1

RISKS LINKED TO THE MACRO-FINANCIAL ENVIRONMENT

The notable recovery of economic activity in Spain in 2021 H2 has contributed to bolstering the financial position of both public and private non-financial agents, although certain sectors and segments continue to show greater vulnerability than before the COVID-19 pandemic. The economic recovery is expected to continue in the short and medium term, albeit at a slower rate owing to the rise in inflation and the armed conflict in Ukraine. Nonetheless, the economic consequences of the war are highly uncertain. The materialisation of risks to economic activity, which are mainly global in nature, such as a greater than expected persistence of inflation or a worsening of the health situation, could result in a less dynamic recovery than anticipated and in an increase in credit risk. Agents' risk aversion could also increase and the possible persistence of inflation could lead to a faster withdrawal of central banks' monetary stimuli than anticipated by investors. Both factors could trigger sharper asset price corrections than observed to date and a tightening of financial conditions, with potentially adverse implications for financial stability.

1.1 Macroeconomic environment

1.1.1 Systemic and materially significant countries

Global economic activity moderated its pace of recovery in 2021 H2, affected by the worsening of the pandemic and by the persistence of bottlenecks. The strong increase in the incidence of COVID-19 owing to the spread of the Delta and Omicron variants and the persistence of bottlenecks affecting the global supply chains in 2021 curbed global growth in the closing months of the year.

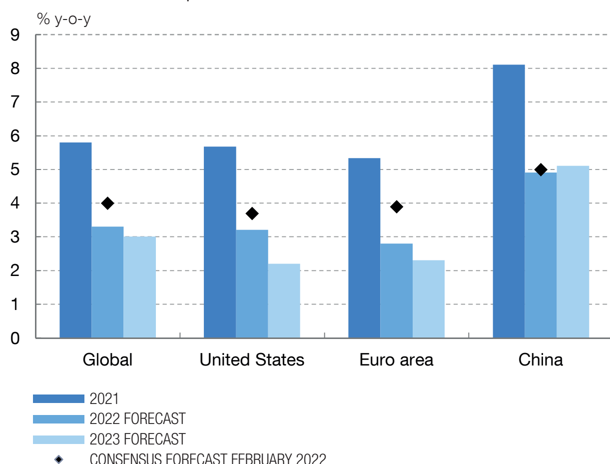
The Russian invasion of Ukraine has compounded the prospects of a slowdown in activity (see Chart 1.1.1). The growth forecasts available before the outbreak of the war already pointed to a gradual slowdown in global activity in the coming years, with downward revisions for some regions. Following the strong rebound in 2021, these prospects reflected the expectation of a reduction in economic support policies as the health crisis gave way to new challenges. This factor would outweigh others that appear to have bolstered growth expectations in the preceding months, such as signs of overcoming the wave of infections associated with the Omicron variant and the incipient signs of an easing of global bottlenecks and lower transport costs (see Chart 1.1.2). The war in Ukraine, to which Western countries have responded by imposing harsh economic sanctions on Russia and Belarus (see Box 1.1), severely

Chart 1.1

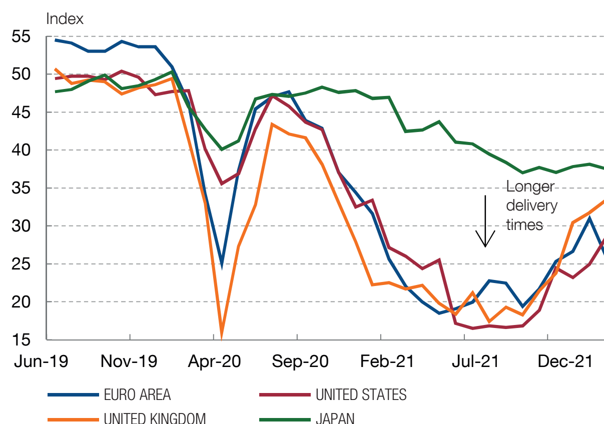
IN 2021 H2, THE RECOVERY OF THE WORLD ECONOMY SLOWED AND INFLATION SURGED, WITH THE EXPECTATION OF REMAINING HIGH IN 2022

The spread of the Omicron variant, the persistence of bottlenecks, labour market mismatches in some economies and the slowdown in China's economy explain the moderation of global economic growth in the final stretch of 2021. The inflation rate continues to rise owing to factors of varying importance across countries. The war between Russia and Ukraine brings uncertainty over growth and inflation expectations.

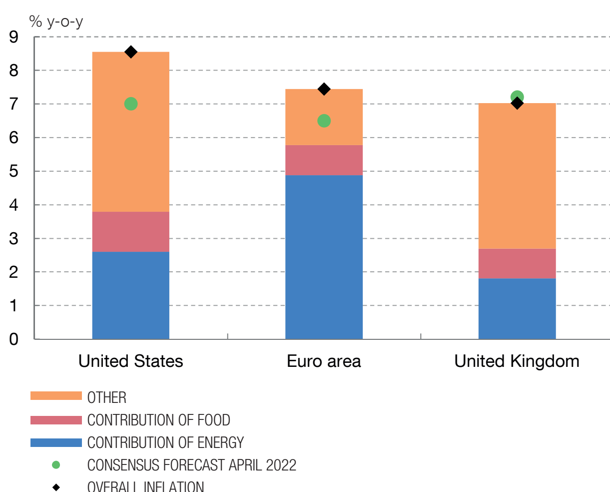
1 GDP GROWTH FORECASTS (2021-2023)
Consensus Forecast April 2022



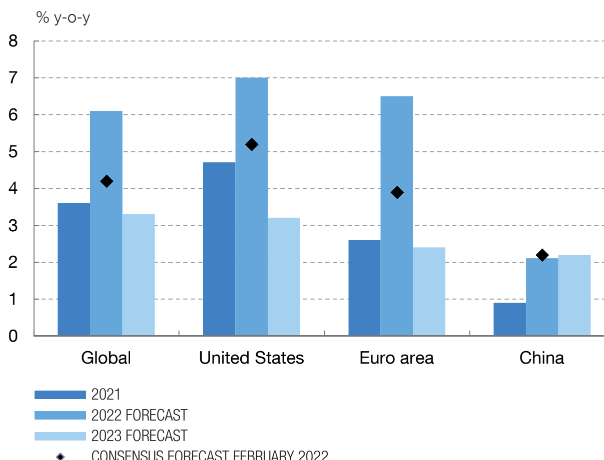
2 MANUFACTURING PMI: SUPPLIERS' DELIVERY TIMES



3 CONTRIBUTION OF ENERGY AND FOOD TO HEADLINE INFLATION: MARCH 2022



4 INFLATION FORECASTS (2021-2023)
Consensus Forecast April 2022



SOURCES: IHS Markit, national statistics, Consensus Forecast, Eikon, Eurostat.

affects these prospects through several channels: heightened uncertainty, which raises risk premia and tends to tighten financial conditions; the increase in commodity prices, particularly energy commodities; and the effects on global trade and demand.

Inflation continued to rise globally in recent quarters, driven by a variety of factors that have been exacerbated since the outbreak of the armed conflict. First, on account of fossil fuel prices, the contribution of the energy component to

inflation shot up in 2021, especially in Europe (see Chart 1.1.3). Food prices also increased considerably, owing to higher production and transport costs, the outbreak of the war in Ukraine and adverse weather conditions in certain regions. Also, the persistence of bottlenecks in 2021 contributed to exert further upward pressure on prices, against a backdrop of a strong increase in demand. Lastly, second-round effects, materialising in significant increases in wage costs, have been observed in certain economies, such as the United States and the United Kingdom, particularly in the sectors hardest hit by the pandemic.

The inflation outlook for 2022 has been revised substantially upwards in almost all regions, although the persistence of the upturn in inflation will ultimately depend on variables that are particularly difficult to forecast in the current setting. Price risks are also skewed significantly upwards, particularly in Europe, owing to its dependence on energy imports from Russia (see Chart 1.14). The war has led to a strong increase in the gas and oil futures curves, which factor in prices remaining very high in 2022, but gradually decreasing in 2023. The persistence of the high inflation episode also makes second round effects on wages and inflation expectations more probable. This last risk factor seems to be particularly relevant in the United States, compared with the euro area, given the reduced slack in the labour market and the more widespread increase in inflation by component.

