in a manner that favours the recovery of activity, and explore effective channels for improving their efficiency.

Spanish institutions also had a robust liquidity position at end-2019 and the ECB's additional measures have reinforced that diagnosis. As in previous years, a stress test was conducted on the liquidity coverage ratio (LCR), with Spanish institutions maintaining appropriate liquidity levels comparable to previous tests.²⁶

Assessment of the impact of the financial support measures

The FLESB framework was used to estimate the impact on Spanish institutions' solvency of the various measures implemented by the economic authorities in response to the crisis. The following measures were considered: public guarantees

²⁶ See Chapter 2 of the Autumn 2019 FSR.

for lending to firms,²⁷ the ECB's new series of TLTROs,²⁸ the restriction on dividend distributions,²⁹ moratoria on mortgage loan and consumer credit repayments³⁰ and certain aspects of the "CRR quick fix".³¹ The first three measures may have an impact on solvency over the exercise's three-year horizon and were included in the results of the preceding section. By contrast, the examined effects of the other two measures may be considered temporary,³² since they are either not applicable over the entire horizon or they will gradually be withdrawn over its course, and are presented in this section as an additional sensitivity analysis.

There is some uncertainty surrounding the scope and effectiveness of the measures when simulating their effect under the FLESB framework. For example, the impact of the public guarantees securing lending to firms will vary depending on whether the guaranteed loans' probability of default is similar to that of the overall portfolio or, on the contrary, they are focused on higher risk debtors. The impact is thus presented as a range between the two possibilities. Logically, the more impairment losses the scheme is able to absorb, the greater the budgetary cost of this support measure. The results of the main exercise considered this range's midpoint.

Securing loans to firms via public guarantees has a significant mitigating impact on the depletion of the banking sector's capital (see Chart 2.16) This facility acts directly through two channels: it lowers the risk weight of the guaranteed portion of the loans granted under this scheme to the 0% risk weight assigned to sovereign exposures, and reduces losses in the event of default, as the central government assumes its share thereof. Furthermore, it is assumed that the amounts guaranteed will not be classified as non-performing in 2020, owing to the liquidity provided and the loan payment holidays. However, this may not be the case over the remaining two years of the exercise's horizon. Depending on the guaranteed loans' credit quality, the guarantees absorb between 11.6% and 48.7% of the expected losses under the baseline scenario, with 30.2% absorbed assuming a credit quality midpoint, while under the adverse scenario the expected losses absorbed range from 12.4% to 43%, with 27.7% absorbed assuming a credit quality midpoint. This

27 See [Royal Decree-Law 8/2020](#) of 17 March 2020 on urgent extraordinary measures to address the economic and social impact of COVID-19.

28 See [Decision \(EU\) 2020/614](#) of the European Central Bank of 30 April 2020 amending Decision (EU) 2019/1311 on a third series of targeted longer-term refinancing operations.

29 See [Recommendation ECB/2020/35](#) of the European Central Bank of 27 July 2020 on dividend distributions during the COVID-19 pandemic and repealing Recommendation ECB/2020/19.

30 See [Royal Decree-Law 11/2020](#) of 31 March 2020, adopting urgent complementary social and economic measures to address COVID-19.

31 See [Regulation \(EU\) 2020/873](#) of the European Parliament and of the Council of 24 June 2020 amending Regulations (EU) No 575/2013 and (EU) 2019/876 as regards certain adjustments in response to the COVID-19 pandemic.

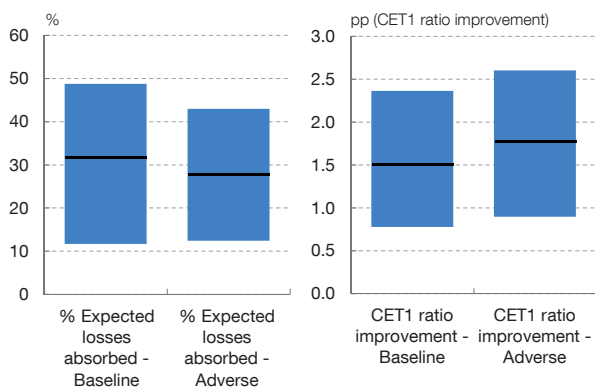
32 Box 3.3 details the "CRR quick fix", which contains transitional and permanent arrangements. This section does not assess the reform in full, merely some aspects thereof that bear a more direct relationship to estimating impairment losses in the stress test exercise.

Chart 2.16

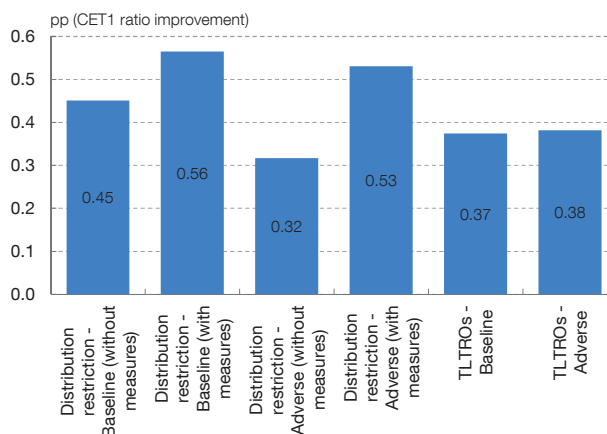
THE EFFECTS OF THE GUARANTEE FACILITY FOR LOANS TO FIRMS AND THE EXPANSION OF THE TLTRO SERIES HAVE A SIGNIFICANT IMPACT ON THE STRESS TEST, STRENGTHENED BY THE RESTRICTIONS ON DIVIDEND DISTRIBUTION (a)

The public guarantee scheme for corporate lending appears to have a positive impact on the CET1 ratio under both scenarios. The restriction on dividend distributions and the latest TLTRO facility also seem to have a positive effect, yet it is smaller than that of the guarantee scheme. The effect of the dividend distribution restrictions complements the other measures, as they increase the volume of profit generated that can be retained due to the restriction.

1 EFFECT OF THE ICO GUARANTEE FACILITY (b)



2 EFFECT OF THE DIVIDEND DISTRIBUTION RESTRICTION AND THE TLTRO SERIES (c)



SOURCE: Banco de España.

- a The effects of the guarantee scheme assuming the credit quality midpoint, the restrictions on the distribution of dividends (with measures) and the TLTROs are included in the main analysis, the results of which are shown in Charts 2.13, 2.14 and 2.15.
- b Chart 2.16.1 shows the range of the measure's effect on expected losses (left-hand side) and on the CET1 ratio (right-hand side) depending on the assumptions made regarding the credit quality of the loans to firms and sole proprietors in Spain under the ICO guarantee facility. The minimum effect assumes that the expected losses are equal to the average of the corporate lending portfolio, while the maximum effect assumes that NPL inflows are primarily concentrated in the guaranteed loans. The black line denotes the midrange effect.
- c Chart 2.16.2 shows the effect of the restriction on dividend distributions and of the latest TLTRO facility (in pp of the 2022 CET1 ratio) with no mitigating measures and assuming a midrange effect of the ICO guarantee facility.

results in a notable improvement in the CET1 ratio of 1.5 pp under the baseline scenario and of 1.7 pp under the adverse scenario where the lending guaranteed is at the credit quality midpoint.

The funding facilities granted by the ECB have also been included, improving institutions' net interest income. The new series of TLTROs offers institutions access to ECB funding at negative interest rates. Funds raised by institutions under TLTRO III can be used to expand the volume of performing assets, thereby obtaining an additional source of income via the interest rate spread. Assuming that the facility remains in force until 2022, and factoring in an average impact for the other measures, it is estimated that the additional volume of income would increase the CET1 ratio by 0.37 pp under the baseline scenario and by 0.38 pp under the adverse scenario. The two scenarios result in similar figures because both the facility's rate and the average rate of the low-risk assets in which the funds are assumed to be invested remain practically constant in both scenarios.

The restriction on dividend distributions over the exercise's horizon also has a positive and significant effect that complements the other support measures.

This measure impacts the CET1 ratio's numerator, boosting the build-up of reserves. Depending on the scenario and on whether or not the other measures are included, the effect of the dividend distribution restriction ranges from an increase in the CET1 ratio of 0.45 pp to 0.56 pp and 0.32 pp to 0.53 pp under the baseline and adverse scenarios, respectively. As expected, the effect in the two scenarios is greater if the other measures are included, since they mitigate the adverse impacts on profitability and therefore improve net profit, which is not distributed on account of the restriction, but instead appropriated to reserves.

The loan repayment moratoria initially appear to have a positive short-term effect on banks' solvency by limiting defaults due to liquidity problems in 2020. Furthermore, in conjunction with the public guarantee scheme they seemingly also mitigate the severity of the macroeconomic scenarios in the longer term (2020-2022 time horizon).

The moratoria influence short-term solvency through two channels. First, they reduce losses by lessening defaults during the period they are in force. However, defaults may ultimately arise after this period has ended. Second, they may affect interest accrual, should it be suspended. However, the accounting rules allow for interest to be considered for at least some of the loans benefiting from the moratoria.³³ As mentioned above, the ICO guarantee facilities increased NFCs' and sole proprietors' liquidity across the board, thereby limiting defaults in the short term. The simulations performed suggest that in 2020 the direct effect of the liquidity-supporting measures would substantially improve the NPL ratio in the two scenarios. It should be noted that this direct effect is temporary and is not included in the estimated solvency ratio for 2022. However, these schemes also appear to enable a larger proportion of solvent firms experiencing liquidity problems to overcome the COVID-19 crisis, by mitigating the severity of the macroeconomic scenarios used in the fully fledged exercise for 2020-2022.

The measures included in the CRR quick fix also appear to have a positive impact additional to that considered in the exercise. However, some of the quick fix's effects are temporary. The CRR quick fix in response to the health and economic crisis came into force on 27 June 2020 (see Box 3.3). These measures were not included in the main analysis, which considers a CET1 ratio free of any temporary adjustments. However, an analysis of their estimated impact is included here in order to assess institutions' ability to satisfy the regulatory requirements over the exercise's horizon. Specifically, the effect of two measures included in the CRR quick fix that are of particular interest to Spanish institutions is estimated. First, the prudential filter for changes in the value of sovereign bond exposures measured at

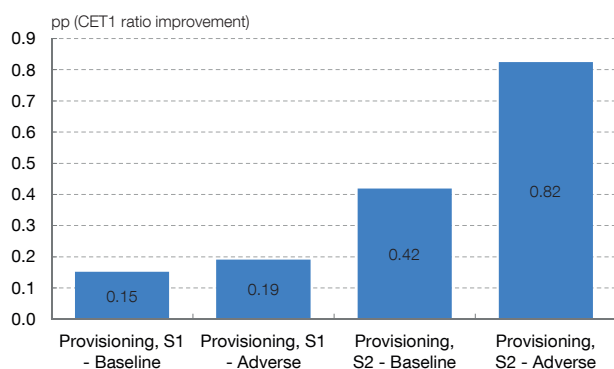
³³ Various methodological assumptions may be made about the effect of the moratorium on interest accrual. However, the simulations performed show that these assumptions do not significantly change the CET1 ratio and, therefore, only its average effect is presented.

Chart 2.17

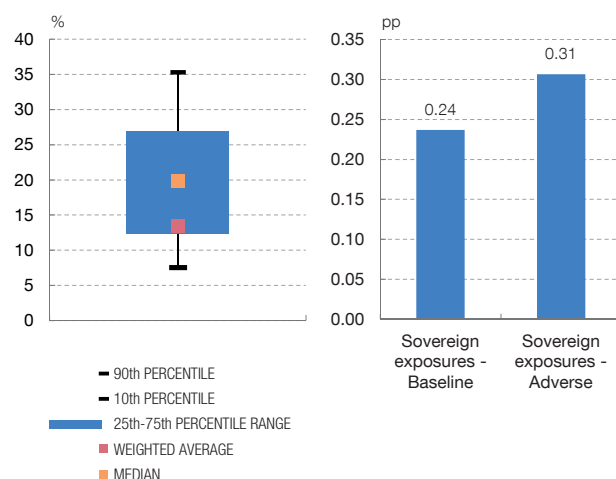
THE ADOPTION OF ADDITIONAL MEASURES IMPROVES THE REGULATORY SOLVENCY ASSESSMENT, ALTHOUGH SOME OF THEM HAVE MOSTLY SHORT-TERM EFFECTS (a)

The effect of some of the CRR quick fix's measures is assessed, finding that the transitional arrangement for expected credit loss provisioning for non-impaired loans (classified as Stage 1 or Stage 2) has a greater impact than the temporary prudential filter for changes in the value of sovereign exposures. Nonetheless, the latter is also important, owing to holdings of sovereign exposures accounting for a significant percentage of consolidated assets. This percentage is lower for larger institutions.

1 QUICK FIX EFFECT, ECL PROVISIONING FOR STAGE 1 AND STAGE 2 EXPOSURES (b)



2 SOVEREIGN EXPOSURES AS A % OF TOTAL ASSETS (LEFT-HAND SIDE) AND EFFECT OF THE SOVEREIGN EXPOSURE QUICK FIX (b) (RIGHT-HAND SIDE)



SOURCE: Banco de España.

- a The effects considered in this chart are not included in the main results in Charts 2.13-2.15 since they relate to transitional arrangements to the regulatory assessment of solvency. Thus, stripping them out from the fully loaded results is useful for the medium and long-term assessment.
- b Chart 2.17.2 shows the pp improvement in the 2022 CET1 ratio, under this section's baseline and adverse scenarios, of two arrangements included in the CRR quick fix concerning the impact of expected losses on capital: (i) the effect of the prudential filter for changes in the value of sovereign exposures; and (ii) the effect of the temporary arrangement for expected credit loss provisioning for Stage 1 and 2 exposures. The CRR quick fix includes measures other than those considered in this exercise, as well as permanent arrangements (see Box 3.3).

fair value and, second, the temporary ability to add back to their CET1 capital any increase in new expected credit loss provisions recognised for their non-impaired loans.³⁴ These measures act by increasing the CET1 ratio's numerator. The prudential filter for sovereign exposures improves the CET1 ratio by 0.24 pp under the baseline scenario and 0.31 pp under the adverse scenario (see Chart 2.17). Meanwhile, the measure concerning impairment losses for non-credit impaired debtors appears to improve the CET1 ratio by 0.57 pp under the baseline scenario (0.15 pp and 0.42 pp in relation to impairment losses for Stage 1 and Stage 2 exposures, respectively). This improvement increases to 1.01 pp (0.19 pp and 0.82 pp for impairment losses for Stage 1 and Stage 2 exposures, respectively) under the adverse scenario, where these losses are far greater.

34 In other words, debtors classified for accounting purposes as Stage 1 or Stage 2.

2.1.4 Deposit institutions' operational risks

The measures adopted by Spanish deposit institutions to mitigate the impact of the pandemic on their operational continuity and, above all, the speed at which they were implemented have helped contain operational risks. Specifically, during the most stringent months of lockdown, on average around 20% of branches were closed and 10% of automated teller machines were not working. The percentage of employees working from home was above 60%. 80% of jobs can be performed remotely, placing Spain among the countries with a banking sector better adapted to this type of working arrangement. Lastly, 5% of staff members were unavailable. Operating expenses recognised by Spanish institutions in relation to the COVID-19 shock were immaterial (less than 0.1% of CET1) and in line with the SSM average. They corresponded mainly to strengthening infrastructure and business continuity, in addition to health and safety measures to protect employees and branches.

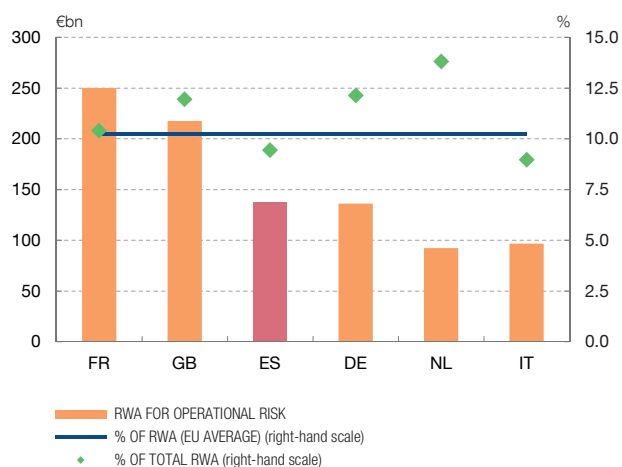
The RWA for operational risk of Spanish institutions fell over the last 12 months, owing to the decrease in the business indicator used to calculate them. Thus, although the weight of operational risk held steady in June 2020 at around 9.5% of total RWA, RWA for operational risk decreased by 4.4% in year-on-

Chart 2.18

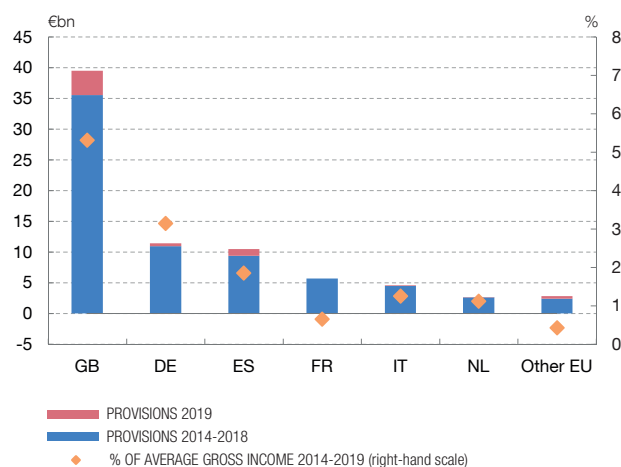
RISK-WEIGHTED ASSETS FOR OPERATIONAL RISK HAVE HELD RELATIVELY STEADY IN RECENT YEARS, WHILE PROVISIONS FOR PENDING LEGAL ISSUES AND TAX LITIGATION HAVE INCREASED

At the European level, RWA for operational risk accounted for 10.3% of total RWA in December 2019. Although Spain was ranked third in terms of volume, the weight of its RWA for operational risk (9.4%) was lower than that of the main European countries (above only Italy) and below the European average. In turn, European banks have recognised significant provisions for pending legal issues and tax litigation in recent years. In 2019, the United Kingdom and Spain were the European countries that recorded the largest increase in provisioning compared with the period 2014-2018.