In the euro area, the ECB has revised substantially upwards its inflation outlook for the coming quarters. Under its baseline scenario, the March Macroeconomic Projection Exercise (MPE) expects the annual average inflation rate to rise to 5.1% in 2022 (up from 2.6% in 2021) and to subsequently ease to 2.1% in 2023 and 1.9% in 2024. Underlying inflation is expected to remain relatively high in 2022 (at an average annual rate of 2.6%), declining to 1.8% in 2023 and 1.9% in 2024. The MPE also presents two alternative scenarios envisaging more adverse developments in the Ukraine war and its economic implications. In particular, the most adverse scenario assumes, among other developments, more serious disruptions in global value chains, a further worsening of financing conditions and cuts in oil and natural gas supply, which could give rise to additional increases in energy costs and consumer prices, and some de-anchoring of inflation expectations. Under this scenario, headline inflation would rise to 7.1% in 2022 and 2.7% in 2023, decreasing to 1.9% at the end of the projection horizon. More recently, inflation expectations for the euro area in 2022 according to the April 2022 Consensus Forecast stand at 6.5%, midway between the baseline scenario and the most adverse scenario in the MPE.

Beyond the war and its effects on growth and inflation, the uncertain course of the pandemic is another risk factor conditioning the global economic outlook, which is also influenced by the economic policies adopted. The low vaccination rates in developing countries and the possible appearance of new variants more harmful than Omicron entail additional risks to the economic recovery.

In particular, the restrictive zero-COVID-19 policies imposed in countries such as China may prolong the global supply chain bottlenecks. More generally, the persistence of a high incidence of the disease in other regions may also contribute to supply and demand mismatches in various countries' economies. Growth will largely depend on the adequate calibration of fiscal and particularly, monetary, policy responses. The latter should maintain its medium-term stance, in view of the nature of the shocks currently affecting the world economy. In a setting of high indebtedness, an increase in financing costs might exert further pressure on households and, especially, firms. Also, in the case of public finances, it could reduce the fiscal policy space, requiring governments to adopt premature fiscal consolidation strategies.

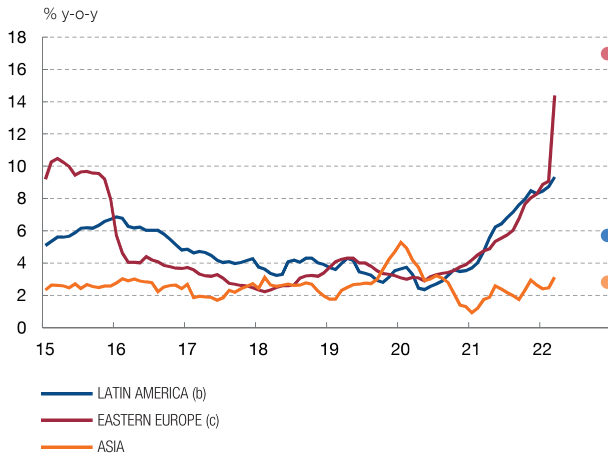
The effects of the tightening of financial conditions have already been felt in emerging economies. In recent months, emerging markets recorded falling stock market prices, exchange rate depreciations and increases in risk premia. Both global factors (expectations of a withdrawal of monetary stimuli in advanced economies and geostrategic risks) and idiosyncratic factors appear to have contributed to this downturn. Thus, the increase in inflation observed and expected in most emerging economies (see Chart 1.2.1) led central banks to accelerate, from mid-2021, the cycle of policy interest rate hikes (see Chart 1.2.2) and gave rise to a strong rebound in long-term interest rates in local currency –in some cases exacerbated by social and political tensions–. Lastly, the tightening of financial conditions, together with the full or partial withdrawal of credit support plans in most of these economies, prompted a slowdown in bank lending, with possible adverse effects on economic activity (see Chart 1.2.3).

The impact on emerging economies of the armed conflict in Ukraine, combined with the tightening of financial conditions, could be highly adverse. First, a fall in global demand would particularly affect those economies that are more open and more integrated into global value chains (for instance, Mexico) and, more specifically, those with close ties to EU countries and to the countries involved in the conflict, such as Eastern European economies and Turkey. Second, an increase in risk aversion might tighten global financial conditions and lead to dollar appreciation, with adverse effects on capital inflows to emerging economies, which would be more pronounced in the most vulnerable economies (such as Turkey, owing to its external position, and Brazil, in the fiscal realm). Third, the commodity prices increase deriving from the war is expected to damage the economies that are more dependent on imports, such as Turkey, while it could have a favourable effect on Latin American exporting countries –Brazil, Colombia and Chile–, a situation already partially reflected in the financial markets. However, this rise in commodity prices might also aggravate inflationary pressures in these countries, leading to greater than expected increases in policy interest rates. Turkey is also subject to a greater geopolitical risk owing to its geographical position and its NATO membership. Aside from the effects deriving from the armed

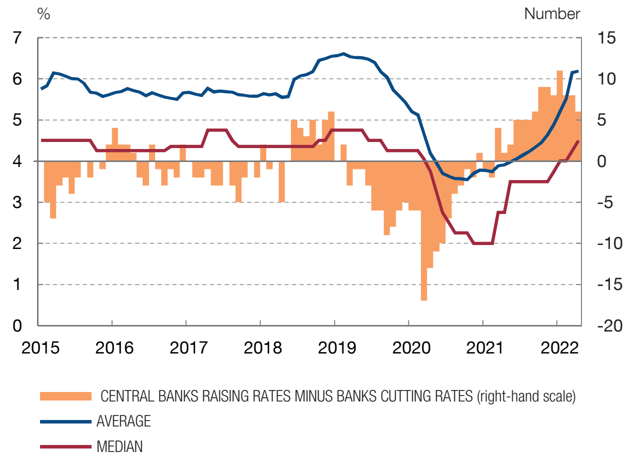
Chart 1.2
HIGHER THAN EXPECTED INFLATION EXERTS UPWARD PRESSURE ON POLICY INTEREST RATES IN THE EMERGING MARKET ECONOMIES AS A WHOLE, WHILE CREDIT CONTINUES TO LOSE MOMENTUM

Inflation unexpectedly surged in 2021 in the emerging market economies (except in Asia), triggering a further tightening of monetary policy. Credit growth moderated in the face of the full or partial withdrawal of public support plans in most of these economies. In Turkey, the lira depreciated significantly in October and November, and the central bank lowered its policy rates despite the high inflation.

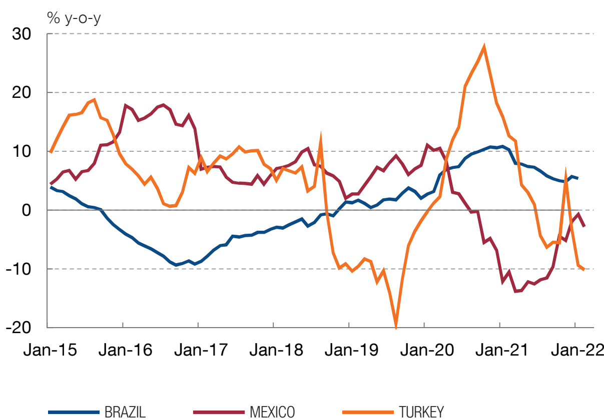
1 INFLATION (a)



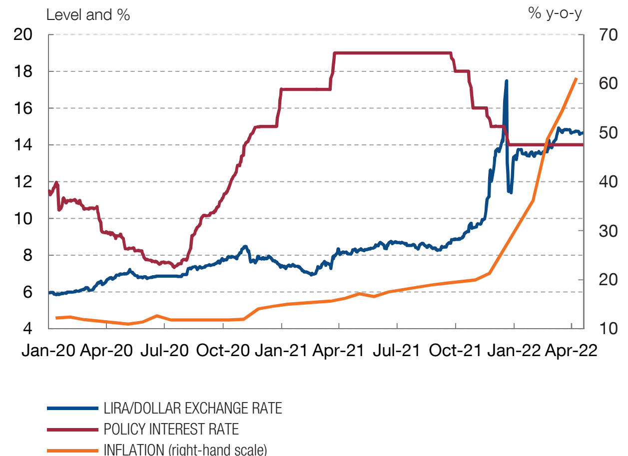
2 EMERGING MARKET ECONOMIES: POLICY INTEREST RATES



3 RATE OF CHANGE OF CREDIT TO THE PRIVATE SECTOR



4 TURKEY: INFLATION, INTE REST RATE AND EXCHANGE RATE



SOURCES: Refinitiv, Consensus Forecast and national statistics.

a The dots denote the inflation expectation at end-2022, according to Consensus Forecast analysts, as at March 2022.
b Excluding Argentina and Venezuela.
c Excluding Turkey.

conflict, emerging economies also face the risk that a faster and stronger than expected withdrawal of monetary stimuli in the advanced economies could severely affect their financial conditions, as it would lead to a further appreciation of the dollar (see Box 1.2). Lastly, other possible risks to emerging market economies are an adverse course of the pandemic or a sharper than expected slowdown of the Chinese economy.

The following can be noted in regard to the main emerging market countries to which Spanish banks are exposed:

In **Mexico,** the economic recovery that had been observed in the first-half of the year came to a halt in 2021 H2, with a quarter-on-quarter fall in GDP in Q3 and no change in Q4. Also, inflationary pressures –with underlying inflation standing above 7% at end-2022, its highest value in the last 20 years– have prompted the central bank to tighten its monetary policy. The falls in bank lending observed in recent quarters moderated, against a backdrop where banks have low NPL ratios and high capital and liquidity ratios.

After two quarters in recession, the **Brazilian** economy posted moderate growth at end-2021. That said, the prospects for 2022 have worsened substantially owing to high inflation, which exceeded 10% at end-2021. As a result, the central bank raised the policy interest rate by 975 basis points (bp) from 2021 Q1, bringing it to 11.75% in March 2022, its highest level since May 2017. The budget deficit has decreased owing to the conclusion of the support schemes implemented during the pandemic, without more structural measures having been adopted. Government debt stood below 90%, but debt servicing costs (closely linked to changes in the policy interest rate and inflation) have increased substantially. As regards changes in bank lending, the conclusion of most of the support schemes approved in 2020 led to practically zero growth in real terms.

In **Turkey,** in 2021 H2, the economy continued to show significant buoyancy, accompanied by a severe worsening of some of its main imbalances as a result of monetary policy easing. Between September and December Turkey's central bank cut its benchmark interest rate four times, for a cumulative total of 500 bp, to 14% (see Chart 1.2.4). The consequent depreciation of the Turkish lira against the dollar (37% in 2021 Q4), together with the other factors driving up inflation globally, led to a historic rise in inflation in Turkey of 61.1% in year-on-year terms in March. To deal with these depreciation pressures on the lira, the central bank carried out fresh foreign exchange interventions, further reducing its already meagre reserves (which became more negative in net terms). In December 2021 it announced a new "liraisation" strategy that aims to incentivise the use of the lira instead of foreign currencies in the Turkish financial system to reduce exchange rate vulnerability.[1] The central bank has also announced that it will monitor credit growth to limit household lending and incentivise business lending, particularly that used to finance investment supporting exports and job creation.

1 Thus, a new type of deposit in lira, protected from exchange rate fluctuations, was created. This deposit, which has a term of up to 12 months, is geared towards households (not firms) and is not subject to tax withholdings. Under a commitment of holding the deposit for three months, it receives compensation for the spread between the exchange rate depreciation (from the deposit arrangement date to the withdrawal date) and the interest rate offered for the deposit. No details have been provided so far on how this scheme will be funded, although it is expected that the Treasury will assume the risk.

1.1.2 Spain

Following its acceleration in 2021 H2, the Spanish economy will moderate its growth in 2022, basically owing to the impact of the persistence of high inflation on private consumption, aggravated by the war in Ukraine. The economic effects of the upturn in infections due to the Omicron variant are expected to have been less intense than those caused by previous waves, thanks to the progress made in the vaccine rollout and the application of less severe restrictions. However, the persistence of high inflation is eroding household income and restraining the growth of consumption.

The armed conflict in Ukraine will, in all likelihood, weaken economic growth in the short term in Europe and in Spain through several interdependent channels. The first one, which is already occurring, is a strong increase in energy and other commodity prices and its pass-through to firms' costs and consumer prices, affecting investment and spending decisions, and constraining economic growth. The second channel operates through the international financial markets, and it is linked to possible falls in share prices, increases in credit risk premia and dollar appreciation. Other effects might include those associated with the loss of firms' and households' confidence arising from the prolonged economic implications of the war. The effects of the last channel are felt through trade and financial exposures between countries. Spain's direct exposure to Russia and Ukraine is very limited, although some euro area countries with which Spain has closer relationships are more exposed to these two countries and, accordingly, a fall in their demand could affect Spain's exports. In addition, certain specific sectors of the Spanish economy are more dependent on imports from these two countries (particularly some cereals and fertilisers) and will possibly face higher prices for these commodities.

These factors deriving from the war in Ukraine entail a downward revision of the economic prospects for 2022, although other items will underpin economic growth. At end-2022 GDP is forecast to be almost 2 pp below the pre-pandemic level (see Chart 1.3.1).[2] This would, at least in part, be possible thanks to the use of savings built up by households during the pandemic. These savings are expected to help soften the impact of high inflation rates on households' purchasing power, as well as be conducive to them carrying out their expenditure and investment decisions. However, this factor would not affect all households equally, since those with lower income and a greater marginal propensity to consume would not have been able to save as much during the pandemic. Other important factors supporting the recovery include the execution of NGEU-related projects and, depending on how the pandemic is managed in some countries (such as China), the gradual tapering-off of the global

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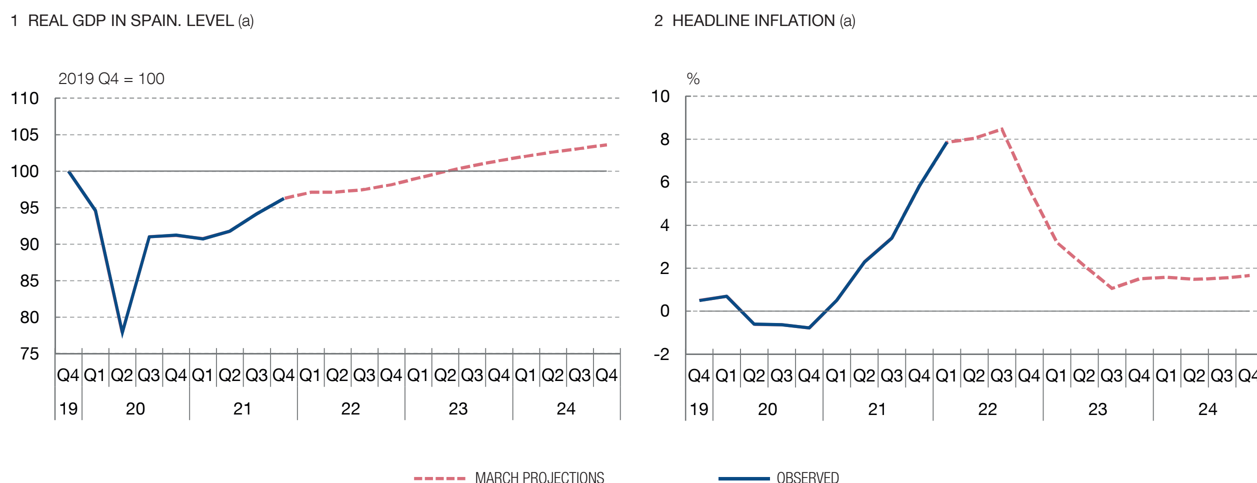
2 See Box 1, "Macroeconomic projections for the Spanish economy (2022-2024)", of the Quarterly Report on the Spanish Economy, *Economic Bulletin* 1/2022, Banco de España.