1 RWA FOR OPERATIONAL RISK
Consolidated data. December 2019



2 PROVISIONS FOR PENDING LEGAL ISSUES AND TAX LITIGATION
Consolidated data. December 2014 - December 2019



SOURCE: EBA.

year terms. At the European level, based on data from the latest EBA EU-wide transparency exercise for December 2019,³⁵ although Spain ranked third in terms of volume of RWA for operational risk, as a percentage of total RWA (9.4%) they remained below the European average (10.3%) (see Chart 2.18). The main reason for this difference is Spanish institutions' greater use of the standardised approach (linked to business indicators) rather than the advanced measurement approach to calculate operational risk capital requirements (linked to historical losses).

European banks' provisioning for pending legal issues and tax litigation fell in 2019. According to the transparency exercises published annually by the EBA, provisions recognised by the European banking sector between 2014 and 2018 exceeded €70 billion (2.3% of gross income). However, this was uneven across countries (ranging from 5.8% in the United Kingdom to 0.8% in France). By volume of provisions, Spain is ranked third, where they amount to 2% of gross income. In 2019, the countries with the largest increase in provisions compared with the period 2014-2018 were the United Kingdom and Spain. The United Kingdom remained the country with the largest volume of provisions (see Chart 2.18).

2.2 Non-banking financial sector and systemic interconnections

2.2.1 Non-banking financial sector

Specialised lending institutions

The outstanding amount of credit granted by specialised lending institutions (SLIs) fell over the last year as a result of changes therein since the onset of the pandemic. Prior to the COVID-19 crisis, lending by SLIs exhibited great momentum, with year-on-year growth of close to 10%. However, in June 2020 that rate dropped to -4.7% (see Chart 2.19), reflecting SLIs' greater vulnerability to the shock triggered by the pandemic on account of their business model, which is heavily focused on consumer credit.

Non-performing consumer credit loans extended by SLIs have risen such that the NPL ratio is at a similar level to that of deposit institutions for the same segment. The significant growth in consumer credit granted by SLIs had kept their NPL ratio below that recorded by deposit institutions in recent years (see Chart 2.19). However, the greater deceleration of new loans granted over the last year has prompted the NPL ratios to even out. Given the current macroeconomic situation and the macroeconomic forecasts, the SLIs' NPL ratio is likely to be subject to upward pressure.

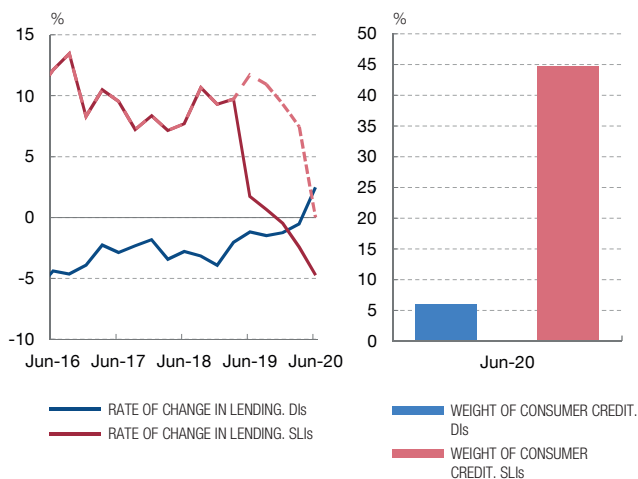
³⁵ See the 2020 EU-wide transparency exercise.

Chart 2.19

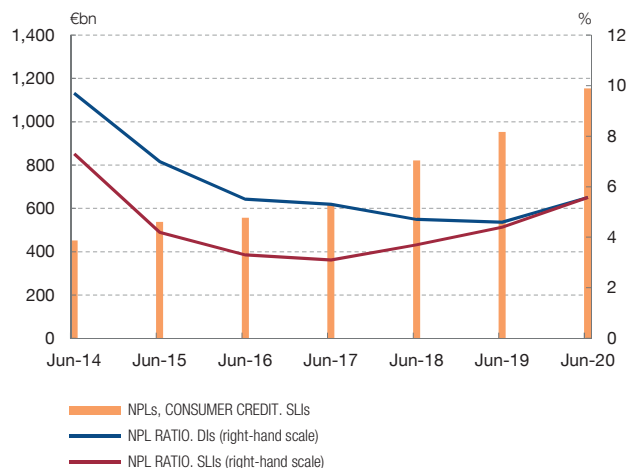
SLIs HAVE RECORDED A DROP IN LENDING AND AN INCREASE IN THE NPL RATIO SINCE THE ONSET OF THE COVID-19 PANDEMIC

Lending by SLIs fell in year-on-year terms on account of the performance in the first six months of 2020 and, above all, the sharp decline observed in Q2. Over the last 12 months, the NPL ratio of SLIs increased at a similar pace to that of deposit institutions. However, the SLI business model, heavily oriented towards consumer credit, makes them more vulnerable to the potential further worsening of households' ability to pay.

1 RATE OF CHANGE IN LENDING AND WEIGHT OF CONSUMER CREDIT (a)
Business in Spain, ID



2 NPLs AND NPL RATIO OF CONSUMER CREDIT
Business in Spain, ID



SOURCE: Banco de España.

a The broken red line shows the change in lending of existing SLIs in June 2020. Since June 2019, several significantly large SLIs have become deposit institutions, hence the marked drop in the rate of change in lending from that date (solid red line).

Insurance companies

The insurance sector's return on equity (ROE) in 2020 H1 fell by 0.5 pp compared to the same period of 2019 to 6.3%. The life insurance segment's performance was a driving factor behind this decrease. With the size of the sector's balance sheet and equity having held relatively steady over the last 12 months, the decline in ROE was triggered by the drop in the sector's earnings (-2.23%). The life (-13.9%) and non-life (6.2%) segments' year-on-year accounting profit performed unevenly in the first six months of 2020. The latter managed to grow despite the impact of COVID-19. This unevenness was also reflected in the performance of premium income. In the life segment premium income fell in the first six months of 2020 by 27.6% in year-on-year terms, while in the non-life segment it increased by 0.9% (see Chart 2.20). The increasing difficulty of channelling savings linked to life insurance products in a low interest rate environment is largely behind the poorer performance of the life segment's income.

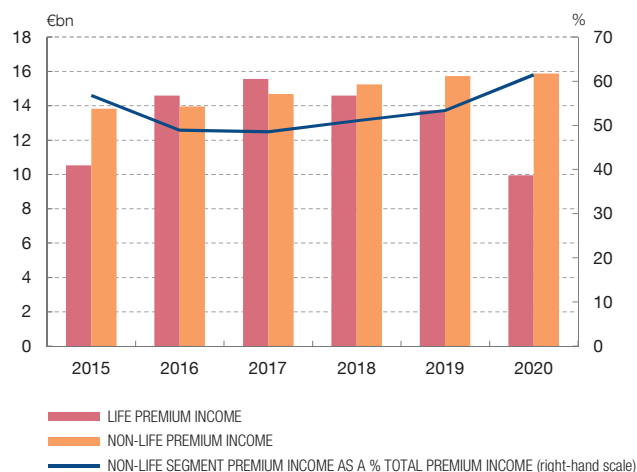
To date the COVID-19 crisis has not entailed significant changes to the sector's solvency position or to its investment portfolio structure by product type in

Chart 2.20

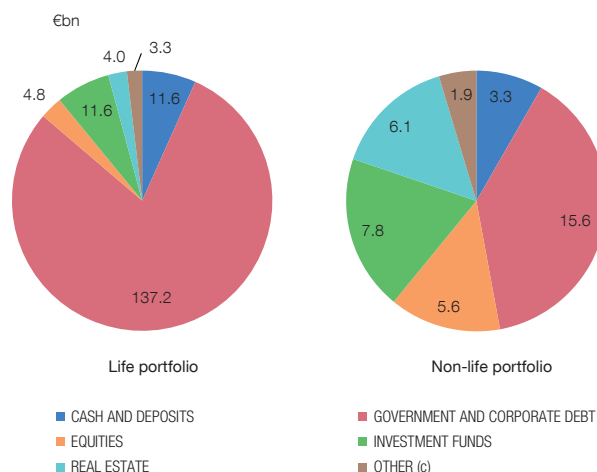
THE PREMIUM INCOME OF THE NON-LIFE SEGMENT HAS INCREASED IN 2020, COMPARED TO THE SHARP YEAR-ON-YEAR DROP RECORDED BY THE LIFE SEGMENT. THE NON-LIFE SEGMENT'S INVESTMENT PORTFOLIO ALSO HAS A GREATER WEIGHT OF RISKIER ASSETS (a)

The premium income of the non-life segment in Spain increased by 0.9% in the first six months of 2020, compared to the decline of more than 25% for the life segment. The life segment faces growing difficulties to attract savings, with an investment portfolio with a high weight (79.6%) of sovereign and corporate bonds with limited yields on account of the low interest rate environment.

1 PREMIUM INCOME AND EARNINGS



2 DISTRIBUTION OF INSURANCE COMPANIES' INVESTMENT (b)



SOURCE: ICEA.

- a Life insurance policies may cover the risk of death and/or include a savings component tied to the insured's survival (with endowment insurance policies combining the two components being a possibility), while non-life insurance policies cover a wide range of risks (motor insurance, health insurance, breakdowns, home insurance, etc.).
- b The life segment's portfolio represents 54.4% of the insurance sector's investments, while the non-life segment barely accounts for 12.7%. Equity and general portfolio investments account for the remaining 32.9%.
- c Other includes mortgage and other loans, derivatives and the other asset categories.

the life and non-life segment. The insurance sector's solvency ratio stood at 229.8% in June 2020, down 4.7 pp on a year earlier. The investment portfolio in the life insurance segment remained concentrated in debt securities, with a weight of 76.9% in June 2020, which had declined minimally by 1.4 pp since June 2019. The proportion of riskier assets, such as equities and investment funds shares or units (2.8% and 6.7%, respectively in June 2020) is much smaller. By contrast, the non-life insurance segment's portfolio has a riskier profile, comprising 13.8% of equities, 19.3% of investment fund shares or units and 15.1% of real estate assets.

The higher risk profile of the non-life segment's investments has advantages in terms of profitability in a low rate environment but involves taking on greater risks. Central bank intervention has contained the negative effect of the COVID-19 crisis on financial asset valuations to date. This is estimated to have limited balance sheet impairment related to the investment portfolio, in particular, of the riskier non-life segment.

During 2020 work continued on the review of Solvency II, the regulatory framework for insurance companies in the EU, with the particular aim of enhancing its macroprudential dimension. Public consultations were launched by the European Insurance and Occupational Pensions Authority (EIOPA) and by the European Commission regarding the review of Solvency II. In February of this year the ESRB published a report³⁶ on this review with several macroprudential policy proposals. Notably, the ESRB favours incorporating into legislation new solvency requirements to prevent and mitigate the procyclical behaviour of insurance companies (through capital buffers), and liquidity requirements to address the risks of specific activities such as hedging derivatives and the placement of certain products, as well as new tools to reduce the risks of credit origination by the insurance sector in certain countries. The COVID-19 crisis has underlined the need to shore up the macroprudential dimension of the regulation in order to address systemic risks (the framework of Solvency II was not initially conceived for this purpose) and the appropriateness of providing the insurance industry with a set of macroprudential tools similar to that available for the banking industry.

Investment funds

Initially investment funds' assets were adversely affected by the pandemic, although they largely recovered during Q2. Specifically, in March 2020 their assets fell by 8.8% month-on-month and subsequently recovered, posting a quarter-on-quarter growth rate of 5.4% in June. The most important contributory factor to these positive developments in the second quarter was the funds' return to profitability, owing to the favourable performance of financial markets valuations, although this was not enough to reverse the losses following the outbreak of the pandemic, particularly in equity funds. Also, on the latest data available published by Inverco (September 2020), the year-on-year growth rate of investment funds' assets fell by 2.3% (see Chart 2.21), despite the favourable performance of long-term bond funds and equity funds. That is in line with the positive trend of the main stock market indices and the fall in risk premia in recent months mentioned in Chapter 1.

Pension funds

Pension funds have performed in a similar way to investment funds since the beginning of the pandemic. Thus, in March 2020 their assets declined by 8.8% in quarter-on-quarter terms and recovered in the second quarter, limiting the fall to 0.3% in year-on-year terms in June. This positive pattern in the second quarter was the result both of net contributions and of pension funds' recovery of profitability. In September (the latest available data published by Inverco), individual pension funds'

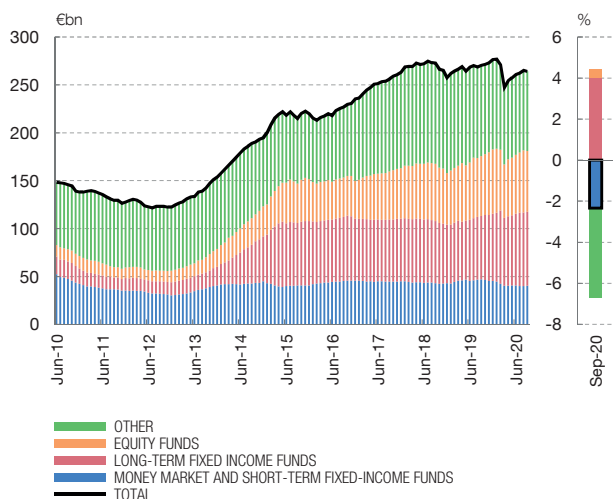
³⁶ See ESRB February 2020 *Enhancing the macroprudential dimension of Solvency II*.

Chart 2.21

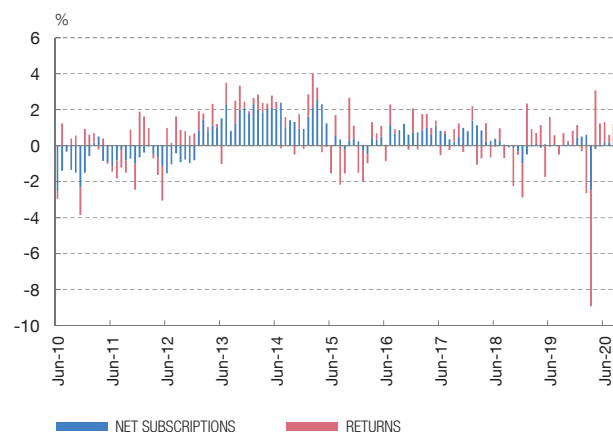
INVESTMENT FUNDS' ASSETS FELL SHARPLY AT THE ONSET OF THE PANDEMIC BUT HAVE LARGELY RECORDED A SUBSEQUENT RECOVERY

The sharp fall in investment funds' assets at the onset of the pandemic, both due to the negative impact on their profitability and net redemptions, was subsequently reversed by their return to profitability, with net subscriptions barely contributing to assets as from March 2020. The latest available data (September 2020) show that the reduction in investment funds' assets year-on-year (-2.3 %) is due to the negative behaviour of money market and short-term fixed-income funds and, in particular, of funds included in the "other" category.

1 BREAKDOWN OF INVESTMENT FUNDS BY CATEGORY (a)
Volume (left-hand scale) and y-o-y growth at Sep. 2020 (right-hand scale)



2 CONTRIBUTION OF RETURNS AND NET SUBSCRIPTIONS TO CHANGE IN INVESTMENT FUNDS' ASSETS



SOURCE: Inverco.

a The "long-term fixed-income funds" category includes long-term fixed-income investment funds, mixed fixed-income funds, international fixed-income funds and international mixed fixed-income funds. The "equity funds" category includes equity investment funds, mixed equity funds, international equity funds and international mixed equity funds. The "other" category includes hedge funds, passive management funds, absolute return funds, global funds and collateralised investment funds.

assets (which represent around 70% of the aggregate assets of individual, occupational and associated pension schemes) continued to rebound to post a year-on-year growth rate of 0.3%.

2.2.2 Systemic interconnections

In Spain the banking sector is key to the economy's financial activities and has a relatively stable weight of more than 65% of the private financial system's individual total assets. In turn, the banking sector is directly exposed to the non-banking financial sector (NBFS, which comprises entities such as investment funds, insurance companies, pension funds and other financial intermediaries) and it is also indirectly exposed to the same risks through investments in the same assets that are included in non-banking entities' portfolios. Although the combined size of these non-banking entities is much smaller than that of the banking sector, their interlinkages could potentially affect financial stability.

Investment funds account for a relatively small percentage of the domestic financial system, although their weight has increased in recent years owing to asset growth. Specifically, investment funds represent 21% of the individual total assets of the NBFS (7% of the total for the financial system). Given that investment funds are one of the most diversified industries in terms of geographical area and sectors, in principle, they would be more likely to mitigate the effects of local crises. However, the COVID-19 crisis has triggered turmoil on many markets worldwide and droves of investors exited the investment funds of several countries in search of less risky and more liquid assets.

The assets which funds must sell to address these divestments at times of stress may prompt prices to fall considerably and cause losses for other sectors which are holding them. Also, bulk sales could spiral and prices could fall in reaction to downgrades of issuers bordering on investment grade, owing to the mandate of many funds which requires them to invest in above investment-grade assets. In addition to the direct impact of falling prices on income or capital, the value of banks' collateral which is accepted or deposited in financial transactions could be affected where it comprises assets subject to fire sales or other assets which are impacted by these sales. As discussed in Chapter 1, at the moment the rating agencies have not revised valuations across the board as they did in the global financial crisis, however in more adverse scenarios this could ultimately happen.

The COVID-19 crisis triggered considerable outflows of capital from investment funds in the euro area. The outflows occurred mainly in the second half of March and reached around 2% of the funds' total assets prior to the outbreak of the pandemic (see Chart 2.22). From April onwards, these outflows were seen to stop or revert depending on the country in question.³⁷ Consequently, the situation at end-August was highly mixed; whereas the net subscriptions received by the funds in some countries exceeded the withdrawals in March (such as in Ireland or France, even though March's outflows were particularly severe in the latter country), the funds in other countries continued to record net capital outflows (such as in Italy). Spanish funds contained the net outflows in early April and their situation has remained stable since then. The outflows in March were sizeable (in Spain the outflows as a percentage of assets were higher than 95% of the monthly outflows observed since 2005). However, developments from March to September were significantly less negative than those observed in the 2007-2008 global financial crisis or the 2010-2012 sovereign debt crisis. The decisive action³⁸ of the ECB and national authorities is estimated to have contributed to stabilising investment fund flows.

A high percentage of banks' and investment funds' portfolios are invested in the assets of the same issuers, particularly sovereign bonds. Chart 2.23 shows the

37 The ECB's pandemic emergency purchase programme (PEPP) which was implemented on 25 March played an essential role.

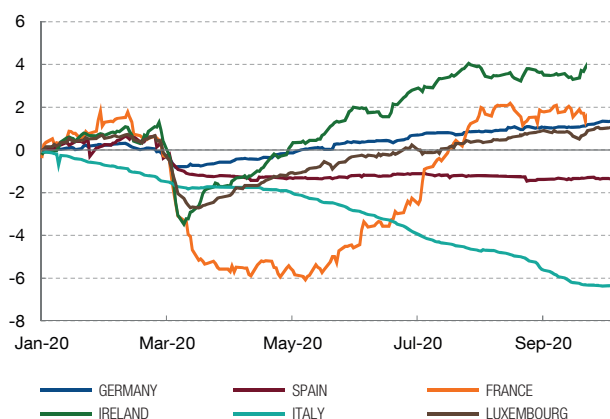
38 See, for example, [the ECB's FSR of May 2020](#).

Chart 2.22

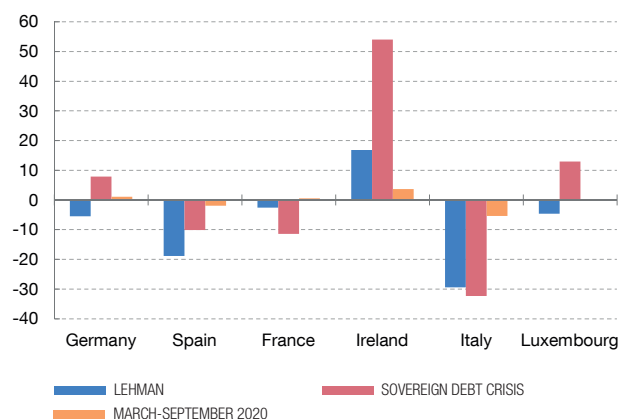
DESPITE THE PANDEMIC'S INITIAL SHARP IMPACT ON EUROPEAN INVESTMENT FUNDS, NET CAPITAL OUTFLOWS SINCE MARCH HAVE BEEN MORE MODERATE THAN IN PREVIOUS CRISES

In March 2020 the investment funds in several European countries experienced net capital outflows of around 2% of their assets. As from April a very mixed recovery has been observed, with funds in countries such as Ireland and France experiencing net inflows that exceed previous outflows, very low levels of net inflows into Spanish funds, and continuous outflows from Italian funds. The outflows recorded in 2020 are moderate when the developments in the period March-September 2020 are compared with the global financial crisis and the 2012 sovereign debt crisis.

1 NET INFLOWS ACCUMULATED SINCE 15 JANUARY 2020
As % of initial assets (a)



2 INVESTMENT FUNDS' NET CAPITAL INFLOWS IN SEVERAL CRISES
As % of initial assets (b)



SOURCE: Refinitiv.

- a Initial assets are calculated as average assets between 8 and 14 January, except for Germany, which were calculated between 22 and 28 January (owing to Refinitiv's scant coverage for this country in the previous period).
- b The "Lehman" data relate to the period July 2007-December 2008 and the "sovereign debt crisis" data relate to February 2010-December 2012. In the three cases, the figures relate to the net flows accumulated in the period with respect to total assets in the month before the period considered.

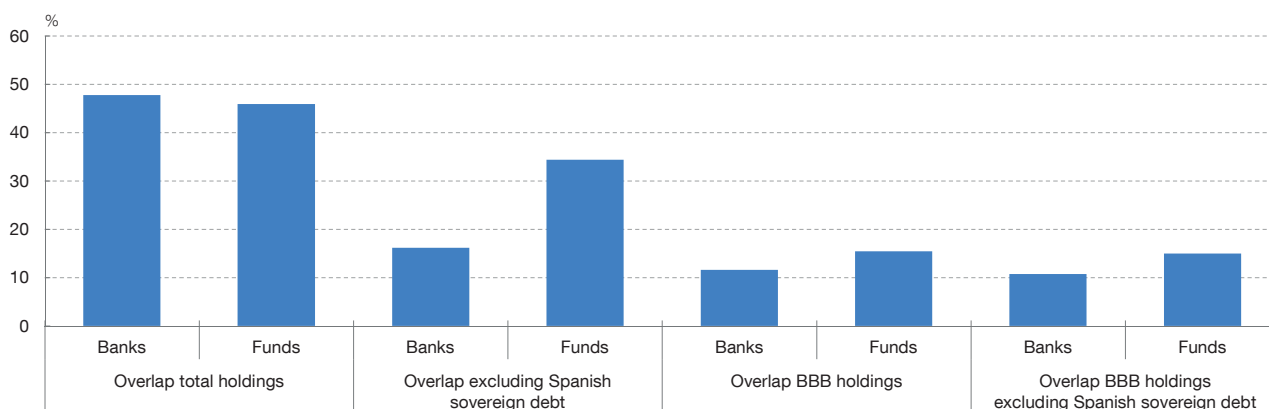
overlap across banks' and investment funds' marketable securities portfolios and the effect that government bond holdings have in this measure of portfolio similarity (the marketable securities portfolio represents 24% of total banking assets in individual terms). The overlap falls considerably if sovereign bond holdings are excluded; it decreases from 48% to 16% when measured in terms of the total banking portfolio. In the event of hypothetical fire sales, the fall in the price of sovereign holdings is expected to be lower than that of private-sector securities since those markets are deeper and more liquid. As for holdings bordering on investment grade,³⁹ the portfolios overlap to a much smaller extent, which ranges from 12% (for banks) to 15% (for funds). The effect of excluding sovereign bond holdings which are close to investment grade is lower since they account for a very small percentage of holdings (and include securities issued by regional or local public bodies). Therefore, possible sudden ratings downgrades in the

39 The ratings available as at 16 September 2020 are considered. They are assigned by one of the rating agencies recognised by the ECB and are adapted to the S&P scale so that all holdings whose issuer receives a rating of between BBB+ and BBB- are deemed to be at the lower range of investment grade.

Chart 2.23

A HIGH PERCENTAGE OF BANKS' AND INVESTMENT FUNDS' PORTFOLIOS ARE INVESTED IN ASSETS OF THE SAME ISSUERS (a)

A significant portion of the holdings they have in common are due to sovereign bond investments. At the same time, the overlap is considerably lower in assets whose rating is at the lower range of investment grade.



SOURCE: Securities Holdings Statistics by Sector.

a The chart shows the holdings that the banking and investment fund sectors have in common (i.e. securities with the same characteristics issued by the same issuer). The vertical axis shows the weight of these holdings as a percentage of each sector's total securities portfolio or of certain segments in their portfolios. For example, around 47% of the banking sector's securities portfolio is in common with that of investment funds. The market value (or fair value, if appropriate) of the holdings reported by the entities is considered. Holdings existing in June 2020 and credit ratings updated as of September 2020.

more vulnerable segments and fire sales of these assets by funds would have limited effects through the securities which are held in common. Nevertheless, these effects could be amplified by the correlation existing between prices of assets which are not held in common, but are similar, in the portfolios of the financial sectors.

2.2.3 Financial market infrastructures under the COVID-19 crisis

The crisis triggered by COVID-19 has posed a considerable challenge for financial market infrastructures (FMI) which, as an essential economic activity, must remain operational at all times. In the climate of uncertainty prompted by lockdown measures and the volatility in the volumes of operations processed, FMIs have had to adapt quickly. They have introduced remote working on a large scale and strengthened security measures to counter higher operational and cybersecurity risks arising from the new situation, while guaranteeing the continuity of their activities.

Securities infrastructures, particularly central counterparties (CCPs), have experienced sharp peaks in processing operations and have successfully overcome the challenge faced. CCPs experienced peak in activity in March and higher increases in variable and intraday margin requirements; the situation returned

to normal in subsequent months, although margin requirements have remained high at above pre-crisis levels. No important operational incidents occurred in this type of infrastructures in Spain or in the rest of Europe.⁴⁰

However, market volatility in the early weeks of the crisis increased the strains on the functioning of the TARGET2-Securities⁴¹ platform, owing to the concentration of settlement operations at certain times of the day which caused some minor incidents. The peaks in operations at certain times in the second half of March were more than double the average usual daily operations. At times these peaks tested the platform's processing capacity, which generated some delays. The operator adopted immediately applicable corrective measures, strengthened processing capacity and by mid-April the situation was gradually returning to normal. In any event, the stability of the financial system was not compromised by the above-mentioned incidents, which were of a markedly technical nature and did not increase financial risks.

Wholesale and retail payment systems, both in Spain and in the rest of the euro area, also responded promptly to the pandemic and continued to operate without incident. At the wholesale level, TARGET2⁴² experienced atypical fluctuations in year-on-year terms in the volume of operations at the onset of the pandemic, but they have returned to normal over subsequent months. In the retail segment, the National Electronic Clearing System (SNCE, by its Spanish abbreviation)⁴³ provided its services as usual, although the crisis has meant a reduction in both the volume and value of its operations. Even so, the performance by payment instrument was mixed. Specifically, immediate transfers grew sharply, which could be partly explained by the proliferation of certain electronic payment applications as an alternative to cash. Nevertheless, a recovery was observed in the overall operations of the National Electronic Clearing System as from June, which coincided with the gradual lifting of the restrictive measures imposed under the state of alert since these operations are closely tied to private consumption and economic activity in general.

There were no notable incidents in the functioning of card payments either, which was affected by consumers' preference for alternative electronic payment instruments rather than cash, and there was a sharp drop in cash withdrawals from ATMs. Furthermore, the relative weight of in-person contactless payments using physical and digitalised cards on mobile devices has increased⁴⁴, as has the relative weight of remote payments.

40 For Spain, BME Clearing and Iberclear (the central securities depository) are deemed CCPs.

41 TARGET2-Securities, a pan-European platform operated by the Eurosystem for the centralised settlement in central bank money of securities operations denominated in euro or in other currencies.

42 TARGET2, systemically important interbank euro real time gross settlement system operated by the Eurosystem.

43 Spanish retail payment system which processes among other instruments transfers and direct debits.

44 Since the payment threshold for purchases not requiring a PIN has increased from €20 to €50 in the context of social distancing.

EFFECTS OF THE PANDEMIC ON THE INTERNATIONAL BANKING SYSTEMS MOST RELEVANT TO SPAIN

In the 1990s, the major Spanish banking groups embarked on an extensive internationalisation drive. This has seen them establish a significant presence in the United Kingdom, the United States, Latin America (in particular Mexico and Brazil), Turkey and the rest of the European Union. Overall, almost 50% of these Spanish deposit institutions' consolidated financial assets are outside Spain (see Chart 2.4 in the main body of the text). The expansion model broadly pursued is characterised by financial and operating autonomy using subsidiaries, in contrast to the model based on branches, which lack a legal personality separate from that of their parent.¹

From the standpoint of financial stability, this model restricts certain channels of risk contagion to the parent institution in Spain in the event of potential financial turmoil in the subsidiary's country.² And that is of particular relevance in the case of more volatile economies such as the emerging countries. This box aims to analyse the developments in recent months in banking systems in which Spanish banks' foreign business is concentrated. It considers the potential adverse consequences of the health crisis on the sector and the effect of the extensive support measures implemented by the respective authorities. Finally, it describes some of the risks already materialising.

Chart 1
SITUATION OF THE PANDEMIC AS AT SEPTEMBER 2020

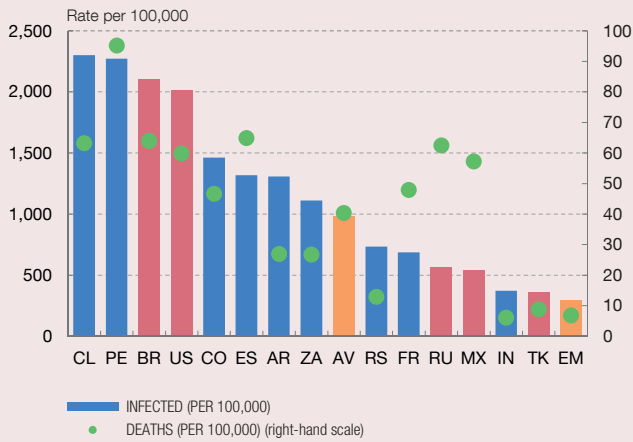


Chart 2
THE OXFORD LOCKDOWN STRINGENCY INDEX

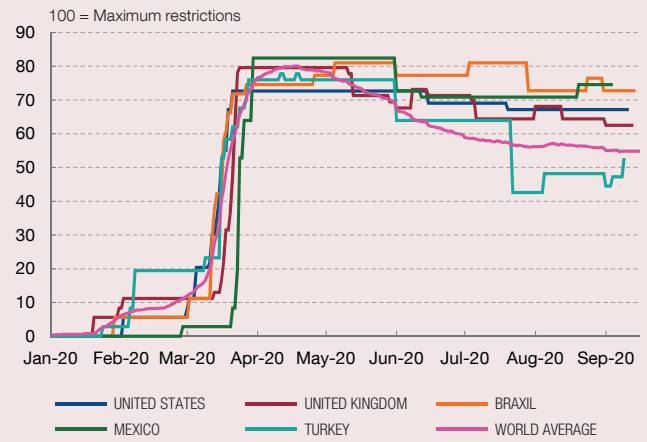


Chart 3
GDP CHANGES IN 2020 Q2

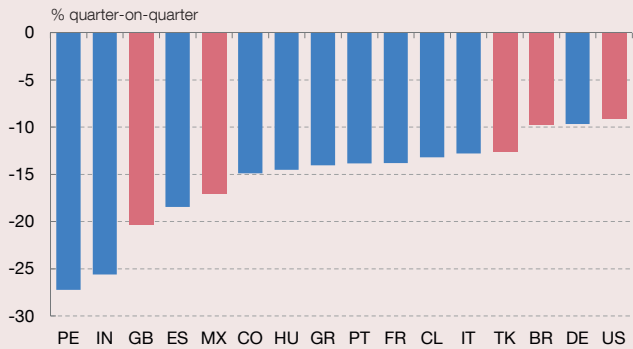
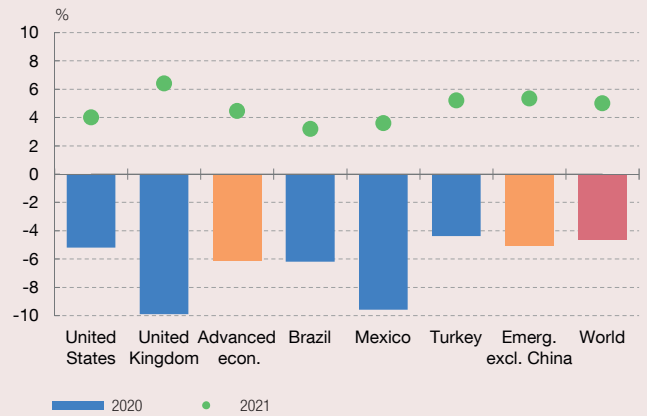


Chart 4
PROJECTED CHANGES TO GDP



SOURCES: Johns Hopkins, Consensus, national statistics and Oxford.

1 See Argimón, I. (2019), "Spanish banks' internationalisation strategy: characteristics and comparison", Economic Bulletin 1/2019.
 2 See chapter 3 of the Report "Macprudential policy implications of foreign branches relevant for financial stability", European Systemic Risk Board, December 2019.

EFFECTS OF THE PANDEMIC ON THE INTERNATIONAL BANKING SYSTEMS MOST RELEVANT TO SPAIN (cont'd)

The five countries most relevant to the Spanish banking system are among those most affected by the COVID-19 pandemic (see Chart 1). Specifically, in September 2020, the United States was the world's most affected country in absolute terms of numbers infected and deaths, and ranked ninth in infections per 1,000,000 inhabitants. Brazil stood third in numbers infected, seventh in infections per 1,000,000 inhabitants, and second in deaths. In Europe, the United Kingdom was the second-ranked country most affected in absolute terms and ninth in relative terms. Mexico stood fifth in absolute terms in numbers infected, close to the United Kingdom in per capita terms, and it had a higher mortality rate than all the other countries. Only in Turkey were the pandemic-contagion figures not so high. On the statistics available, Turkey also had a low mortality rate.

In an attempt to check the spread of the virus, all these countries adopted measures restricting individual movements and the normal functioning of economic activity. The measures were broadly similar to those applied in other countries worldwide (see Chart 2). Along with the effects of the pandemic on agents' behaviour and, in the case of the emerging economies, the financial turmoil in March and April, these measures prompted strong contractions in activity and higher unemployment rates (see Chart 3). The consensus among analysts regarding the latest GDP growth forecasts would suggest a significant decline in GDP this year, which would not be fully reversed in any of the jurisdictions in 2021 (see Chart 4). In 2020, the United Kingdom, Mexico and, to a lesser extent, Brazil are expected to post bigger contractions than the advanced and emerging economies as a whole, respectively, while the United States and Turkey will fall somewhat less on average than the economies referred to. In 2021, it is estimated that only the United Kingdom will grow above the average of the reference countries in each case (see Chart 1.4).

Like the other main economies, all these countries have launched wide-ranging economic policy measures to address the consequences of the pandemic.³ Fiscal and monetary policy actions seek to support the economy as a whole, which exerts beneficial effects on all sectors, including the finance industry. Some measures have been more directly geared to upholding the financial system,

such as the credit support programmes, the moratoria on payments, State guarantees and other action relating to the oversight of banks. The main characteristics of these measures are detailed in Table 1. Albeit with some differences, the measures are fairly similar in all countries, and pursue a threefold objective: a) to promote the granting of credit; b) to provide the system with liquidity; c) to mitigate the adverse impact of the crisis on institutions' capital.

Against this background, lending in these banking systems has continued growing in the first half of 2020 (see Chart 5). Such growth has come about essentially via lending to firms. This has been due, initially, to the drawdown of previously extended credit lines and, subsequently, to the public support programmes set in place by different governments to promote the extension of credit. Further, and as has also occurred in other countries, lending to households has slowed. In Mexico, where aid programmes of this type have not been approved, the behaviour of lending has been much more moderate and its year-on-year growth rate has fallen. Also, in those countries in which the weight of public banks is greater, such as Brazil and Turkey, whose respective market shares exceed 45% and 40%, there has been a notable increase in public financing during the first half of the year compared with previous periods.