Chart 1.3

THE SPANISH ECONOMY WILL MODERATE ITS GROWTH IN 2022 H1, AFFECTED BY THE PERSISTENCE OF HIGH INFLATION AND THE ECONOMIC CONSEQUENCES OF THE WAR IN UKRAINE

The economic consequences of the war in Ukraine will steepen and prolong the increase in energy and other commodity prices that had already been observed before the invasion, affecting households' and firms' consumption and investment decisions, and constraining economic growth. Although Spain's direct trade and financial exposure to Russia and Ukraine is very limited, some of our main trading partners in the euro area are more exposed to these two countries and, accordingly, a fall in their demand may hamper our exports. By contrast, other factors, such as the partial release of the savings built up by households during the pandemic, the execution of NGEU-related projects and some normalisation of tourism receipts, will support economic growth.



SOURCES: Banco de España and INE.

a Banco de España macroeconomic projections at March 2022, the cutoff date for which was 31 March 2022.

supply chain disruptions which could nevertheless continue in certain sectors for which Russia and Ukraine are important suppliers of inputs. Also, the gradual recovery of tourist flows will further boost activity.

In the medium term, the growth of the Spanish economy is subject to downside risks, including most notably, once again, the economic effects of the Ukraine invasion. Although inflation is expected to significantly moderate starting at end-2022 (see Chart 1.3.2), it may remain higher than projected for several reasons. The possible lengthening of the armed conflict and potential retaliatory measures by Russia for the economic sanctions imposed might lead to a persistent increase in energy prices, particularly of gas and oil. This would negatively affect the activity of some of Spain's main trading partners and, therefore, Spanish exports. Also, rising labour and input shortages, more pronounced in certain sectors, may ultimately spill over to the rest of the economy, as is happening in several European countries. Should cost pressures fully pass through to final prices, higher wage demands might trigger notable second-round effects, which would lead to a stronger and more protracted upturn in inflation than anticipated to date. This would entail a greater decline in households' real income, which would weigh down consumption, and in

firms' demand for investment and employment. Box 1.3 considers macroeconomic scenarios for Spain, within a global economic framework, in which these risks materialise to a high degree. These adverse scenarios are therefore significantly distant from the baseline expectations, but provide a useful and necessary base to measure the resilience of financial intermediaries to unexpected losses, as discussed in Chapter 2 of this Financial Stability Report for the Spanish banking sector.

Also, significant downside risks associated with the pandemic and its economic repercussions continue to exist. In particular, new, more transmissible, harmful and vaccine-resistant variants of COVID-19 may arise, which could prompt new epidemic waves and the reintroduction of measures with negative implications for activity. Conversely, if the health situation improves faster than anticipated, economic growth could be boosted by agents' greater confidence in carrying out their expenditure and investment plans. Some of the Spanish economy's structural characteristics, such as the importance of SMEs and the services sector, would increase sensitivity to potential adverse developments in the COVID-19 pandemic.

1.2 Financial markets and the real estate sector

1.2.1 Financial markets

The long-term yields of higher-rated sovereign bonds rose significantly from end-2021, mainly owing to expectations of monetary policy tightening in the advanced economies at a faster pace than previously anticipated by financial markets. The less accommodative stance adopted in monetary authorities' communications in the wake of increasing inflationary pressures led investors to anticipate a faster withdrawal of monetary stimuli, particularly in the case of the United States. As a result, at the cut-off date for this report, long-term sovereign debt yields stood at their highest levels since December 2018 (see Chart 1.4.1). The evidence available suggests that part of the increase in the yield in the economies that are comparatively further behind in the cycle (such as the euro area) cannot be explained by internal factors. On the contrary, part of this increase appears to have been influenced by external determinants and, in particular, by changes in monetary policy expectations in the United States, which would be consistent with the significant role monetary policy plays in global financial conditions.[3] These developments have also been accompanied by an increase in the implied volatility of sovereign debt prices, which rose sharply after the outbreak of the war in Ukraine and have subsequently moderated, though they are still at historically high levels (see Chart 1.4.2).

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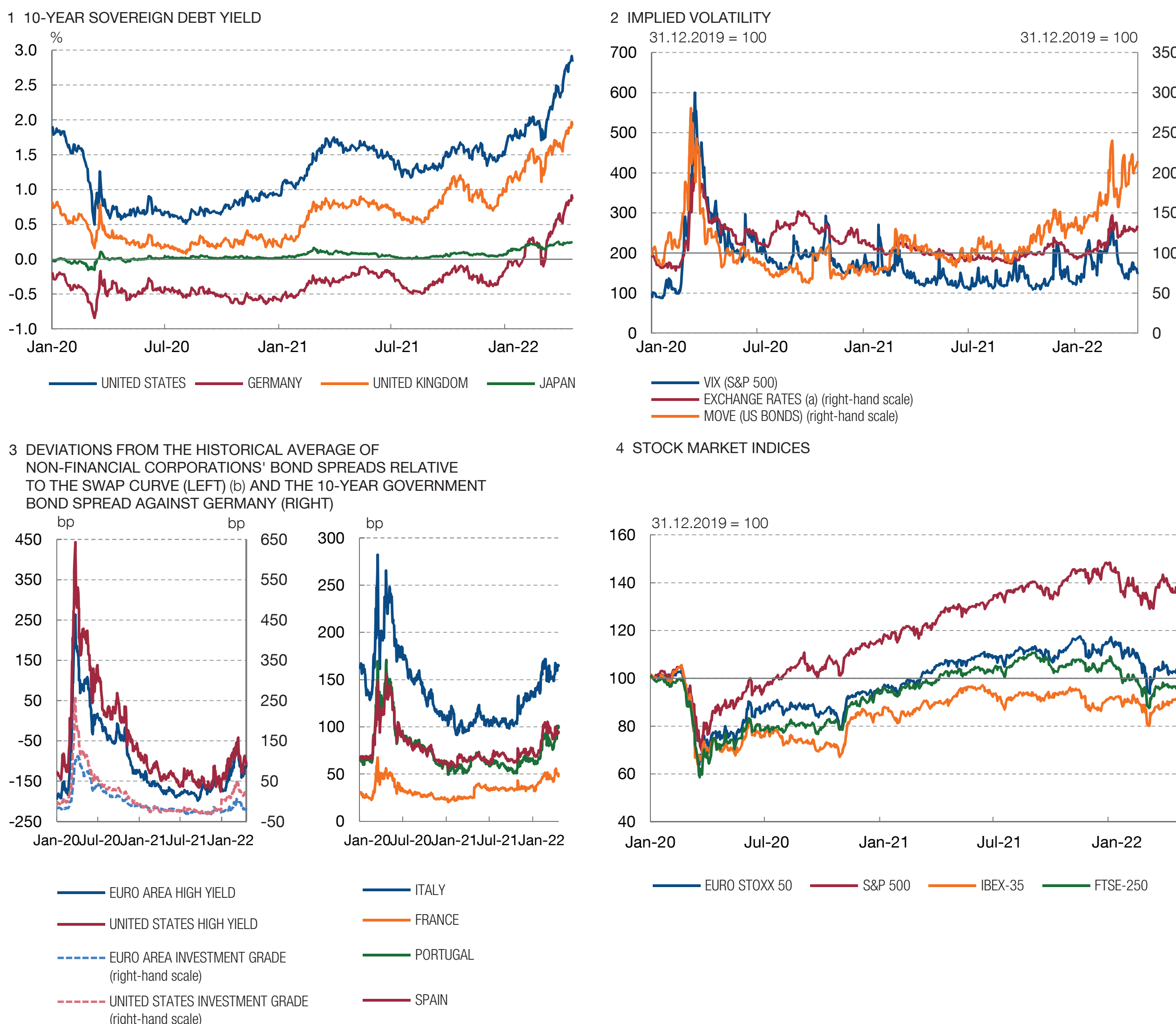
3 See Box 4 of the "Quarterly report on the Spanish economy", *Economic Bulletin* 1/2022, Banco de España.

Chart 1.4
IN RECENT MONTHS, THE LONG-TERM YIELDS OF HIGHER-RATED SOVEREIGN BONDS HAVE RISEN AND THE PRICES OF RISK-BEARING ASSETS HAVE DECLINED

The long-term yields of higher-rated sovereign bonds rose significantly from end-2021, owing to the less accommodative monetary policy stance adopted. Sovereign and corporate risk premia have risen, likewise influenced by the changes in monetary policy expectations. The rebound in long-term interest rates and the war in Ukraine have adversely affected the stock market indices in the main developed economies. After rising to record highs in January 2022, they have since declined. Following the outbreak of the war in Ukraine, the stock market indices fell sharply and their volatility increased, although these movements reversed subsequently. Bond price and exchange rate volatility remains, however, high.