Despite the unfavourable economic situation, the NPL ratio has not increased significantly to June this year (see Chart 6) as a consequence of the increase in lending activity (an increase in the ratio's denominator) and in light of the 90-day period that must elapse as from the first default arising until a loan is recognised as non-performing. Indeed, in Turkey the ratio has improved significantly in the first half of the year following an uptrend in 2018. This can be explained by a regulatory change which has extended the default period for recognising a loan as non-performing from 90 to 180 days, until end-2020.

In addition, generally all countries have launched widespread public programmes involving moratoria. Brazil has been an exception. There, each bank applies discretionary measures under the flexibility temporarily allowed by the central bank to classify loans as non-performing. The expiry dates of these moratoria are concentrated in the second half of 2020. Thus, it will

3 Details of the main measures adopted by the US and UK governments and central banks can be found in Cuadro-Sáez, L., López-Vicente, F. S., Párraga Rodríguez, S., and F. Viani (2020), *Fiscal policy measures in response to the health crisis in the main euro area economies, the United States and the United Kingdom*, Occasional Papers, No. 2019, August 2020, Banco de España. For the main measures adopted initially in Brazil and Mexico, see Banco de España (2020), *Report on the Latin American economy. First half of 2020*, 29 April, Analytical Articles, Economic Bulletin 2/2020.

EFFECTS OF THE PANDEMIC ON THE INTERNATIONAL BANKING SYSTEMS MOST RELEVANT TO SPAIN (cont'd)

Table 1
MEASURES ADOPTED TO ADDRESS THE CONSEQUENCES OF THE PANDEMIC ON THE BANKING SECTOR

Country	Moratoria	Credit-promoting measures	Supervisory measures
Mexico	<p>Moratoria for mortgage loans, consumer loans, credit cards, loans to SMEs and to companies (from 26 March to 31 July 2020)</p> <p>Deferral of principal and/or interest payment of between 4-6 months</p> <p>For all customers whose source of income is affected by the pandemic</p>	None set	<p>Recommendation not to pay out dividends</p> <p>Possibility of using the capital conservation buffer for the extension of credit</p> <p>Delay in the entry into force of certain international standards, such as IFRS 9 or TLAC</p> <p>Easing of local liquidity requirements for 6 months</p>
Brazil	<p>No general public moratoria established. Credit institutions have defined private deferral measures with different characteristics</p> <p>Suspension of up to 6 months of repayment of indirect loans from BNDES (April to September 2020)</p>	<p>Support from public banks and the BNDES</p> <p>PESE (Emergency Job Support Programme): financing of payrolls for firms with turnover of up to 10 million BRL in the first phase (to June 2020) and up to 50 million BRL in the second (to October 2020). 85% guarantee. 3-year term</p> <p>PRONAMPE (SME support programme): for firms with turnover up to 4.8 million BRL (to November 2020). 85% guarantee. 3-year term</p> <p>PEAC (emergency credit access programme): for firms with turnover up to 300 million BRL (to December 2020). 80% guarantee. Term up to 5 years</p>	<p>Temporary restriction on the distribution of income above the legal minimum in 2020</p> <p>Reduction of the capital conservation buffer from 2.5% to 1.25% and further measures to reduce requirements such as the change in weighting for SMEs from 100% to 85% in operations between April and December</p> <p>Exemption for reclassification and increase in provisioning for loans subject to restructuring on account of COVID-19 from March to September</p>
United Kingdom	<p>Legislative moratoria for mortgage loans (19 March to 31 October), personal loans, credit cards and car finance (9 April to 31 October)</p> <p>Deferral of principal and interest payments for a period of 3-6 months</p> <p>Various private measures</p>	<p>State-backed programmes:</p> <p>– CBILS (<i>Coronavirus Business Interruption Loan Scheme</i>): financing to companies with annual turnover of up to 45 million GBP (to 30 September). 3-6 year term. 80% guarantee</p> <p>– CLBILS (<i>Coronavirus Large Business Interruption Loan Scheme</i>): financing to companies with annual turnover of over 45 million GBP (to 30 September). Term up to 3 years. 80% guarantee</p> <p>– BBLs (<i>Bounce Back Loan Scheme</i>): financing for all types of companies (to 4 November). 6-year term. 100% guarantee.</p> <p>Bank of England programme for purchase of short-term debt issued by large companies</p>	<p>Recommendation not to pay out dividends until January 2021</p> <p>Reduction in countercyclical buffer to 0% for 12 months</p> <p>Maintenance of Pillar 2A requirements for 2020 and 2021</p> <p>More flexible reclassification arrangements and increased provisioning for loans subject to restructuring on account of COVID-19 from March to October</p>

SOURCES: National Central Banks and Banco de España.

foreseeably be as from 2020 Q4 and in early 2021 that the impairment of credit quality becomes more evident, with an increase in NPLs and forbearance expected.

The profitability of the different banking systems began already to worsen in the first half of the year (see Chart 7).

Broadly, banks' income statements have begun to reflect the initial impacts of the pandemic. This has essentially been the result of lower revenue, owing to the lower fees arising on diminished commercial activity, and, above all, to higher provisioning by banks to withstand the new

EFFECTS OF THE PANDEMIC ON THE INTERNATIONAL BANKING SYSTEMS MOST RELEVANT TO SPAIN (cont'd)

Table 2
MEASURES ADOPTED TO TACKLE THE CONSEQUENCES OF THE PANDEMIC ON THE BANKING SECTOR (cont'd)

Country	Moratoria	Credit-promoting measures	Supervisory measures
United States	<p>Deferral of principal and/or interest payments, with a recommendation this should not exceed 6 months</p> <p>Applicable to all products, except certain mortgage loans</p> <p>To be concluded when the first of these two dates should fall due: (a) 60 days after the end of the state of alert, or (b) 31 December 2020</p> <p>For loans not more than 30 days past-due on 31 December 2019</p>	<p>PPP (Paycheck Protection Program): intended for SMEs with fewer than 500 employees (discontinued in August, but could be extended if a new package of fiscal stimuli is approved). 2-year term. 100% guarantee.</p> <p>Main Street Program: intended for firms with fewer than 15,000 employees or annual income below 5 million dollars. 5-year term. 95% guarantee. Can be requested until December 2020.</p>	<p>Restrictions on dividend payouts in 2020 for the country's biggest banks</p> <p>Easing of TLAC and leveraging requirements</p> <p>Incentives to use buffers for extension of credit</p>
Turkey	<p>Applicable to all types of loans</p> <p>Deferral of 3 months for retail customers and of 6 months for wholesale customers, with the possibility of an extension until the end of the year in both cases if the customer so requests it</p> <p>Deferral of principal and/or interest payment</p>	<p>Increase in the ceiling on the Credit Guarantee Fund (State programme for SMEs) of TRY 25 - 50 million. No discontinuation date. 80% guarantee</p> <p>Asset ratio: new requirement defined as loans and securities divided by deposits, which must be higher than 95%, penalising foreign exchange activity</p> <p>Capitalisation of the three public banks through the "wealth fund" (\$2.97 billion)</p>	<p>Restrictions on dividend payouts in 2020 for the country's biggest banks</p> <p>Easing of TLAC and leveraging requirements</p> <p>Incentives to use buffers for extension of credit</p>

SOURCES: National Central Banks and Banco de España.

macroeconomic scenario. In Turkey, which is an exception to this pattern, the slight improvement in the banking system's profitability has been underpinned exclusively by public banks (a 28 bp rise in ROA to 0.76%), since the profitability in the private banking sector has behaved similarly to the other countries analysed.

As regards liquidity, the situation has remained relaxed in most countries. Liquidity ratios have held above the regulatory minimum (standing even higher at the start of the crisis), thanks to central bank liquidity injection programmes. These enabled banks to stockpile liquidity in anticipation of possible future needs, which have so far not materialised. As an exception, some small retail-oriented Mexican banks experienced some liquidity tensions in March and April, but these have now been overcome.

Lastly, as regards bank solvency, there has been no discernibly significant impact on capital ratios, which remain relatively stable and above the minimum required level in all the countries (see Chart 8). Several provisions adopted by the authorities have contributed to this stability of solvency ratios. They include most notably the across-the-board recommendation not to pay out dividends (see

Table 1). In addition, as in the European Union, a further series of measures have been taken focusing on minimising the impact stemming from market developments and reducing requirements in a transitory manner.

In short, despite the adverse effects of the COVID-19 pandemic, the main indicators of the banking systems most relevant to Spanish banks have not worsened substantially so far. This is largely owing to the swift adoption of support measures by the authorities of these countries. However, the outlook for these banking systems is subject to significant downside risks. Factors here include the pandemic potentially taking a turn for the worse, and its macroeconomic influence and the likely associated credit impairment, as the manifold downgrades in corporate credit ratings anticipate (see Charts 9 and 10). Such factors have been exacerbated in the case of certain emerging economies owing to their greater macrofinancial vulnerability. Finally, some of the measures taken by the authorities also entail certain risks that should be taken into account. These include possible market segmentation resulting from the actions of public banks, and the public sector having to burden itself with sizeable fiscal costs.

Box 2.1

EFFECTS OF THE PANDEMIC ON THE INTERNATIONAL BANKING SYSTEMS MOST RELEVANT TO SPAIN (cont'd)

Chart 5
LENDING TO THE PRIVATE SECTOR (a)

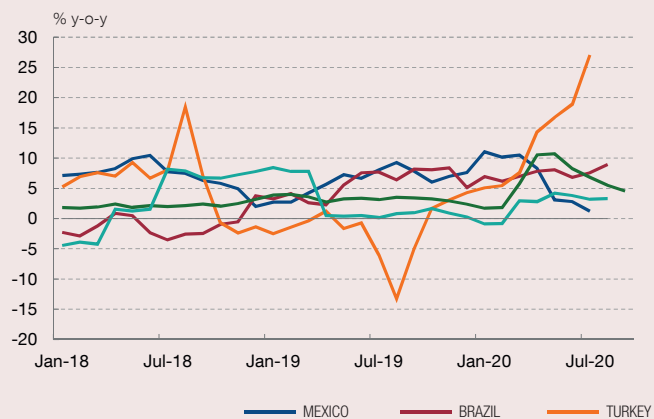


Chart 6
NON-PERFORMING LOANS

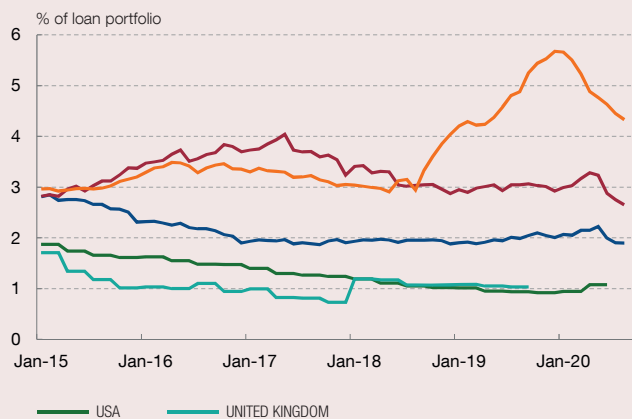


Chart 7
PROFITABILITY (b)

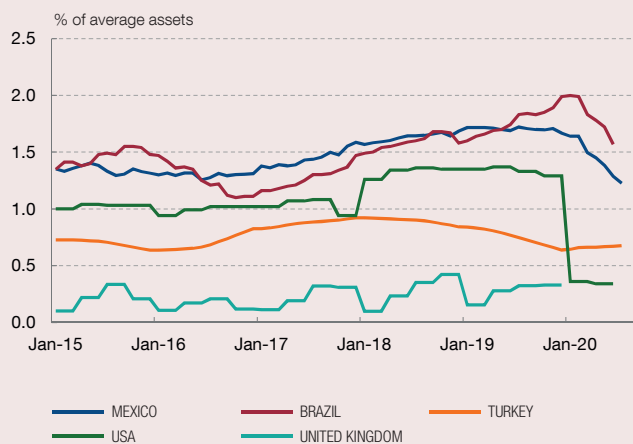


Chart 8
REGULATORY CAPITAL

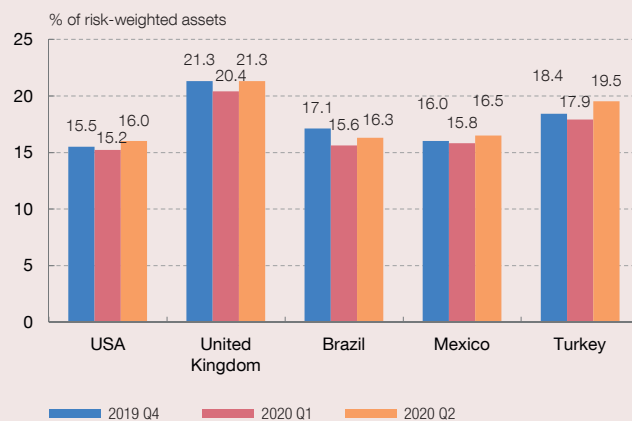


Chart 9
CORPORATE CREDIT RATINGS: EMERGING ECONOMIES

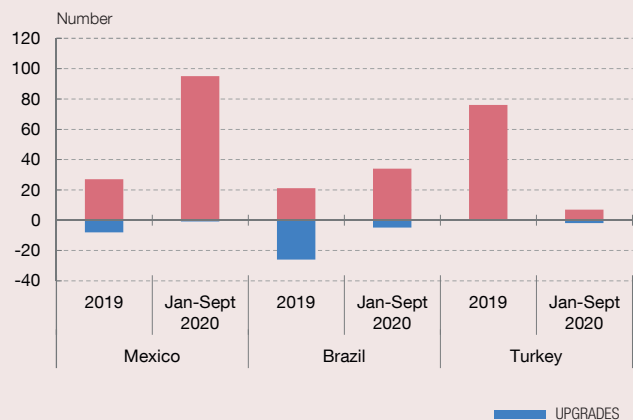
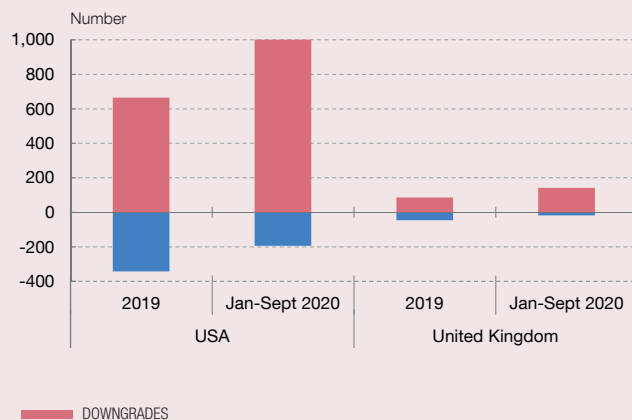


Chart 10
CORPORATE CREDIT RATINGS: ADVANCED ECONOMIES



SOURCES: National statistics, Refinitiv and IMF.

- a In real terms.
- b Return on assets (ROA).

CHANGE IN ANALYST OPINIONS ON MAIN SPANISH LISTED BANKS IN VIEW OF THE IMPACT OF COVID-19

Studies of the opinions expressed in and the tone of financial reports, monetary policy speeches and other public messages are being increasingly used in the sphere of financial market analysis. Thus, various authors¹ have analysed the way in which central banks' messages or the tone used in speeches may affect stock market performance and other financial indicators.

These studies seek to transform qualitative unstructured information into quantitative structured data. Specifically, sentiment analysis is based on classifying documents according to two extremes (positivity or negativity),² to assess the level of polarity (or tonality) of a document and thus obtain a quantitative index.

This box aims to assess the impact of the COVID-19 crisis on the tone of analysts' reports on the Spanish banking sector and to relate it to the price moves observed in the stock market.

In consequence, the initial aim is to transform the qualitative content of these reports into a numerical indicator. For this purpose, the first step is to create a database of analysts' and credit rating agencies'³ reports on Spanish banks,⁴ covering the periods immediately before and after the state of alert was declared ("pre- and post-COVID-19"),⁵ respectively. Second, a dictionary is used that allows the words in each report to be classified

according to whether they have a positive, negative or neutral connotation. This provides a sentiment index (SI) of each report.⁶ Subsequently, once an index has been obtained for each document, the median values⁷ of the two periods may be compared, and also their dispersion and overall distribution.

The dictionary⁸ used to classify the sentiment of the words distinguishes between positive, negative and neutral words and was compiled specifically to analyse English-language financial texts. The SI of each report is calculated as the ratio of the difference between positive and negative words to the total words in each document.⁹ Accordingly, the index takes values ranging from -1 (maximum possible negativity) to 1 (indicating that all the words in a document have positive tonality). In addition, if the value obtained is equal to zero, the index is considered to be neutral, either because there is equivalence between the number of positive and negative words or because all the words have neutral tonality.¹⁰

The findings suggest that there has been an overall deterioration in analyst sentiment towards European banks, as reports with a negative SI are more frequent in the "post-COVID-19" period. The change in analyst sentiment in the reports between the two periods analysed is greater for Italian and French banks than for Spanish banks, and especially than for German banks.¹¹ The distribution

- 1 See N. Apergis and I. Pradigis (2019), "*Stock Price Reactions to Wire News from the European Central Bank: Evidence from Changes in the Sentiment Tone and International Market Indexes*", and R. Feldman, S. Govindaraj, J. Livnat and B. Segal (2010), "Management's tone change, post earnings announcement drift and accruals".
- 2 The positivity (negativity) of a document is the number of positive (negative) words over the total words. Words are classified as positive or negative according to a dictionary pre-established by the researcher.
- 3 Using the following data sources: Bloomberg Intelligence, S&P Global, Deutsche Bank Research, Morgan Stanley Research, Moody's and Fitch Connect (all in English).
- 4 For Spain, reports on the five main listed banks – Santander, BBVA, CaixaBank, Bankia and Sabadell – which account for 93% of Spanish banks' market capitalisation. The sample comprises 73 reports for the pre-COVID-19 period and 138 reports for the post-COVID-19 period.
- 5 The pre-COVID-19 period comprises Jan-Feb 2020 and the post-COVID-19 period April-May 2020. March 2020 has not been included owing to the small number of reports published in that month and because the downgrades in analysts' estimates were made as from April.
- 6 The Banco de España has compiled the first Spanish-language dictionary of words with connotation in the financial stability context. This dictionary was used as a research tool to obtain a measure of the tonality of the Spanish-language Financial Stability Reports. See I. M. Moreno and C. González (2020), "*Sentiment analysis of the Spanish Financial Stability Report*".
- 7 The median is used to measure the comparison between the pre- and post-COVID-19 periods because it is more appropriate than the average when the distribution is not normal and the sample is relatively small.
- 8 See T. Loughran and B. McDonald (2011), "When is a Liability Not a Liability? Textual Analysis". In this case, an existing dictionary of English financial terms was used rather than the Banco de España's own dictionary as the reports of the sources consulted are only available in English.
- 9 To calculate the index the following formula was used: Sentiment Index (SI) = (#Positive words - #Negative words) / #Total words.
- 10 Neutral words are those with no connotation, i.e. those which cannot be classified as either positive or negative. In most countries, around 5% of words on average have connotation.
- 11 The difference between the medians in the two periods is significant for Spain (at 95%), Italy (at 99%) and France (at 95%). To test the null hypothesis that the two medians are equal, a limited version of the Mann-Whitney-Wilcoxon test is generally used. However, this test assumes that the only difference between the two populations is the location of the median, with all other characteristics (asymmetry, dispersion...) being equal. To make this assumption more flexible, a quartile regression is used, where the dependent variable is the SI and the explanatory variable is a dichotomous variable representing the pre- and post-COVID-19 periods (0=Jan-Feb, 1=Apr-May).

CHANGE IN ANALYST OPINIONS ON MAIN SPANISH LISTED BANKS IN VIEW OF THE IMPACT OF COVID-19 (cont'd)

Chart 1
SENTIMENT DISTRIBUTION OF REPORTS FOR SPANISH BANKS (a)

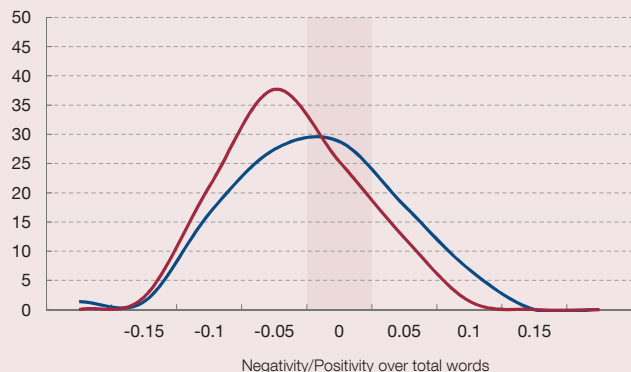


Chart 2
SENTIMENT DISTRIBUTION OF REPORTS FOR ITALIAN BANKS (a)

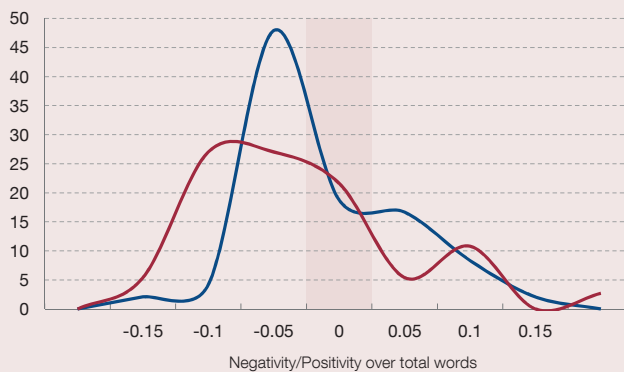


Chart 3
SENTIMENT DISTRIBUTION OF REPORTS FOR FRENCH BANKS (a)

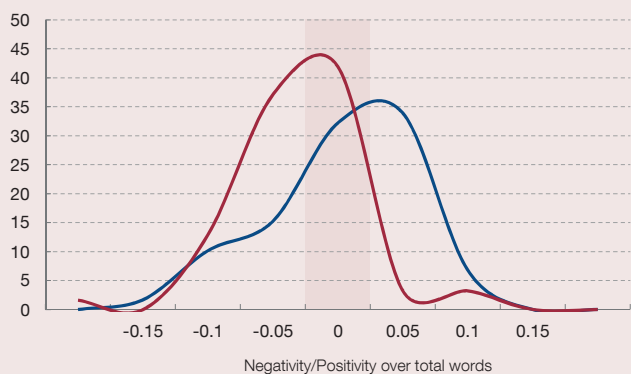
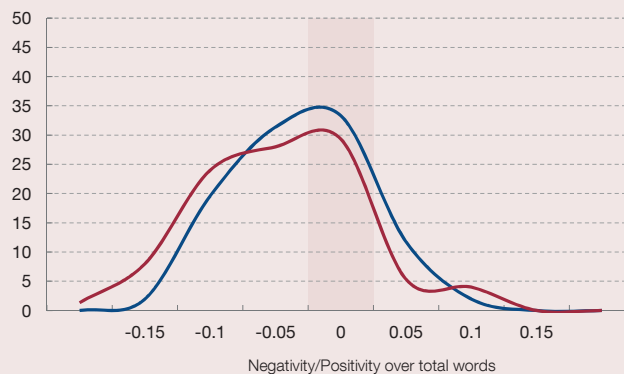


Chart 4
SENTIMENT DISTRIBUTION OF REPORTS FOR GERMAN BANKS (a)



— PRE-COVID-19 — POST-COVID-19

SOURCE: Banco de España.

a The other European banks selected are Intesa, Unicredit and Mediobanca (Italy), Deutsche Bank and Commerzbank (Germany), and BNP Paribas, Crédit Agricole and Société Générale (France). The Spanish banks considered are Santander, BBVA, Caixabank, Bankia and Sabadell. The charts depict the percentage of reports in each range or interval. The vertical band depicts the percentage of reports with neutral connotation, i.e. those that contain no words with positive or negative tonality or that have an equal number of positive and negative words. To the left (right) of this band are the percentages of reports that have a higher significant proportion of negative (positive) words over total words. The “pre-COVID-19” period comprises Jan-Feb 2020 and the “post-COVID-19” period April-May 2020.

analysis of the SI for Spanish banks shows a post-COVID-19 median in negative territory (2 pp, a significant percentage given that the average proportion of non-neutral words in reports is 5 pp), while in the pre-COVID-19 period neutral or even positive values were more frequent (Chart 1). In addition, in the case of Spanish banks, there was also a smaller disparity in opinion in April and May, in contrast to the case of the Italian (Chart 2) and, to a lesser extent, the

German banking sector where analysts’ reports present a broader range of opinion since the onset of COVID-19 (see Chart 4).

In keeping with the change in analyst sentiment, banking sector market valuations have declined. Thus, daily returns were more volatile in April and May, the post-COVID-19 period, while at the same time stock prices steadied at levels below those observed at the start of the year.¹²

12 European banks’ stock prices fell by around 40%-60%, according to which bank is analysed, between mid-February and mid-March, and then steadied at levels below those observed at the start of the year.

CHANGE IN ANALYST OPINIONS ON MAIN SPANISH LISTED BANKS IN VIEW OF THE IMPACT OF COVID-19 (cont'd)

Chart 5
DISTRIBUTION OF DAILY RETURNS ON SPANISH BANKS INDEX

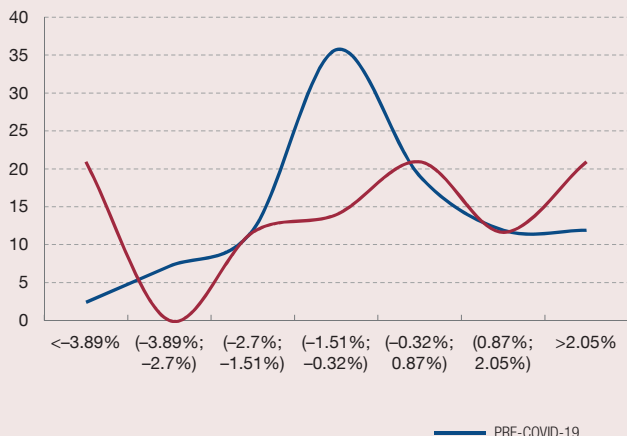
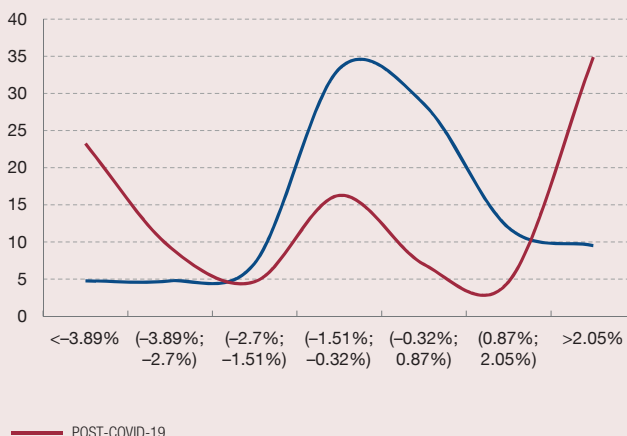


Chart 6
DISTRIBUTION OF DAILY RETURNS ON OTHER EUROPEAN BANKS INDEX



SOURCES: Thomson Reuters and Banco de España.

a The other European banks selected are Intesa, Unicredit and Mediobanca (Italy), Deutsche Bank and Commerzbank (Germany), and BNP Paribas, Crédit Agricole and Société Générale (France). The Spanish banks considered are Santander, BBVA, Caixabank, Bankia and Sabadell. The “pre-COVID-19” period comprises Jan-Feb 2020 and the “post-COVID-19” period April-May 2020.

In this respect, there is less dispersion in the distribution in the pre-COVID-19 period, while in April and May there are more values in the tails of the distribution, both for Spanish banks and the European banking sector overall (see Charts 5 and 6). Yet there are differences between the distributions of returns for the Spanish banking sector

and for all other European banks in the post-COVID-19 period.

That said, it may be concluded that the COVID-19 crisis has had a damaging impact on analyst sentiment both on the Spanish banking sector and the European banking sector overall. This coincides with the greater uncertainty observed in stock prices.

3

SYSTEMIC RISK AND PRUDENTIAL MEASURES IN RESPONSE TO COVID-19

3 SYSTEMIC RISK AND PRUDENTIAL MEASURES IN RESPONSE TO COVID-19

This chapter reviews developments in systemic financial vulnerabilities since the onset of the COVID-19 crisis and assesses the measures introduced by the prudential authorities aimed at stimulating the flow of credit to real activity and shoring up bank solvency. First, the effects of the pandemic on various systemic risk indicators are assessed, focusing particularly on those used by the Banco de España in its decisions regarding the countercyclical capital buffer (CCyB). The chapter goes on to review the measures adopted to date by prudential supervisors and assesses, from a normative standpoint, the pros and cons of implementing certain additional measures. These measures may be activated should the risks identified materialise or if the deterioration of the financial system proves more marked than expected.

3.1 Analysis of financial vulnerability indicators and their relevance in the environment generated by COVID-19

The outbreak of the COVID-19 pandemic initially gave rise to heightened stress in the financial markets. These tensions have diminished considerably following intervention by economic and, in particular, monetary authorities. The systemic risk indicator (SRI) accurately reflects these changes in systemic stress in the financial markets (see Chart 3.1). This is a composite indicator comprising information on the four most representative segments of the financial markets (monetary markets, government debt, equity and financial intermediaries). The indicator is designed such that its value increases when tensions occur simultaneously in these four segments, thus ensuring that the SRI effectively identifies systemic tensions that affect them all.

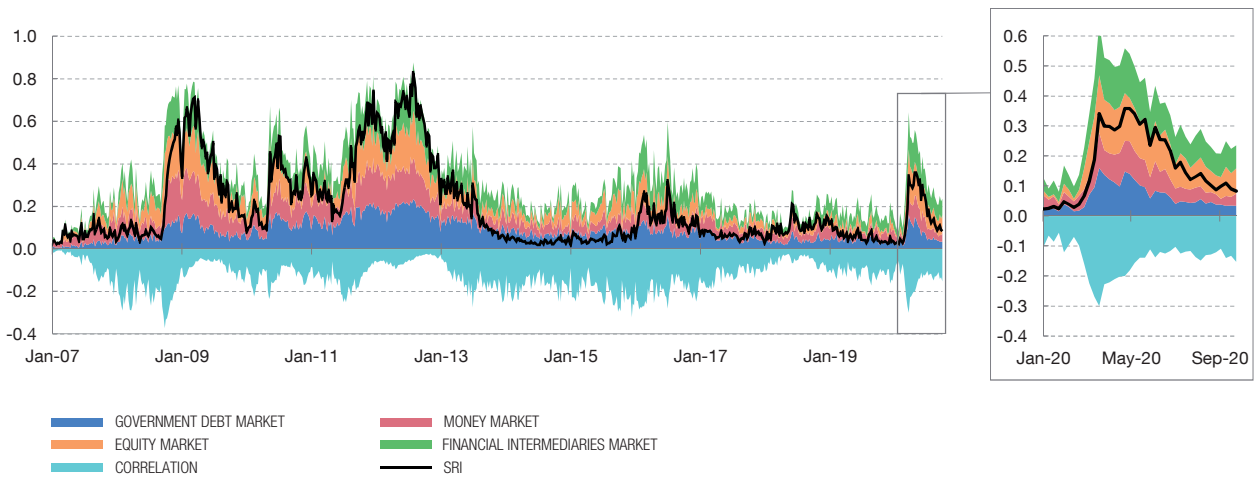
The indicator rose sharply between February and May 2020, coinciding with the increase in volatility in the financial markets associated with the COVID-19 outbreak. This drove the indicator above the levels observed in 2016 H2 following the Brexit referendum. In fact, during the spring of 2020 the SRI rose at a similar pace to that witnessed at the onset of the 2008 global financial crisis. Since May, the indicator has shown a steady improvement which continues to this day. This improvement has coincided, inter alia, with the measures adopted by the various authorities to mitigate the effects of the pandemic. Nonetheless, the SRI remains at higher levels than those seen prior to the outbreak of the pandemic.

Moreover, the onset of the COVID-19 crisis has caused some leading indicators of systemic vulnerabilities to send equivocal signals. These indicators have responded to the stimulus policies implemented and the sharp impact of the shock to

Chart 3.1

SYSTEMIC RISK IN THE SPANISH FINANCIAL SYSTEM GRADUALLY DECLINED BETWEEN LATE APRIL AND LATE SEPTEMBER, BUT REMAINS SOMEWHAT ABOVE PRE-CRISIS LEVELS (a)

The systemic risk indicator (SRI), which rose sharply at the onset of the COVID-19 pandemic, showed a gradual decline in levels of tension from late April onwards. Since late September the level of stress in the financial markets has held relatively stable, albeit at values somewhat higher than those observed prior to the outbreak of the pandemic.



SOURCES: Datastream and Banco de España.

a The systemic risk indicator (SRI) aggregates 12 individual indicators of stress (volatilities, interest rate spreads, maximum historical losses, etc.) from different segments of the Spanish financial system (markets for money, government debt, equity and financial intermediaries). In calculating the SRI, the effect of cross-correlations is taken into account, whereby the SRI registers higher values if the correlation between the four markets is high, in particular where there is a high level of stress in the four markets at the same time. By contrast, the value is lower where there is less or negative correlation (i.e. situations in which the level of stress is high in some markets and low in others). For a detailed explanation of this indicator, see Box 1.1 of the Banco de España's *May 2013 Financial Stability Report*.

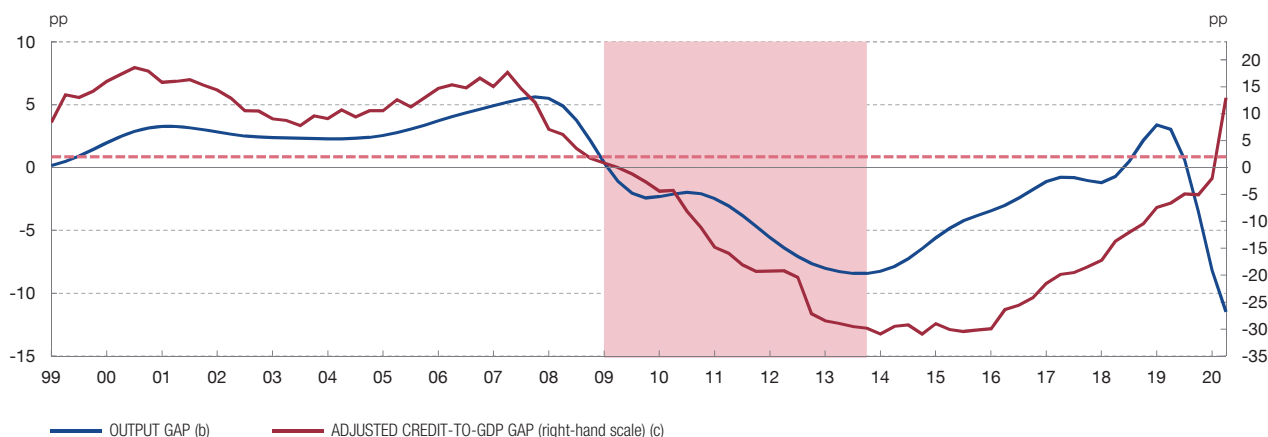
activity, rather than to any new financial imbalances that could be addressed by activating countercyclical macroprudential tools. This has been the case for the adjusted credit-to-GDP gap, which is one of the main indicators guiding activation of the CCyB during expansionary phases of the credit cycle (see Chart 3.2). In the years leading up to the outbreak of the pandemic, the credit-to-GDP gap held constantly well below 2 pp, the threshold above which the credit-to-GDP gap is taken to signal imbalances. However, the current crisis has given rise to the paradox of this indicator surpassing the alert threshold in June 2020. This sharp increase in the credit-to-GDP gap should not be interpreted as a systemic warning requiring the activation of the CCyB. On the contrary, it simply demonstrates that this indicator is intended for expansionary phases of the credit cycle, rather than situations, such as the present, involving a sharp and very deep fall-off in GDP on account of factors exogenous to the financial system. As indicated in the guidelines provided by the Basel Committee on Banking Supervision, it is not appropriate to adhere to the automatic CCyB activation guide when the credit-to-GDP gap increases due to an abrupt decline in GDP,¹ which is exactly what occurred in the first two quarters of 2020.