SOURCES: Refinitiv Datastream and Banco de España.

a Average three-month volatilities of USD/EUR, USD/GBP and JPY/USD.
b High-yield: ICE Bank of America Merrill Lynch Non-Financial High Yield Index. Investment grade: ICE Bank of America Merrill Lynch Non-Financial Index. Deviations are calculated relative to the historical average between 1998 and 2022.

The expectation of a faster than expected withdrawal of monetary stimuli in the advanced economies has translated into increases in sovereign bond yield spreads in the euro area and in corporate credit risk premia. Long-term sovereign bond yield spreads in the euro area against the German benchmark have risen to their highest levels since mid-2020 and above the pre-pandemic

levels (see Chart 1.4.3). The increase since the start of 2022 has been sharper in economies with higher yields, such as Greece (from 149 basis points (bp) to 202 bp) and Italy (from 136 bp to 166 bp), and more moderate in other economies, such as Spain (from 77 bp to 95 bp). Corporate credit risk premia have also increased in recent months, particularly in the high yield segment, also standing above the levels previous to the health crisis.

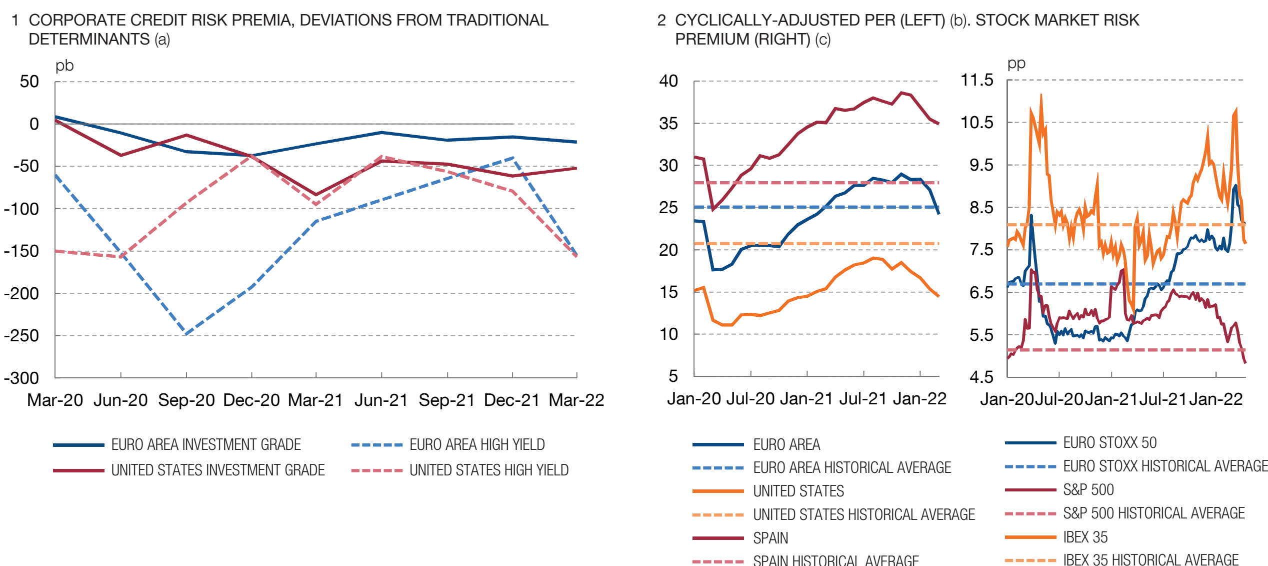
After rising to record highs in early January 2022, the stock market indices in the main developed economies have since declined. Share prices rose in the period October-January in reaction to the publication of better than expected business profits for 2021 Q3 and Q4. This trend was subsequently interrupted, mainly as a result of the increase in long-term interest rates, which adversely affected share prices insofar as it increases the rate at which future dividends are discounted (see Chart 1.4.4). The heightened geopolitical tensions in Eastern Europe and Russia's subsequent invasion of Ukraine initially contributed to intensifying the downward trend of stock market indices, particularly European ones, and to substantially increasing their volatility. However, share prices have since recovered and their volatility has moderated (see Chart 1.4.2). At the cut-off date for this report, the EURO STOXX 50 and the S&P 500 indices had accumulated losses of 9.3% and 6.4%, respectively, since early 2022, while the IBEX 35 index had increased moderately (0.6%). Stock prices in the banking sector, as well as in other more cyclical sectors, have shown high sensitivity to geopolitical tensions, posting sharp falls in the first two weeks following the outbreak of the war. Specifically, between 23 February and 8 March EURO STOXX Banks and the Madrid Stock Exchange banks sub-index recorded declines of 24.1% and 13.4%, respectively. More recently, banks' stock prices have recovered a significant part of the losses.

A protracted duration of the armed conflict in Ukraine and/or a fresh escalation of related tensions could generate additional bouts of instability in the international financial markets. The materialisation of these risks would raise investors' concerns over the macroeconomic outlook and over firms' economic and financial situation through the various channels discussed in the opening paragraphs of this chapter. All of this could trigger declines in the prices of risk-bearing assets.

If central banks' monetary stimuli are withdrawn earlier than currently expected by investors, long-term risk-free interest rates might rise further, triggering new asset price corrections. This could occur if certain upside inflation risks discussed in the opening sections of this chapter were to materialise. The possible increase in yields could be transferred more intensely to corporate bonds, since their risk premia are abnormally low according to their historical relationship with their usual determinants (see Chart 1.5.1). Despite recent falls in share prices, they still remain in some geographical areas at very high levels compared with corporate profits, in cyclically-adjusted terms (see Chart 1.5.2).

Chart 1.5
THE PRICES OF RISK-BEARING FINANCIAL ASSETS REMAIN HIGH COMPARED WITH SOME OF THEIR DETERMINANTS

Corporate credit risk premia are still below the level warranted by their historical relationship with determinants such as expected enterprise value and uncertainty over expected enterprise value, leveraging or risk aversion. For their part, stock prices in the United States and the euro area are historically high compared with the cyclically-adjusted earnings of listed firms. Stock market risk premia have declined, following the increase observed at the start of the Russian invasion of Ukraine and, in some cases, stand below their historical average.



SOURCES: Refinitiv Datastream and Banco de España.

a The difference between the corporate credit risk premium observed and that predicted by a corporate bond valuation model based on four factors: expected enterprise value (EV), uncertainty over expected EV, corporate sector leverage, and investor risk aversion. For more details, see J. Galvez and I. Roibás, "Asset price misalignments: an empirical analysis", Working Paper (forthcoming), Banco de España.
b The cyclically-adjusted PER is calculated as the ratio of the share price to the 10-year moving average of profits. The historical averages are calculated for the period 1997-2021.
c The stock market risk premium is calculated using a 2-stage dividend discount model. For more details, see R. J. Fuller and C.C. Hsia (1984), "A simplified common stock valuation model", *Financial Analysts Journal.* The historical averages are calculated for the period 2006-2021.

This is largely a reflection of the low interest rates, since in these cases risk premia stand close to their historical averages. In this connection, additional long-term interest rate hikes could lead to further declines in stock prices.

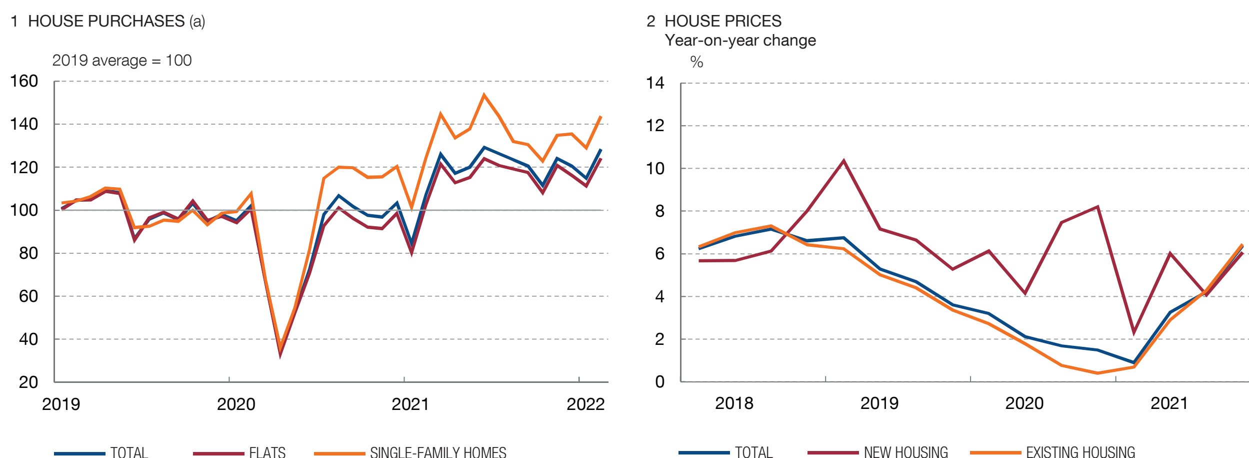
1.2.2 Spanish real estate market

House sales in 2021 H2 remained at figures similar to those of H1, the highest since early 2008, while house supply grew less. These developments continued in the early part of 2022. In 2021 as a whole, housing transactions were 18% above the 2019 levels (see Chart 1.6.1), while housing starts were only 1% higher. Also, between January and February 2022, house sales remained 18% above the volume posted in the same period in 2019, while housing starts at the beginning of 2022 were 4% below their level in early 2019. Several factors lie behind this robust momentum in demand for housing. These include a more encouraging economic

Chart 1.6

GROWTH IN HOUSE PURCHASES ROSE VIGOROUSLY IN 2021 TO SURPASS PRE-PANDEMIC LEVELS IN EARLY 2022, AMID LIMITED SUPPLY OF NEW HOUSING AND PRICE ACCELERATION

The improved economic and health situation, favourable financing conditions and the materialisation of purchase decisions postponed after the onset of the pandemic are among the factors behind the robust momentum of house purchases throughout 2021 and their relatively high levels in early 2022. The pace of housing starts remained relatively slow. Against this background, average house prices accelerated up to 2021 Q4.



SOURCES: Centro de Información Estadística del Notariado, INE and Ministerio de Transportes, Movilidad y Agenda Urbana.

a Seasonally and calendar-effect adjusted series. The latest figure for public-deeded purchases relates to February 2022.

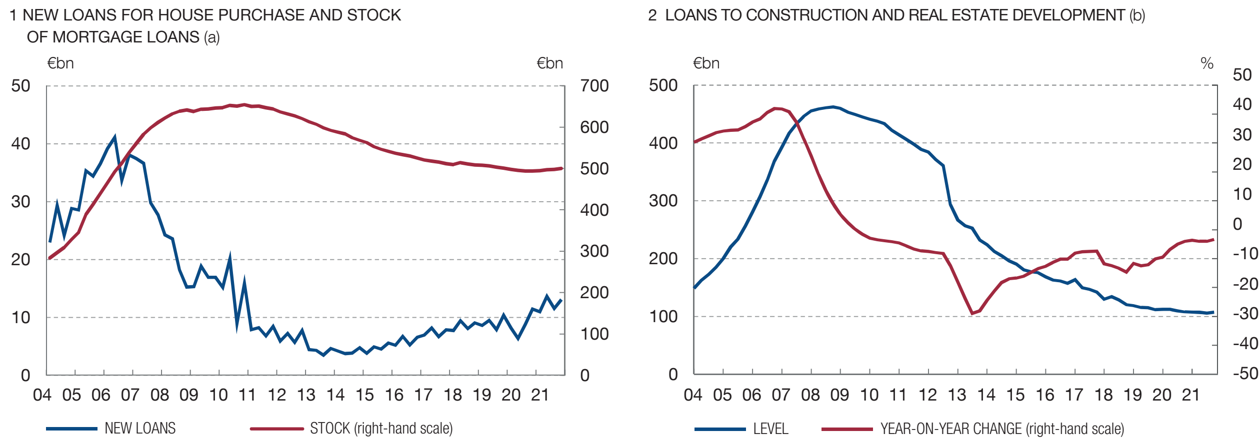
and epidemiological environment, favourable financial conditions, the materialisation of purchase decisions that had been postponed following the onset of the pandemic and changes in households' housing preferences arising from it, such as a greater demand for single-family homes than for multi-family housing and the shift towards peripheral areas of large cities. That said, the current level of construction of new houses is low and unable to absorb the growth of demand. In any event, the Housing Renovation and Urban Regeneration Plan, to be implemented within the framework of the Recovery, Transformation and Resilience Plan (RTRP), which has funding of €6,820 million out of the NGEU funds, will drive activity in the residential sector, in both renovation and new housing.

The greater strength of housing demand vis-à-vis supply translated into a new acceleration of average house prices in 2021 Q4. Drawing on data from the National Statistics Institute (INE, by its Spanish acronym), the year-on-year growth rate for house prices rose to 6.4% in that period, 2.2 pp above the Q3 figure (see Chart 1.6.2). An acceleration was observed in both the second-hand and new dwellings segments (of 2.2 pp and 2 pp, and to 6.4% and 6.1%, respectively). The considerable rise in the costs of inputs and the growing labour supply shortages in the construction sector, which is slowing down and even halting some construction work in progress, which is causing the slowdown and even stoppage of some works in progress, could lead to additional increases in new house prices this year. In addition, the implementation of the RTRP could bring about a further tightening of

Chart 1.7

THE STOCK OF RESIDENTIAL MORTGAGE LOANS IS GROWING AT A VERY MODERATE PACE, WHILE THAT OF LOANS TO CONSTRUCTION AND REAL ESTATE DEVELOPMENT CONTINUES TO DECLINE

In 2021 H2, new residential mortgage loans held at around the same levels as in H1, which were the highest since 2010. This meant that the stock of these loans continued to grow, albeit at a very moderate rate. The stock of loans to construction and real estate development continued on a downward path, but it is falling at an increasingly slower pace.



SOURCE: Banco de España.

a The new loans for house purchase time series (left-hand scale) captures in billions of euro the value of the new lending accumulated at the end of each quarter. The stock of mortgage loans time series (right-hand scale) captures in billions of euro the value of the stock of mortgage loans accumulated at the end of each quarter.

b Quarterly data. The year-on-year change is calculated as the average for the four quarters.

costs in the sector and its pass-through to prices. This would advise a more protracted implementation of the plan than is currently envisaged.

In line with house purchase developments, in 2021 H2 the volume of new residential mortgage lending remained around H1 levels, which were the highest since 2010 (see Chart 1.7.1). Against this backdrop, the stock of such loans continued to grow, rising by 1.2% year-on-year in 2021 Q4, the highest rate of change since early 2011. Conversely, the stock of loans to construction and real estate development (see Chart 1.7.2) held on its downward trend, albeit at a progressively slower pace.