¹ Basel Committee on Banking Supervision (2010). *Guidance for national authorities operating the countercyclical capital buffer*. See Principle 3 (“Risk of misleading signals”).

Chart 3.2

ON PROVISIONAL DATA FOR JUNE, THE CREDIT-TO-GDP GAP EXCEEDED THE STANDARD CCyB ACTIVATION THRESHOLD. THIS DOES NOT CONSTITUTE A SYSTEMIC WARNING SIGNAL SINCE IT IS EXPLAINED BY THE SHARP DECLINE IN GDP (a)

The credit-to GDP gap exceeded the CCyB activation threshold in 2020 Q2. However, this owed to the sharp reduction in GDP during the period, which is likewise reflected in changes in the output gap. Therefore, at present this should not be interpreted as a systemic risk warning. Although the indicator will be corrected to some extent over the coming quarters, it will have to be monitored over the next few years to assess the degree to which the increase in leverage is absorbed by economic agents.



SOURCE: Banco de España.

- a The shaded area shows the last period of systemic banking crisis (2009 Q1-2013 Q4). The horizontal dashed line represents the CCyB activation threshold equal to 2 pp.
- b The output gap is the percentage difference between observed GDP and potential GDP. Values calculated at constant 2010 prices. See P. Cuadrado and E. Moral-Benito (2016), *Potential growth of the Spanish economy*, Occasional Paper 1603, Banco de España.
- c The adjusted credit-to-GDP gap is calculated as the difference, in percentage points, between the observed ratio and the long-term trend calculated using a one-sided Hodrick-Prescott filter with a smoothing parameter equal to 25,000. This value is more in line with the financial cycles historically observed in Spain.

Admittedly total bank lending has increased, spurred by the guarantee and moratorium schemes aimed precisely at mitigating the steep fall-off in GDP; however, it is the slump in GDP in the ratio's denominator that has been the driving factor behind the changes in the adjusted credit-to-GDP gap. This ratio will have to be tracked closely over the coming quarters, given the possibility of the increased level of leverage as a proportion of GDP consolidating over time.

Against the backdrop of the current crisis, it is preferable to use in CCyB decision-making indicators that inform of the degree of macroeconomic stress in the economy. Following a shock of this nature, financial markets tend to respond before the impact is felt on the real economy. Accordingly, the indicators based on such information react immediately. This is attributable to their more forward-looking, but also volatile, nature, since they include agents' expectations as to what may happen in the future. For the same reason, the financial markets and the corresponding indicators likewise respond rapidly to the implementation of measures to mitigate the crisis. This has led the indicators to ease in recent months. By contrast, macroeconomic variables tend to react more slowly and usually display greater inertia in the recovery. However, on this occasion, the special nature of the shock has caused

the macroeconomic variables to reflect the negative impact more quickly than in previous crises. In any event, the economic recovery is expected to be slow and uneven. In fact, a greater slowdown in this improvement in growth represents one of the main risks at present. Accordingly, these macroeconomic indicators are increasingly relevant to macroprudential decision-making. For example, the output gap stood below -10% in 2020 Q2 (see Chart 3.2) but will foreseeably recover partially over the coming quarters. Although it is difficult to estimate potential growth in the current uncertain environment, this indicator represents a more informative guide for CCyB decision-making than the credit-to-GDP gap in the present circumstances.

Against this backdrop, the econometric approach known as growth-at-risk is another potentially useful analytical option. This method can be used both to assess the intensity of the crisis and the benefits of macroprudential policy (see Box 3.1).

Taking this set of macrofinancial indicators into account, the Banco de España has maintained in its quarterly decisions the CCyB rate at 0% and stated its intention not to increase the rate until the Spanish economy has recovered from the impact of the crisis.² The scale of the exogenous adverse shock inflicted by the pandemic on real activity has seen special consideration given to the output gap criterion and the uncertainty surrounding growth, measured, for example, using the growth-at-risk approach. As in the previous FSR, the Banco de España maintains its view that banks must remain unburdened by this capital buffer so as to sustain the flow of credit and mitigate negative pressure on economic growth.

3.2 Prudential measures adopted in response to the crisis and other alternative measures

The coordinated action of macroprudential, microprudential and accounting policies remains geared towards supporting the financial intermediation function as a key mitigator of the pandemic's economic impact. Chapter 3 of the previous FSR³ covered a broad spectrum of measures adopted as an immediate response to the crisis, which largely remain in force.

In Europe, the ESRB has issued a series of recommendations and reports that are relevant to assessing both the measures adopted and the areas of the financial sector that require closer attention. These ESRB publications are

² See the press release of 25 September 2020 "The Banco de España holds the countercyclical capital buffer at 0%".

³ See FSR Spring 2020.

grounded on a pool of research works conducted in crisis mode following the onset of the pandemic. These measures are detailed in Box 3.2.

Turning to solvency requirements, banks can still in general terms make full use of the countercyclical capital buffer and temporarily operate below the levels set for certain requirements. In Europe, banks have been allowed to operate below the level of capital defined by the Pillar 2 Guidance (P2G), the capital conservation buffer and the liquidity coverage ratio. Further, the authorities have sought to overcome banks' reluctance to use these buffers by providing greater certainty as to their future rebuilding, emphasising that there will be a lengthy and sufficient timeframe in which to rebuild the buffers once the main effects of the pandemic have been absorbed. Likewise, the rules concerning the composition of capital instruments to meet Pillar 2 Requirements (P2R) have been relaxed. As regards macroprudential requirements, the countercyclical capital buffer was released swiftly in most jurisdictions as part of the initial response and remains available for use. This came alongside the reduction or postponement of other requirements addressing the cross-sectional dimension of systemic risk, such as the systemic risk buffer (SyRB) and the buffer set for other systemically important institutions (O-SIIs).

It is likewise important to recall the BCBS' decision to postpone until 2023 implementation of the revised methodology for the identification of global systemically important institutions and certain pending aspects of the new Basel III regulatory framework. The BCBS has also delayed to 1 January 2028 the conclusion of the transitional arrangements for the output floor to internally modelled capital requirements. In any event, all jurisdictions remain committed to the full and consistent transposition of the Basel III framework under the new timetable.

For its part, the Single Resolution Board (SRB) has maintained a forward-looking approach to the application of minimum requirements for own funds and eligible liabilities (MREL requirements), taking into account the impact of the measures implemented by the authorities on bank balance sheets and the forthcoming transposition of the new European Bank Recovery and Resolution Directive (BRRD2), such that the effects of easing the prudential requirements are not curtailed.

As part of the European response to the COVID-19 crisis, the Capital Requirements Regulation (CRR) was also subject to quick fix amendments in June 2020 with a view to maintaining banking sector support to businesses and households. This CRR quick fix combines transitional and permanent arrangements so as to smooth banks' absorption of the shock and strengthen their solvency ratios, thereby helping to avoid potential credit constraints that might hinder the economic recovery. Relevant aspects of this initiative include the revised SME supporting factor in the calculation of risk-weighted assets (RWAs), the application of a prudential filter to changes in the value of sovereign debt instruments

and the revised temporary prudential treatment of credit risk impairment. Box 3.3 details these measures and approximates their potential effects on regulatory capital ratios, which are expected to rise as a result of the amendments.

It remains possible to make appropriate use of the flexibility provided in prudential regulation, preventing a mechanistic and procyclical application of accounting standards while at the same time recognising actual impairment.

The supervisory guidelines clarify, among other aspects, that loans past due by more than 30 days do not require immediate classification to Stage 2. They also clarify the need to differentiate between borrowers' liquidity and solvency problems and the recognition of public guarantees when they are applied. At the same time, the supervisory guidelines consider that this flexibility should not hamper the identification and appropriate coverage of actual impairment and that adequate standards should be maintained. Accounting reporting requirements have also been streamlined during the period, prioritising information that is especially relevant for monitoring the pandemic (e.g. launch of the moratorium scheme) and relaxing the schedule for information considered to be secondary.

Provision also continues to be made for a degree of operational flexibility in supervision, although the pressures on business continuity have diminished following the end of the strict lockdown periods. Among the measures aimed at promoting smooth operational functioning, the postponement of the EBA's stress test of European banks until 2021 is particularly noteworthy; a new target timeline for this exercise has been defined and the list of participating banks has been determined.⁴

Similarly, the ECB and other national authorities, among them the Banco de España, maintain their recommendation to refrain temporarily from dividend distributions and apply prudent criteria with regard to variable remuneration for employees. These recommendations, aimed at reinforcing organic capital generation and strengthening European banks' solvency position, were initially applicable until October 2020 and have been extended until January 2021.⁵ On a general basis, all Spanish banks that could legally suspend or defer dividends on their 2019 earnings have followed these recommendations.

This response to the crisis, together with those from monetary and fiscal authorities, has enabled to absorb the initial impact of the shock. This has thus prevented the materialisation of a systemic risk in the financial system that would have exacerbated the crisis and made it more persistent. However, in the current context of uneven and uncertain recovery, it is possible that the additional risks

⁴ See [EBA press release \(July 2020\)](#).

⁵ The ECB reiterated the recommendation on dividend distribution and variable remuneration on 28 July 2020. On the same day, the Banco de España extended this recommendation to less significant institutions under its supervision. See [Banco de España press release of 28 July](#).

identified materialise and that their impact is greater and longer-lasting than expected, especially in some productive segments. In the face of such uncertainty, a detailed assessment must be made of the measures already in place, retaining those that have proven most effective for as long as the recovery is not sufficiently self-sustaining, and adjusting them to accompany the growth in activity and avoid artificially propping up activities and firms that show little sign of viability. Further, consideration must be given to additional measures that can contribute to sustaining economic activity under the scenarios considered or that allow for reactions to more unfavourable than expected short-term economic developments.

In this respect, greater easing of the macroprudential and microprudential banking capital requirements could foster lending to the economy, but it could also reduce loss-absorbing capacity under certain conditions. Indeed, lower capital requirements free up additional funds for banks to lend to customers and thereby stimulate the economy, which could also curb losses for the banks themselves. However, using capital buffers reduces the banking sector's loss-absorbing capacity when defaults occur, although such defaults would be smaller. There is a clear trade-off, and determining which to prioritise at any given time is therefore an empirical question.

The implementation of this type of measure must also take into account the related impact on the financing conditions of financial intermediaries, in particular on those of the banking sector. Maintaining relaxed capital requirements and using capital buffers in the most adverse macroeconomic scenarios could increase banks' risk perception and trigger a rise in financing costs, going against the objectives of preserving solvency and the flow of credit.

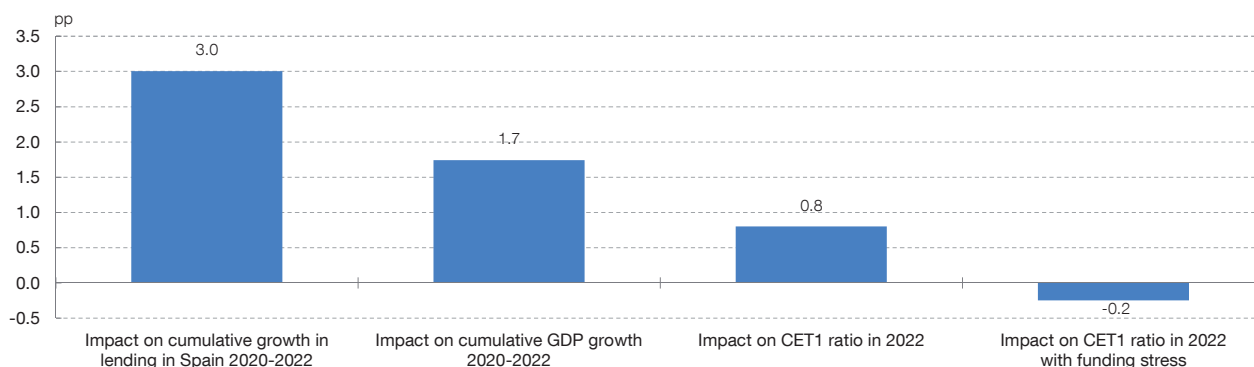
Recommendations and rules on restrictions to dividend distributions also pose a similar trade-off as they allow for greater loss-absorbing resources to be built up at present, but they could subsequently lead to issuance difficulties or drive up the cost of capital instruments. The adverse effects of these measures would be curbed by a proper regulatory policy assuring investors that such restrictions are conditional on the persisting uncertainty about the duration of the crisis and that they are applicable to all institutions and jurisdictions, given the global nature of the crisis.

In this context, the simulation exercises conducted by the Banco de España for the Spanish banking sector suggest that an additional credit stimulus would have a positive impact on economic growth, improving solvency expectations. Specifically, a simulation has been performed of Spanish banks making further use of their capital buffers to achieve higher growth in lending to Spanish firms and households than that considered in the stress test baseline scenario presented in Chapter 2. It envisages a general increase of 3 pp in cumulative growth in lending to households and firms, derived from the use of banks' capital buffers, in the 2020-2022 period compared with the original baseline scenario. This would lead to an

Chart 3.3

THE USE OF CAPITAL BUFFERS TO STIMULATE CREDIT CAN CONTRIBUTE TO BANKS' SOLVENCY, IF THERE IS NO SIGNIFICANT DEVIATION FROM THE FUNDING CONDITIONS UNDER THE BASELINE SCENARIO (a) (b)

The use of existing capital buffers would stimulate the supply of credit in Spain and therefore mitigate the contraction in GDP, impacting bank solvency through channels of the opposite sign. The higher growth in lending also entails greater RWAs, reducing the CET1 ratio, but the best-case macro scenario envisages smaller losses. Applying the FLESB model, a positive net effect of 0.8 pp is estimated on the macro path of the baseline scenario in the solvency exercise; this effect would become slightly negative if the use of these buffers caused a significant deterioration in funding conditions.



SOURCE: Banco de España.

- a The positive shock to the supply of credit in Spain in 2020 is introduced into the baseline scenario (see Table 2.1) of the macro model, providing complete alternative paths for lending and all macro variables in the 2020-2022 horizon; these in turn are applied to the FLESB framework to assess the impact on the CET1 ratio in this horizon, considering all the factors affected.
- b Under the funding stress assumption, it is assumed that the use of capital to stimulate the supply of credit increases the required returns in other forms of financing, introducing a shock of 1 pp to interbank funding, consistent with the increase in this rate continuing in 2020 at the pace recorded in the months of heightened stress, and to the cost of issued securities, which spreads to loan and deposit interest rates based on the historical relationship observed.

improvement of 1.7 pp in cumulative GDP growth in the same period (see Chart 3.3). Such an improvement in the macroeconomic scenario would mean smaller losses for banks, thereby reducing capital consumption. This effect would outweigh the increase in risk-weighted assets entailed by greater lending. Under these assumptions, the CET1 ratio of the banking sector as a whole would increase by 0.8 pp in 2022. However, it should be borne in mind that this credit expansion could be less favourable for banking sector solvency if a more adverse economic scenario were to materialise.

Furthermore, such improvement in banks' solvency owing to the boost to lending in operations in Spain could peter out if the use of the capital buffers is accompanied by a sufficiently significant worsening of financing conditions. To assess how the markets' reaction could have a bearing on the results of this exercise, the impact of an increase of 1 pp in interbank reference rates passed through to operations in Spain (to the cost of wholesale funding for banks and to retail deposit and loan rates) is analysed. This would naturally dampen the improvement in banks' results associated with a more favourable macroeconomic scenario. Chart 3.3 shows that the impact on the CET1 ratio would be -0.2 pp. Overall, the reassessment of credit stimulus policies based on the use of capital buffers should therefore consider

both developments in the most likely macroeconomic scenarios and the possible market reaction in the form of an impact on financing conditions.

Other types of measures, such as those aimed at completing the EU Banking Union, would shore up the banking system's capacity to absorb the economic impact of the crisis triggered by the outbreak of COVID-19. Specifically, the establishment of a fully pooled European Deposit Guarantee Scheme (DGS) or the further implementation of resolution legislation, in particular its adaptation to systemic crises or its application to cross-border institutions, would help smooth bank funding and reduce the regulatory obstacles to cross-border corporate transactions.

The consolidation of the banking sector may also be a further mechanism for enhancing banks' efficiency, provided it enables revenue and cost synergies to be harnessed. These synergies would include those associated with the diversification of credit risk in banks' portfolios. However, the cost-benefit analysis of consolidation calls for the case-by-case analysis of these synergies, and their impact on competition in the sector. Corporate operations are the responsibility of bank management teams and owners, but it is for bank supervisors to analyse the viability of potential merger projects. That means assessing the solvency of the resulting bank, studying its impact on financial stability as a whole and overseeing the execution of the operation in order to measure the effective harnessing of synergies.

Here, European transnational operations would help deepen the Banking Union and incorporate greater diversification possibilities. These operations would also improve the incentives for digitalising banking business. They would allow more extensive customer bases to be formed across which to distribute the cost of technological investments, although they would have a lesser immediate impact on cost-cutting. In any event, for banks to gain much-needed efficiency, under the different possible levels of consolidation of the sector, they will have to invest in the digitalisation and optimisation of their physical networks. The SSM has submitted to public consultation a review of the supervisory guidelines on bank mergers. This envisages making the formal supervisory requirements associated with such mergers more straightforward, and reviewing the criteria for the calculation of the P2R and P2G requirements made of merged banks.⁶

The possible adverse effects of bank mergers would be associated with less competition or with the incentives for bigger banks to take on excessive risk. The existing theoretical and empirical evidence indicates that an increase in concentration above certain thresholds may have destabilising effects on the banking

⁶ The SSM proposal considers the weighted average of these requirements and recommendations for the individual entities as a criterion for setting the initial levels of P2R and P2G applicable to the merged banks; this average could be adjusted upwards and downwards based on the characteristics of the business combination. See [Draft ECB Guide on the supervisory approach to consolidation in the banking sector \(July 2020\)](#).

system.⁷ In Spain, the sector appears some way off this situation; there is an effective transmission of changes in interest rate levels to bank margins, denoting the presence of effective competition. However, as the degree of concentration grows, more caution becomes necessary, and possible excessive risk-taking by banks that acquire systemic status and whose resolution poses challenges will be more of an issue.

Prudential tools can correct possible biases in risk-taking by merged banks.

Such mitigation would be through both microprudential requirements, which are sensitive to the individual risk profiles assumed by each bank, and through macroprudential measures such as the capital surcharge for systemic, global and local banks. Bank resolution regulations, which assume the use of internal funds in this type of situation, also contribute to banks internalising in their decision-making the externalities entailed for the financial system as a whole.