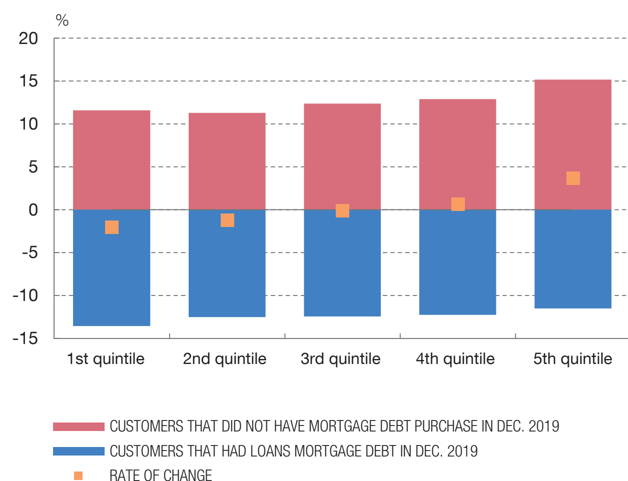
Growth in the overall stock of loans secured by mortgage collateral since the onset of the pandemic has been driven exclusively by households in higher income areas, particularly by those in the top quintile (see Chart 1.8.1). Households that had mortgage debt before the pandemic have since broadly de-leveraged, particularly in the case of households in lower-income areas. Among those that did not have pre-existing mortgage debt, the increase in credit secured by mortgage collateral has been sharpest in households in the top income quintile areas. Consequently, in net terms, only the households in the fourth and fifth income quintile areas made a positive contribution to the growth in the stock of mortgage-backed loans between December 2019 and end-2021. Meanwhile, at end-2021 an

Chart 1.8

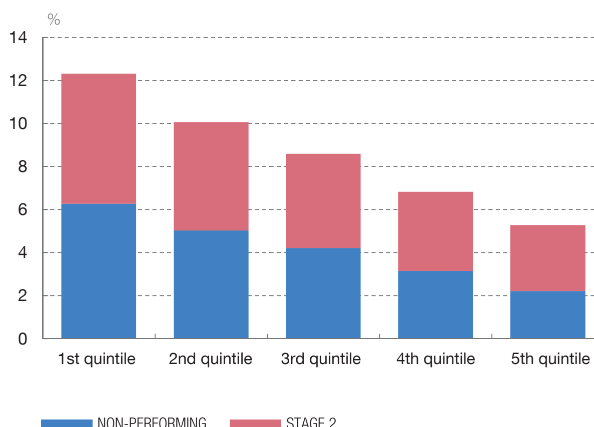
SINCE THE ONSET OF THE PANDEMIC, GROWTH IN LOANS TO HOUSEHOLDS SECURED BY MORTGAGE COLLATERAL HAS BEEN CONCENTRATED IN HIGHER-INCOME AREAS

Only households in the fourth and fifth income quintile areas have seen positive growth, overall, in the stock of loans secured by mortgage collateral since the onset of the pandemic. Households in higher-income areas have, on average, a lower ratio of troubled loans of this kind.

1 CONTRIBUTION TO THE RATE OF CHANGE (BETWEEN DEC. 19 AND DEC. 21) OF LOANS SECURED BY MORTGAGE COLLATERAL BY INCOME QUINTILE AREA (a) (b) (c)



2 RATIO OF STAGE 2 AND NON-PERFORMING LOANS SECURED BY MORTGAGE COLLATERAL BY INCOME QUINTILE AREA (DEC.-21) (a) (b)



SOURCES: Banco de España calculations drawing on information from the Central Credit Register and INE experimental statistics.

a Classification by income quintile at postcode level. Each individual borrower is assigned the credit resulting from the sum of the proportional part of each of the mortgage loans secured by mortgage in their name. Loans to households secured by mortgage guarantee may be for house purchase and renovation or for other purposes. The study also includes non-resident borrowers.

b Postcodes in very small municipalities, for which no postcode-level income data are available, have been excluded. In order for all quintiles to have equal importance, a dual allocation criterion has been used in each one. The postcodes (municipalities) have been ranked by income and also by the stock of credit at the start of the crisis (December 2019). Thus, the first quintile includes the postcodes (municipalities) that account for 20% of loans at the start of the crisis and have the lowest income, and so on for the other quintiles.

c The contribution to the change in lending to households that had no mortgage debt in December 2019 is defined as the ratio of their debt secured by mortgage in December 2021 (accumulated as a result of new lending since December 2019) to the total stock of households' loans secured by mortgage collateralat December 2019.

inverse relationship was observed between the ratio of Stage 2 and non-performing loans secured by mortgage collateral and the average income of the area where the borrowers reside (see Chart 1.8.2). Given the increase in the share of borrowers with fewer distressed loans, these developments would suggest that the average quality of banks' mortgage portfolios has improved since the onset of the pandemic.

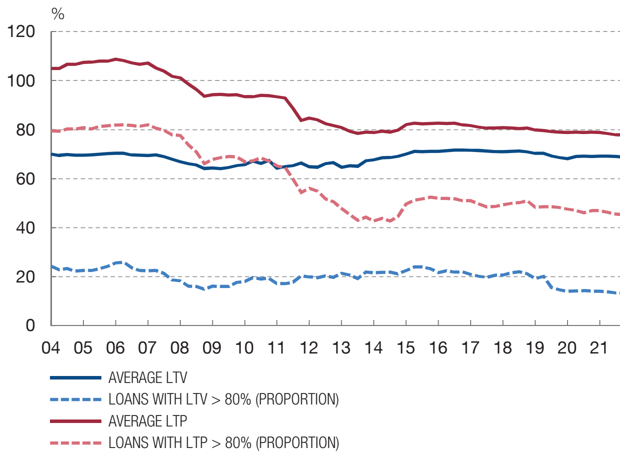
There was no substantial change in credit standards for new residential mortgages in 2021. The average loan-to-value (LTV) and loan-to-price (LTP) ratios, which measure borrowers' indebtedness in new mortgage loans, remained stable in 2021. At the same time, there were no significant variations in the proportion of loans with a higher level of leverage (those with an LTV or LTP ratio of more than 80%) (see Chart 1.9.1). As regards the loan-to-income (LTI) ratio, which reflects the relationship between the mortgage principal and the borrowers' income when the

Chart 1.9

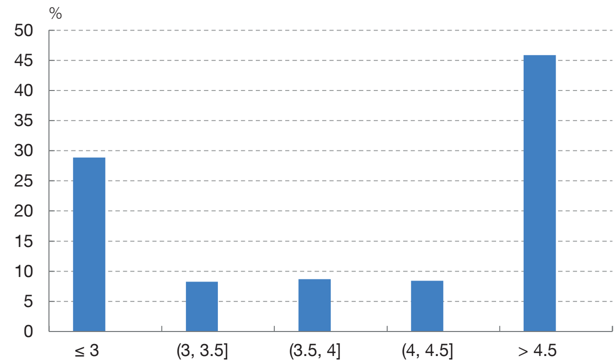
STABILITY HAS BEEN OBSERVED IN THE DISTRIBUTION OF CREDIT STANDARDS FOR NEW RESIDENTIAL MORTGAGES. THE INTEREST RATE SPREADS FOR FIXED-RATE MORTGAGES NARROWED ACROSS THE BOARD UNTIL EARLY 2022

No significant changes have been observed in the distribution of the LTV and LTP ratios of new mortgage loans in the most recent period. Most new residential mortgage lending was concentrated in loans with relatively low or high (not intermediate) LTI ratios. Meanwhile, the interest-rate spread over the risk-free rate of fixed-rate mortgages narrowed in 2021, to stand at its lowest level in recent years. Spreads narrowed in all loan groups by LTP ratio distribution.

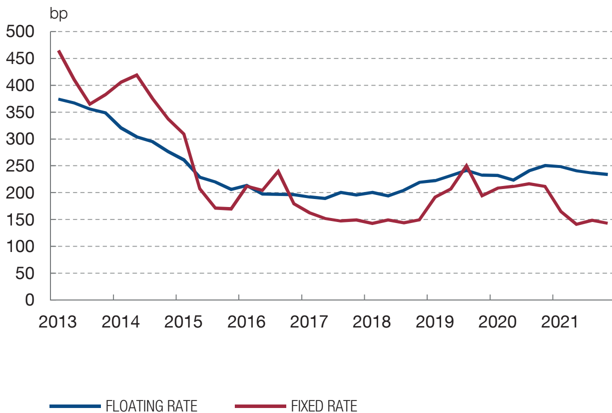
1 LOAN-TO-VALUE AND LOAN-TO-PRICE RATIOS OF NEW MORTGAGES (a)



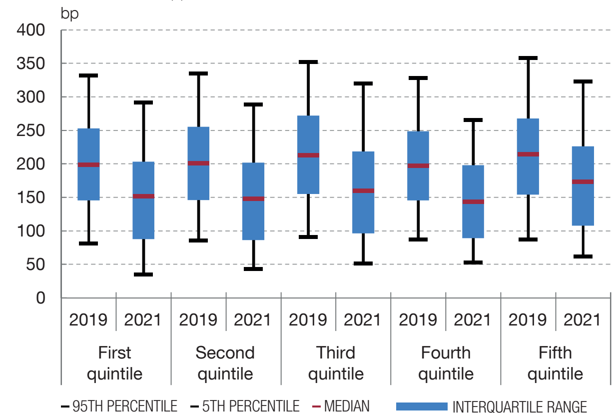
2 LOAN-TO-INCOME RATIO. WEIGHT OF EACH TRANCHE IN NEW MORTGAGES IN 2021 (b)