In the European setting, discussions have also begun on the need to set in place additional measures, should more adverse scenarios than those envisaged to date materialise.

Firstly, these alternative European responses include the possibility of extending or modifying the guarantee and moratorium schemes, countenancing the option of applying a more selective approach for these policies. Other potential responses include measures encouraging corporate or household deleveraging, either through an increase in corporate capital or through a restructuring of households' and firms' debt in the medium term. Such measures would be geared to fostering the restructuring of productive activities, in response to a more permanent worsening in some segments, and to underpinning the financial situation of households and firms with sound long-term solvency prospects. Adoption of these measures should be governed by caution and detailed analysis, with the benefits of maintaining activity and repayment incentives properly weighed against the costs that they could entail for the banking sector and their possible tax consequences for general government.

More broadly, these Europe-level discussions also envisage other measures that are more hypothetical in the current situation, such as strengthening banks' solvency position and creating or adapting asset management companies ("bad banks"). Once again, a cost-benefit analysis should govern discussions about the hypothetical implementation of such measures.

⁷ See, for example, Martínez Miera, D., and R. Repullo (2010) "Does competition reduce the risk of bank failure?", Jiménez, G., López, J. A., and J. Saurina (2013) "How does competition affect bank risk-taking?" and the thematic analysis "Market power, competitiveness and financial stability of the euro area banking sector" of Huljak, I., Reghezza, A., and C. Rodríguez d'Acien, ECB FSR, November 2019.

IMPACT OF THE PANDEMIC ON GROWTH-AT-RISK AND MITIGATING IMPACT OF THE MACROPRUDENTIAL MEASURES ADOPTED

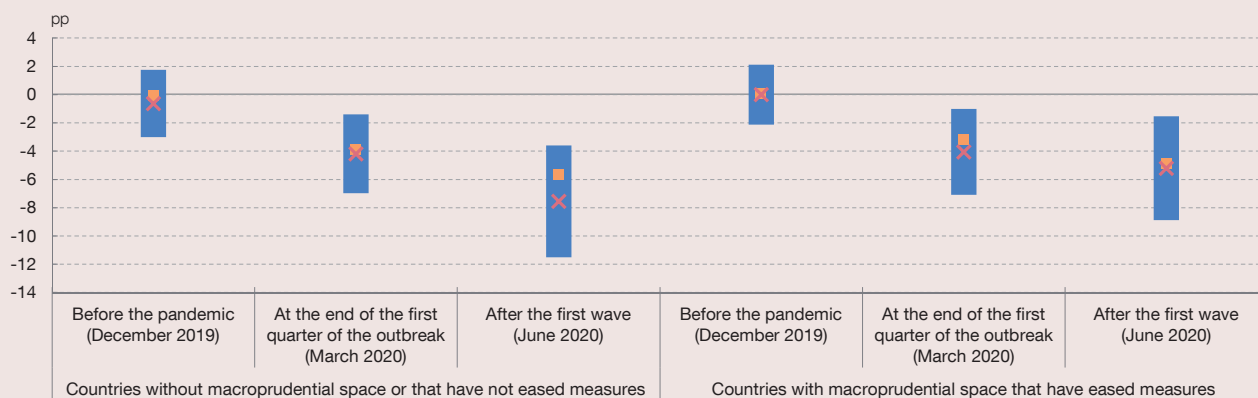
The pandemic has severely impacted economic growth in recent quarters. That has impinged not only on expected average growth for the coming quarters, but also on the entire future distribution of GDP. A model recently estimated by the Banco de España enables the impact of the build-up of cyclical vulnerabilities, the bouts of financial stress and the use of macroprudential tools on GDP distribution to be assessed (see Box 3.1, 2020 Spring FSR).¹ The results of applying this model to the current crisis show a particularly significant impact on growth-at-risk, which is defined as the growth rate which would be observed under adverse scenarios that occur with a 5% probability.

Chart 1 shows the distribution of growth-at-risk over a one-year horizon in European Union countries² on three dates: before the pandemic (December 2019), at the end of the first quarter of the outbreak (March 2020) and after the first wave (June 2020). The purpose of this exercise is not merely to quantify the impact of the pandemic on growth-at-risk, but also to analyse the effect that macroprudential policy

might be exerting on mitigating this impact. Thus, the exercise considers, on the one hand, countries that have adopted countercyclical macroprudential measures (17 countries); and, on the other, countries that have not done so or could not (11 countries). The starting point for both groups of countries was similar in terms of pre-pandemic growth-at-risk. The effects of the pandemic on both groups of countries were comparable to March, with growth-at-risk deteriorating significantly in all the countries analysed. However, estimates as of June 2020 already show some differences between the two groups. In particular, the group of countries that have been able to fully or partly release their macroprudential buffers seems to have contained the deterioration in growth-at-risk better than those short on the necessary macroprudential space to do so.

That said, this lower impact on future growth-at-risk may be explained not only by the easing of macroprudential measures but by smaller GDP declines during lockdown, lower volatility in their financial markets or different positions in the financial cycle. Chart 2 analyses in greater

Chart 1
DISTRIBUTION OF GROWTH-AT-RISK OVER A ONE-YEAR HORIZON BASED ON THE USE OF MACROPRUDENTIAL POLICY IN RESPONSE TO THE PANDEMIC (a)



SOURCES: ECB, BIS and Banco de España.

a The vertical bars, the orange square and the pink cross represent the range between the 5th percentile and 95th percentile, the median and the mean, respectively, of the growth-at-risk values over a one-year horizon in countries that had macroprudential space and have eased measures in response to the pandemic and those that did not have such space or have not eased measures. For details of the methodology used, see J. E. Galán (2020) "The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk", Working Paper No 2007, Banco de España.

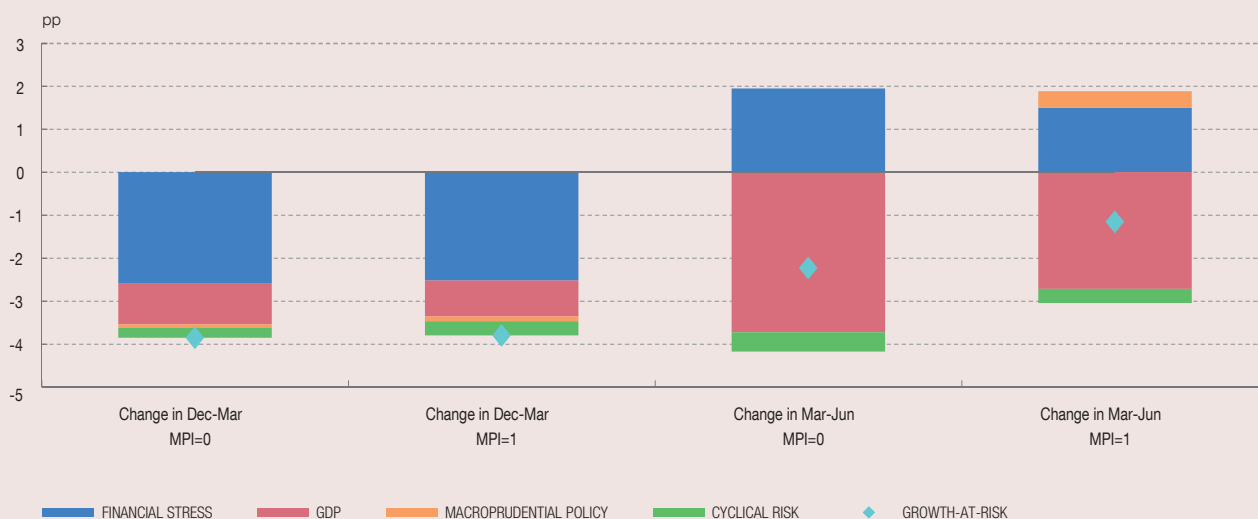
1 For further details, see Galán J.E. (2020). *The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk*. Working paper 2007. Banco de España.

2 The sample includes the 27 EU countries plus the United Kingdom.

IMPACT OF THE PANDEMIC ON GROWTH-AT-RISK AND MITIGATING IMPACT OF THE MACROPRUDENTIAL MEASURES ADOPTED (cont'd)

Chart 2

BREAKDOWN BY FACTOR OF THE QUARTERLY CHANGE IN ESTIMATED GROWTH-AT-RISK IN COUNTRIES THAT HAVE AND HAVE NOT EASED MACROPRUDENTIAL MEASURES



SOURCES: ECB, BIS and Banco de España.

a The bars represent the contribution (in percentage points) from each of the factors included in the model to the change in growth-at-risk between December 2019 and March 2020 and between March and June 2020. The results distinguish between countries that have eased macroprudential measures in response to the pandemic (MPI=1) and those that have not (MPI=0). Positive (negative) values represent a positive (negative) contribution to growth-at-risk. The diamonds represent the change in median growth-at-risk in each group of countries. For details of the methodology used, see J. E. Galán (2020) "The benefits are at the tail: uncovering the impact of macroprudential policy on growth-at-risk", Working Paper No 2007, Banco de España.

detail the drivers of the changes observed. It breaks down the factors behind the change in estimated growth-at-risk in the two groups of countries. First, it shows that the change in growth-at-risk between December 2019 and March 2020 can be attributed mainly to heightened stress in financial markets, followed by a drop in economic growth, and that these factors had a similar impact on both groups of countries. Second, the change in growth-at-risk in 2020 Q2 is mainly due to the sharp drop in economic growth. Conversely, improving levels of financial stress have acted as a mitigating factor, limiting the deterioration in growth-at-risk. The comparison between the two groups of countries shows that, for those that have been able to release macroprudential buffers, this decision has acted as an additional compensatory factor, improving growth-at-risk by around 0.4 pp over a one-year horizon.

Other factors may admittedly have allowed the group of least-affected countries in Q2 to post a smaller decline in GDP, but the release of macroprudential buffers would account for around one-third of the differences in the change in growth between both groups. These countries were able to adopt these measures because they had sufficient macroprudential space, arising from the use of macroprudential tools in previous years. There are several reasons why some countries had this macroprudential space. But a most notable one is the different financial cycle conditions, which warranted the tightening of macroprudential requirements in the pre-crisis years. In any case, this exercise shows that having macroprudential buffers for unexpected events can help mitigate, at least partially, the effects of these shocks.

THE RESPONSE OF THE EUROPEAN SYSTEMIC RISK BOARD TO THE COVID-19 CRISIS

The European Systemic Risk Board (ESRB) was established at the end of 2010 with a mandate of macroprudential oversight of the financial system within the EU. The objective of the ESRB¹ is to contribute to the prevention and mitigation of systemic risks to financial stability in the EU, so as to avoid periods of widespread financial distress, thus contributing to the smooth functioning of the internal market and, ultimately, ensuring a sustainable contribution of the financial sector to economic growth.

The profound macroeconomic and financial impact of the COVID-19 pandemic – and of the subsequent confinement measures and restrictions adopted by the public authorities to combat it – is the most significant challenge that this institution has had to face since its creation, barely a decade ago.

In a context of rapid and extensive institutional reaction at global, EU and national level, driven by the urgent need to mitigate the impact of the pandemic on society and the productive system, the ESRB decided in April to adapt its regular work programme to the new situation. Specifically, the General Board of the ESRB resolved² to focus its attention temporarily on five priority areas for action and coordination:

- (i) implications for the financial system of guarantee schemes and other fiscal measures to protect the real economy;
- (ii) market illiquidity and implications for asset managers and insurers;

- (iii) impact of procyclical downgrades of bonds on markets and entities across the financial system;
- (iv) system-wide restraints on dividend payments, share buybacks and other payouts;
- (v) liquidity risks arising from margin calls.

These five areas of ESRB work “in crisis mode” were mainly developed in the period April-June, with the involvement of its Advisory Technical Committee and Advisory Scientific Committee.³ Notably, the work of the ESRB produced:

- A Recommendation (ESRB/2020/8)⁴ addressed to all the macroprudential authorities of the EU to monitor the financial stability implications of debt moratoria and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic. This recommendation was preceded by a letter⁵ sent by the ESRB to the Economic and Financial Affairs Council (Ecofin) inviting fiscal authorities to cooperate and exchange information with the central banks and supervisory authorities of their countries. In the case of Spain, the authority to which this Recommendation was addressed is AMCESFI (Spanish macroprudential authority), which must send information to the ESRB on a quarterly basis on the measures introduced in Spain. Accordingly, the Financial Stability Technical Committee of the AMCESFI⁶ is developing an analytical framework to assess these measures, as stipulated in this recommendation;

1 Central banks and the national supervisory authorities for banks, securities markets, insurance companies and pension funds of all the Member States of the EU/European Economic Area participate in the ESRB, along with the EU institutions and agencies with regulatory and supervisory responsibilities in this area. The ECB hosts the ESRB’s secretariat and provides the resources necessary for its operations.

2 See the ESRB’s press releases: “The General Board of the ESRB held its 37th regular meeting on 2 April 2020”, of 9 April 2020; “The General Board of the ESRB takes first set of actions to address the coronavirus emergency at its extraordinary meeting on 6 May 2020”, of 14 May 2020; “The General Board of the ESRB takes second set of actions in response to the coronavirus emergency at its extraordinary meeting on 27 May 2020”, of 8 June 2020; and “The General Board of the ESRB held its 38th regular meeting on 25 June 2020”, of 2 July 2020.

3 The ESRB’s Advisory Technical Committee has been chaired since July 2019 by Pablo Hernández de Cos, Governor of the Banco de España. The ESRB’s Advisory Scientific Committee has been chaired since September 2020 by Javier Suárez, professor at the Centro de Estudios Monetarios y Financieros (CEMFI).

4 Recommendation ESRB/2020/8 of 27 May 2020 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic.

5 See “ESRB letter to Governments on the financial stability impact of the national guarantee schemes and other fiscal measures”, 14 May 2020.

THE RESPONSE OF THE EUROPEAN SYSTEMIC RISK BOARD TO THE COVID-19 CRISIS (cont'd)

- A Recommendation (ESRB/2020/7)⁷ addressed to prudential authorities on restriction of distributions during the COVID-19 pandemic, until 1 January 2021, applicable to banks, insurers, investment firms and central counterparties (CCPs). As regards banks, the ECB and national authorities of the Single Supervisory Mechanism, including the Banco de España, which issued its own recommendation at the end of July⁸, have adhered to this recommendation;
 - A Recommendation (ESRB/2020/6)⁹ addressed to competent microprudential authorities, the European Securities and Markets Authority (ESMA) and the European Commission on liquidity risks arising from margin calls, to: i) limit cliff effects in relation to the demand for collateral; ii) improve the stress scenarios of CCPs; iii) limit liquidity constraints related to margin collection, and iv) to promote international standards in relation to the mitigation of procyclicality in the provision of client clearing services and in securities financing transactions. In the case of Spain, the CNMV (Spanish National Securities Market Commission) is the main authority to which this recommendation is addressed, although it also affects the Banco de España in its capacity as the supervisor of credit institutions that are members of CCPs.
 - A Recommendation (ESRB/2020/4)¹⁰ addressed to ESMA to coordinate with the national competent authorities to undertake a supervisory exercise with investment funds that have significant exposures to corporate debt and real estate assets, to assess their preparedness to potential future adverse shocks.
 - A Technical Note¹¹, published in July, in which the ESRB summarises the findings of a top-down analysis of the impact of a mass bond downgrade scenario on the financial system. The ESRB's study suggests that, hypothetically, if the scenarios and assumptions considered materialize, losses could be generated in the EU as a whole of between €156 billion and €298 billion. A significant portion of these losses would stem from fire sales by financial institutions forced to divest themselves of corporate debt holdings that lose their investment-grade rating due to a downgrade to below BBB. The sectors most affected would be investment funds and insurance companies.
 - A letter¹² addressed to the European Insurance and Occupational Pensions Authority (EIOPA) urging in the near term improved monitoring of liquidity risks in insurers, in order to reinforce the strength of the sector in case of a deterioration in financial conditions.
- Finally, it should be noted that the ESRB has launched on its website a detailed directory¹³ of national financial policy measures adopted within the EU/EEA by central banks, supervisory authorities and governments in response to COVID-19. This repository of information is regularly updated with the latest actions undertaken in each country.

4 Recommendation ESRB/2020/8 of 27 May 2020 on monitoring the financial stability implications of debt moratoria, and public guarantee schemes and other measures of a fiscal nature taken to protect the real economy in response to the COVID-19 pandemic.

5 See "ESRB letter to Governments on the financial stability impact of the national guarantee schemes and other fiscal measures", 14 May 2020.

6 The Financial Stability Technical Committee of the AMCESFI is chaired ex officio by Margarita Delgado, Deputy Governor of the Banco de España.

7 Recommendation ESRB/2020/7 of 27 May 2020 on restriction of distributions during the COVID-19 pandemic.

8 See the Banco de España's press release "The Banco de España conveys to less significant institutions under its direct supervision the ECB recommendation on dividend distributions and variable remuneration", of 28 July 2020.

9 Recommendation ESRB/2020/6 of 25 May 2020 on liquidity risks arising from margin calls.

10 Recommendation ESRB/2020/4 of 6 May 2020 on liquidity risks in investment funds.

11 "A system-wide scenario analysis of large-scale corporate bond downgrades", ESRB Technical Note, July 2020.

12 See "ESRB letter to EIOPA on Liquidity risks in the insurance sector", 8 June 2020.

13 Accessible at this link: Policy measures in response to the COVID-19 pandemic.

AMENDMENTS TO EUROPEAN BANKING REGULATION IN RESPONSE TO THE COVID-19 PANDEMIC (THE CRR QUICK FIX)

On 26 June 2020 an amendment to the CRR¹ in response to COVID-19, commonly known as the “CRR quick fix”, was published in the Official Journal of the European Union. Most of the amendments are temporary, although some apply on a permanent basis or bring forward reforms scheduled to come into force in 2021. The main changes introduced are described below:²

- **Prudential filter** – the option is introduced for institutions³ to apply a temporary filter to neutralise the impact on CET 1 of changes in the value of sovereign debt instruments⁴ measured at fair value through other comprehensive income (FVOCI). Changes in the fair value of these assets are recorded as other comprehensive income and, as this is a CET 1 component, they have a direct effect on institutions’ highest-quality capital.

The filter is to be applied over three years to unrealised gains and losses accumulated from 31 December 2019. In particular, the filter fully neutralises the effect in the first year, decreasing progressively in the following two years (100% in 2020, 70% in 2021 and 40% in 2022).

- **Review of the transitional arrangements applicable to expected credit loss accounting** – the favourable prudential treatment of provisions (which was introduced to ease the shift from the former incurred loss accounting to the current expected loss accounting models) is amended, resetting the schedule to be applied to provisions arising as a result of the impact of COVID-19.⁵ These are proxied as the increase in the stock of provisions for exposures classified as Stage 1 or Stage 2 under IFRS 9 from 1 January 2020. The new treatment allows for these

increases to be recognized in CET1 (an effect known as “add-back”) in full in 2020 and 2021, reducing the percentage of recognition progressively and proportionately over the following three years (75% in 2022, 50% in 2023 and 25% in 2024).

The amendments introduced also ease the possibility for entities to use this transitional arrangements (so as to avoid that it is limited solely to those entities that had previously decided to apply it).

- **Adjustments related to the temporary exclusion of central bank reserves from the leverage ratio⁶** – this amendment aims to permit the exclusion of central bank reserves from the denominator of this ratio when the competent authority, after consultation with the relevant central bank, declares that exceptional circumstances exist, warranting its exclusion in order to facilitate the implementation of monetary policies.

The adjustments introduced serve two main purposes. First, for the purposes of supervisory reporting and disclosure of information to the market, the exclusion may be applied until June 2021 (the leverage ratio is not introduced as a minimum requirement until that date and, accordingly, the exclusion will not give rise to direct effects on capital requirements until then).

Second, the calibration currently required to introduce this exemption (already envisaged in the CRR) is amended. The prior method established in the CRR offset any type of benefit obtained from the exemption, with the aim of preventing the release of capital as a result of its application. This exception becomes operational with this amendment, preventing that effect and, therefore, allowing for increases in central bank reserves not to affect banks’ leverage ratios.

1 Regulation (EU) 575/2013 and Regulation (EU) 2019/876.

2 Also amended was the treatment of credit risk for exposures to central banks and central governments denominated in the domestic currency of another Member State, to reintroduce a favourable temporary treatment within the framework of large exposure limits and credit risk (risk-weighting of exposures).

3 Entities have the option of reversing this treatment once during the transitional period.

4 Treated as sovereign exposure under Articles 115.2 and 116.4, with the exception of non-performing financial assets.

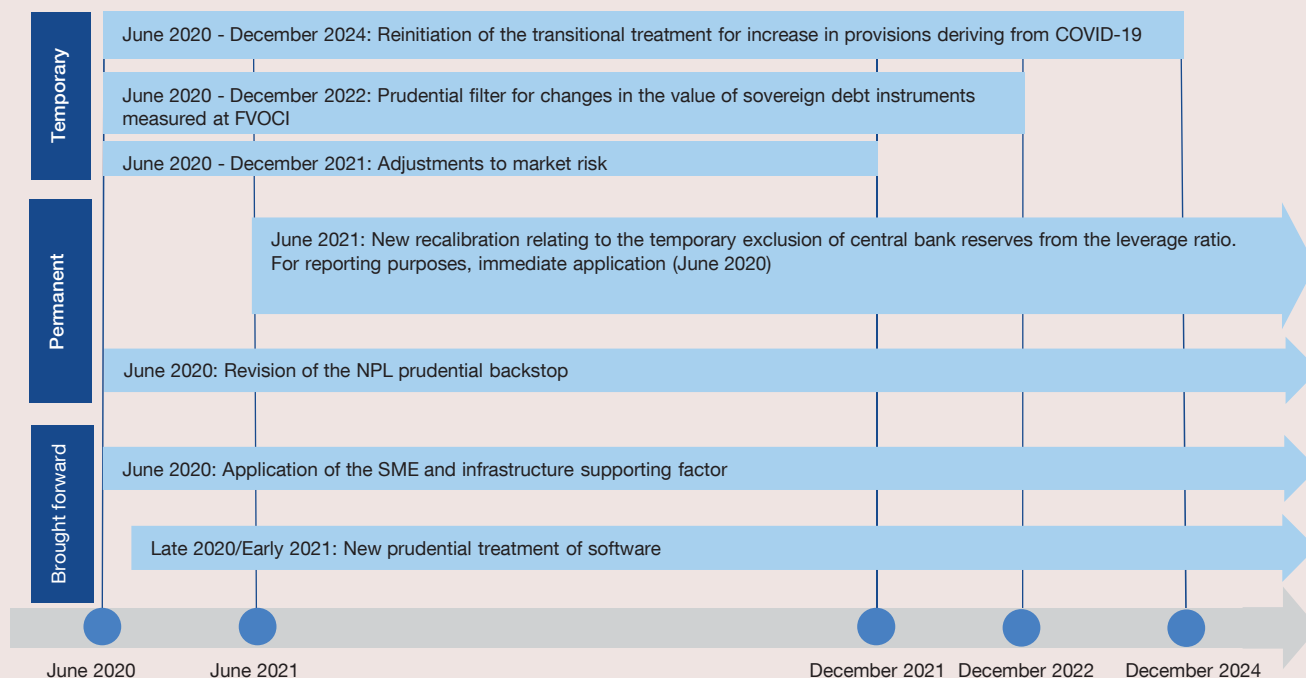
5 Treatment of the static component (increase in provisions arising from the first time application of IFRS 9) remains unchanged. The change in the dynamic component prior to 2020 (differential increase in the stock of provisions in Stage 1 and Stage 2 from 1 January 2018 to 31 December 2019) will be subject to the existing transitional arrangements only if this involves a benefit for the entity.

6 It is also agreed to defer the entry into force of the leverage ratio buffer for G-SIBs until 2023, in line with the one-year deferral agreed at international level on the implementation of the 2017 Basel III standards: Finalising post-crisis reforms.

AMENDMENTS TO EUROPEAN BANKING REGULATION IN RESPONSE TO THE COVID-19 PANDEMIC (THE CRR QUICK FIX) (cont'd)

Figure 1

TIMELINE AND DURATION OF QUICK FIX REFORMS



SOURCE: Banco de España.

- **Revision of the NPL prudential backstop** – as regards the calculation of the deduction for insufficient provisioning for NPLs, the application of a 0% factor on the part guaranteed by public sector government is introduced on a permanent basis. This treatment is applicable during the first seven years since the exposure is classified as non-performing.
- **Adjustments to market risk requirements** – supervisors are granted discretionary powers to decide whether, under exceptional circumstances and on a case-by-case basis, institutions may exclude from the calculation of market risk requirements the overshootings deriving from the institutions' internal models and arising between 1 January 2020 and 31 December 2021, provided they do not arise from shortcomings of the internal model.
- **Bringing forward of measures scheduled for 2021, including:**
 - **Software deduction** – the entry into force of the new prudential treatment of software is brought forward. The European Banking Authority (EBA) was responsible of the development of the new treatment through a regulatory technical standard (RTS).⁷ The quick fix amendment establishes its application from the entry into force of the RTS, instead of 12 months later, as was originally envisaged. To date, all intangible assets of institutions, including software, were deducted from CET1. Accordingly, this amendment will have an immediate impact on the highest-quality capital of institutions.

⁷ See "Final draft RTS on prudential treatment of software assets", EBA 14/10/2020.

AMENDMENTS TO EUROPEAN BANKING REGULATION IN RESPONSE TO THE COVID-19 PANDEMIC (THE CRR QUICK FIX) (cont'd)

– **SME and infrastructure supporting factor** – the application date is brought forward to 27 June 2020. Exposures to SMEs below €2.5 million will apply a factor of 0.7619 in calculating their risk weight, while those exceeding such amount will be weighted factored at 0.85.⁸ The supporting factor for exposures to entities that operate or finance infrastructures or support essential public services will be 0.75, provided certain criteria are met. These

amendments reduce risk-weighted assets, therefore raising the solvency ratios.

The purpose of this set of measures is to introduce a favourable prudential treatment with the aim of supporting the flow of credit to households and businesses. Its impact in terms of capital will depend on the types of exposures and the balance sheet movements (provisions, changes in fair value, etc.) involved. In any case, it is expected to result in an increase in the prudential solvency ratios.

⁸ The CRR II introduced the infrastructure supporting factor and also expanded the scope of the already existing SME supporting factor (specifically, a scaling factor of 0.7619 was applied under the CRR, reducing the capital requirements for credit risk to exposures to SMEs, provided they did not exceed €1.5 million).

ANNEX 1

CONSOLIDATED BALANCE SHEET DEPOSIT INSTITUTIONS

Assets	Jun-20	Change	Relative weight	Relative weight
	€m	Jun-20/Jun-19	Jun-19	Jun-20
		%	%	%
Cash and balances with central banks	350,791	54.1	6.2	8.9
Loans and advances to credit institutions	262,496	11.1	6.4	6.7
General government	100,979	-1.6	2.8	2.6
Other private sectors	2,198,770	3.4	58.0	56.1
Debt securities	538,708	5.4	13.9	13.7
Other equity instruments	30,378	-16.2	1.0	0.8
Investments	26,875	3.5	0.7	0.7
Derivatives	183,325	30.1	3.8	4.7
Tangible assets	62,240	-3.2	1.8	1.6
Other	165,636	-14.1	5.3	4.2
TOTAL ASSETS	3,920,199	7.0	100.0	100.0
<i>MEMORANDUM ITEMS</i>				
Financing to private sector	2,280,543	3.1	60.3	58.2
Financing to general government	526,256	5.2	13.6	13.4
Total NPLs	87,151	-7.9	2.6	2.2
Total NPL ratio	2.9	-5 (b)		

Liabilities and equity	Jun-20	Change	Relative weight	Relative weight
	m€	Jun-20/Jun-19	Jun-19	Jun-20
		%	%	%
Balances from central banks	336,484	61.6	5.7	8.6
Deposits from credit institutions	277,164	-5.4	8.0	7.1
General government	106,893	-5.9	3.1	2.7
Other private sectors	2,175,238	6.7	55.6	55.5
Marketable debt securities	433,694	2.9	11.5	11.1
Derivatives	172,823	24.7	3.8	4.4
Provisions for pensions, tax and other	27,465	-15.3	0.9	0.7
Other	143,233	-3.9	4.1	3.7
TOTAL LIABILITIES	3,672,995	8.2	92.6	93.7
<i>MEMORANDUM ITEM</i>				
Eurosystem net lending (a)	196,374	19.5	0.0	0.0
Own funds	270,687	-1.5	7.5	6.9
Minority interests	20,490	-10.5	0.6	0.5
Valuation adjustments relating to total equity	-43,973	57.3	-0.8	-1.1
TOTAL EQUITY	247,204	-8.3	7.4	6.3
TOTAL LIABILITIES AND EQUITY	3,920,199	7.0	100.0	100.0

SOURCE: Banco de España.

a Difference between funds received in liquidity-providing operations and funds delivered in absorbing operations. June 2020 data.

b Difference calculated in basis points.

ANNEX 2

CONSOLIDATED INCOME STATEMENT DEPOSIT INSTITUTIONS

	Jun-20		Jun-19	Jun-20
	€m	% Var. Jun-20/Jun-19	% ATA	% ATA
Financial revenue	49,874	-12.24	3.15	2.63
Financial costs	15,492	-24.55	1.14	0.82
Net interest income	34,381	-5.27	2.01	1.81
Return from capital instruments	615	-26.38	0.05	0.03
Net financial income	34,996	-5.75	2.06	1.84
Share of profit or loss of entities accounted for using the equity method	1,022	-41.76	0.10	0.05
Net commissions	12,695	-5.24	0.74	0.67
Gains and losses on financial assets and liabilities	3,207	70.77	0.10	0.17
Other operating income (net)	168	-	-0.07	0.01
Gross income	52,089	-1.38	2.93	2.74
Operating expenses	25,442	-8.34	1.54	1.34
Net operating income	26,647	6.32	1.39	1.40
Asset impairment losses (specific and general provisions)	15,231	100.85	0.42	0.80
Provisioning expense (net)	1,758	-31.23	0.14	0.09
Other income (net)	-14,480	-	0.00	-0.76
Profit before tax (including discontinued operations)	-4,822	-132.27	0.83	-0.25
Net income	-9,511	-190.70	0.58	-0.50
<i>MEMORANDUM ITEM</i>				
Income attributable to the controlling entity	-10,353	-215.22	0.50	-0.55

SOURCE: Banco de España.

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SYMBOLS AND ABBREVIATIONS

AI	Average income	ICO	Instituto Oficial de Crédito (Official Credit Institute)
AMCESFI	Autoridad Macropudencial Consejo de Estabilidad Financiera (Macropudencial Authority Financial Stability Council)	ID	Data obtained from individual financial statements
ATA	Average total assets	IFRSs	International Financial Reporting Standards
ATM	Automated teller machine	IGBM	Índice General de la Bolsa de Madrid (Madrid Stock Exchange General Index)
BBLS	Bounce Back Loan Scheme	IIP	International investment position
BCBS	Basel Committee on Banking Supervision	IMF	International Monetary Fund
BIS	Bank for International Settlements	INE	Instituto Nacional de Estadística (National Statistics Institute)
BLS	Bank Lending Survey	INVERCO	Asociación de Instituciones de Inversión Colectiva y Fondos de Pensiones (Spanish Association of Investment and Pension Funds)
BMPE	Broad Macroeconomic Projection Exercise		
BNDES	Banco Nacional de Desenvolvimento Econômico e Social (National Bank for Economic and Social Development)	JPY	Japanese Yen
BRL	Brazilian Real	LATAM	Latin America
BRRD2	Bank Recovery and Resolution Directive 2	LCR	Liquidity coverage ratio
CBILS	Coronavirus Business Interruption Loan Scheme	LSI	Less significant institution
CBQ	Banco de España Central Balance Sheet Data Office quarterly survey	LTP	Loan-to-price
CBSO	Banco de España Central Balance Sheet Data Office	MMSR	Money Market Statistical Reporting
CCB	Cross-currency basis	MREL	Minimum Requirement for own funds and Eligible Liabilities
CCP	Central clearing counterparty	NBFS	Non-banking financial sector
CCR	Banco de España Central Credit Register	NFC	Non-financial corporation
CCyB	Countercyclical capital buffer	NGEU	Next Generation EU
CDS	Credit default swap	NPL	Non-performing loan
CEMFI	Centro de Estudios Monetarios y Financieros (Centre for Monetary and Financial Studies)	OECD	Organisation for Economic Co-operation and Development
		OIS	Overnight Interest Swap
CET1	Common equity Tier 1	OLSI	Other less significant institutions
CLBILS	Coronavirus Large Business Interruption Loan Scheme	O-SII	Other systemically important institutions
CNMV	Comisión Nacional del Mercado de Valores (National Securities Market Commission)	P/E	Price-to-earnings ratio
		P2G	Pillar 2 guidance
COVID-19	Coronavirus disease 2019	P2R	Pillar 2 requirement
CRR	Capital Requirements Regulation	PEAC	Programa de emergencia de acceso al crédito (Emergency credit access programme)
CRR2	Capital Requirements Regulation 2	PELTRO	Pandemic Emergency Longer-Term Refinancing Operations
DGS	Deposit Guarantee Scheme	PEMEX	Petróleos Mexicanos (Mexican Petroleum)
DI	Deposit Institution	PEPP	Pandemic Emergency Purchase Programme
DTA	Deferred tax asset	PESE	Programa de emergencia de soporte a empleos (Emergency Job Support Programme)
EA	Euro Area		
EBA	European Banking Authority	PMI	Purchasing Managers' Index
EC	European Commission	pp	percentage points
ECB	European Central Bank	PRONAMPE	Programa Nacional de Apoyo a Microempresas y Empresas de Pequeño Tamaño (SME support programme)
ECOFIN	Economic and Financial Affairs Council		
EEA	European Economic Area	Q	quarter
EIOPA	European Insurance and Occupational Pensions Authority	ROA	Return on assets
EMCI	Emerging markets currency index	ROE	Return on equity
ERTE	Expendiente de regulación temporal de empleo (temporary layoff arrangements)	RTS	Regulatory technical standard
		RWA	Risk-weighted asset
ESI	Economic sentiment indicator	S1/S2	Stage 1 / Stage 2
ESMA	European Securities and Markets Authority	SEPE	National Public Employment Service
ESRB	European Systemic Risk Board	SI	Sentiment Index
€STR	Euro short-term rate	SLI	Specialised Lending Institution
ETF	Exchange-traded fund	SMEs	Small and medium-sized enterprises
EU	European Union	SNCE	National Electronic Clearing System
FLESB	Forward-looking exercise on Spanish banks	SP	Sole proprietor
FMI	Financial market infrastructures	SRB	Single Resolution Board
FSR	Financial Stability Report	SRI	Systemic Risk Indicator
FVOCI	Fair value through other comprehensive income	SSM	Single Supervisory Mechanism
GBP	Pound Sterling	SyRB	Systemic risk buffer
GDI	Gross disposable income	TARGET	Trans-European Automated Real-time Gross Settlement Express Transfer System
GDP	Gross domestic product		
G-SIB	Global systemically important bank	TBD	Total Bank Debt
H	Half-year	TBD/AI	Total bank debt to average household income ratio
ICEA	Investigación cooperativa entre entidades aseguradoras y fondos de pensiones (Research Cooperative of Insurance Companies and Pension Funds)	TLAC	Total loss-absorbing capacity
		TLTRO	Targeted Longer-Term Refinancing Operations
		USD	United States dollar
		WEO	World Economic Outlook

ISO COUNTRY CODES

AT	Austria	DE	Germany	IE	Ireland	NL	Netherlands
AU	Australia	DK	Denmark	IT	Italy	NO	Norway
BE	Belgium	EE	Estonia	JP	Japan	PL	Poland
BG	Bulgaria	ES	Spain	KR	South Korea	PT	Portugal
BR	Brazil	FI	Finland	KY	Cayman Islands	RO	Romania
CA	Canada	FR	Francia	LT	Lithuania	SE	Sweden
CH	Switzerland	GB	United Kingdom	LU	Luxembourg	SI	Slovenia
CL	Chile	GR	Greece	LV	Latvia	SK	Slovakia
CN	China	HR	Croatia	MT	Malta	TR	Turkey
CY	Cyprus	HU	Hungary	MX	Mexico	US	United States
CZ	Czech Republic						