3 SPREADS OVER RISK-FREE RATES (c)



4 SPREADS OVER SWAP RATE OF NEW FIXED-RATE MORTGAGES, BY LTP QUINTILE (c)



SOURCES: Banco de España, Colegio de Registradores and Refinitiv.

a The LTV ratio is the amount of the mortgage principal relative to the property's appraisal value. The LTP's denominator includes the registered price of the property. The average values in the LTV and the LTP are weighted by the capital of each mortgage. Both indicators are calculated for new mortgages. The LTP ratio is available for a sample of mortgages. Data up to 2021 Q4 (not all loans for this period are yet available).

b The LTI ratio is the amount of the mortgage principal relative to the borrowers' income. The horizontal axis of the chart shows the distribution of credit in each LTI segment. The LTI of loans extended up to 2021 Q4 is represented.

c Interest rate spread of each new mortgage over the euro IRS curve or swap curve. For floating-rate mortgages, the 1-year IRS rate is used to calculate the spread; for fixed-rate mortgages, the term equivalent to the mortgage term is selected. Data up to 2021 Q4.

loan is originated, most new lending was concentrated in loans with a low LTI ratio (below 3) and a high LTI ratio (above 4.5) (see Chart 1.9.2).

Over the course of 2021 the average interest rate spread for fixed-rate mortgages narrowed to its lowest level in recent years. In 2021, the interest rate on new fixed-rate residential mortgages, which currently account for the bulk of new

mortgage lending,[4] continued to fall until converging with that of floating-rate loans, which, on average, stood at around 2% at year-end. This was also accompanied by a narrowing of the spreads over the risk-free rate of fixed-rate loans (see Chart 1.9.3). On more granular data, spreads narrowed in all groups by LTP ratio distribution, including those with a higher ratio, although they are somewhat higher in riskier loans as per this indicator (see Chart 1.9.4). Set against a growing share of fixed-rate mortgages in new lending and a narrowing of spreads, the risk for banks of an interest rate rise associated with a potential tightening of monetary policy becomes more relevant. However, the severity of this risk will depend on the extent to which their exposure to it is covered.

The signs of improvement in real estate activity also extended to the commercial segment, both in terms of price and volume. There was a recovery in the sector's activity in the final stretch of 2021, with prices rising 4.7% year-on-year in 2021 Q3, which was accompanied by a significant increase in the sales of this type of property, according to the latest information available.

1.3 Non-financial sectors

1.3.1 Non-financial corporations and households

In line with the economic recovery, business turnover continued to rise across the board in 2021 H2, although it remained clearly below 2019 levels in some sectors in 2021. On State tax revenue service data, sales[5] in most sectors in 2021 exceeded those for 2019. However, despite posting growth, business revenues in the sectors severely affected by the pandemic have not returned to pre-health crisis levels and, in some cases, are still a considerable way off.[6] Specifically, turnover in 2021 was 27%, 16% and 15% below 2019 levels in the hospitality sector, social, cultural and recreational services, and the manufacture of transport equipment, respectively. In terms of firm size, according to the Banco de España Business

4 In 2021, around 70% of new mortgages on residential property were granted at fixed rate.

5 Each quarter, the State tax revenue service publishes the Sales, Employment and Wages in Large Firms and SMEs statistics, which include aggregate information from the tax returns for VAT and withholdings on labour income for all firms considered to be large for tax purposes and SMEs whose legal form is that of a public limited company or private limited company. The geographical range is the so-called "common tax regime territory", i.e. excluding firms that operate exclusively in the Basque Country and Navarre. In the case of the VAT return variables, the areas where this tax is not levied (the Canary Islands, Ceuta and Melilla) are excluded.

6 The extent to which firms have been affected by the COVID-19 pandemic is measured on the basis of the fall-off in business turnover in 2020 relative to 2019. The sectors are classified as severely affected (those whose sales fell by more than 15%), moderately affected (sales down by between 9% and 15%) and largely unaffected (the rest). The sectors severely affected by the COVID-19 pandemic are: hospitality; the manufacture of refined petroleum products; social, cultural and recreational services; transportation and storage; the manufacture of textiles; and the manufacture of transport equipment.

Activity Survey (EBAE), small and micro firms' sales in 2021 remained farther from their pre-pandemic levels than the average for their sector of activity.[7]

The increase in business turnover seems to have resulted in an across-the-board improvement in firms' profitability, although it appears that the proportion of those reporting accounting losses will remain higher than before the pandemic. According to the sample of firms contributing to the Central Balance Sheet Date Office Quarterly Survey (CBQ), comprising chiefly large firms, in 2021 the percentage of firms with a negative return on assets (ROA) decreased by 5 pp on 2020,[8] but it remains 4 pp higher than in 2019. The proportion of such firms in the severely affected sectors (36%) continues to be higher than in the moderately affected (27%) and largely unaffected sectors (30%) (see Chart 1.10.1).

The recovery of turnover and the subdued growth of debt appear to have enabled an improvement in firms' financial situation, although, on average, it will continue to be more vulnerable than before the pandemic. Thus, firms' average debt and debt burden ratios began to fall in 2021 thanks to the strong increase in income far outpacing the growth of debt. In this context, on the CBQ, the percentage of firms with high debt[9] has decreased across the board: it stands close to pre-pandemic levels in the moderately affected and largely unaffected sectors, but remains 7 pp higher than in 2019 in the severely affected sectors (see Chart 1.10.2).

A potential interest rate hike, especially one that is faster than expected, may increase the percentage of firms under high financial pressure. However, under the baseline scenario envisaging a continuing economic recovery, the vulnerabilities would tend to diminish. Within corporate bank financing, short-term and floating-rate loans predominate, and changes in market interest rates therefore pass through relatively swiftly to the average cost of debt. Under a scenario consistent with the latest Spanish economic projections where, in line with agent expectations, market interest rates would rise progressively in 2022 and 2023, firms' interest expenses as a percentage of gross operating surplus would begin to increase from 2023 onwards to stand, by the end of 2024, 1 pp above 2021 levels. However, according to a sensitivity analysis, if short and long-term interest rates rise by 100 bp more than envisaged in the foregoing scenario, interest expenses as a percentage of business income would increase by a further 1.7 pp in

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7 See Box 2, "An analysis of developments in firms' activity in 2021 drawing on other sources of information", in "Economic and financial performance of Spanish firms in 2020 and 2021 according to the Central Balance Sheet Data Office", *Economic Bulletin* 4/2021, Banco de España.

8 See "Results of non-financial corporations to 2021 Q4. Preliminary year-end data", Analytical Article, *Economic Bulletin* 1/2022, Banco de España.

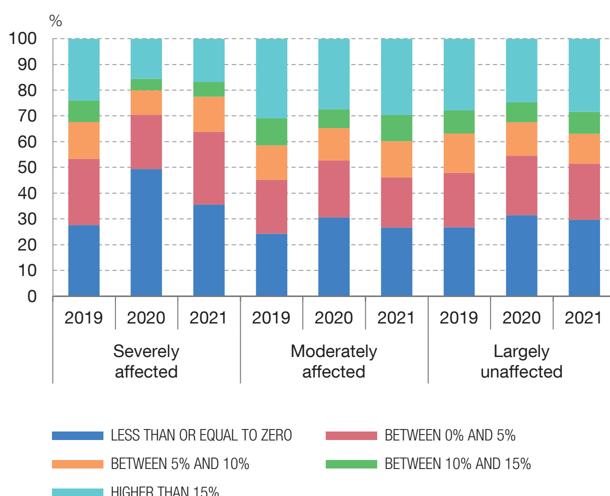
9 Firms are defined as having high debt if their ratio of net debt / (gross operating profit + financial revenue) is higher than 10 or if they have positive net financial debt and zero or negative earnings.

Chart 1.10

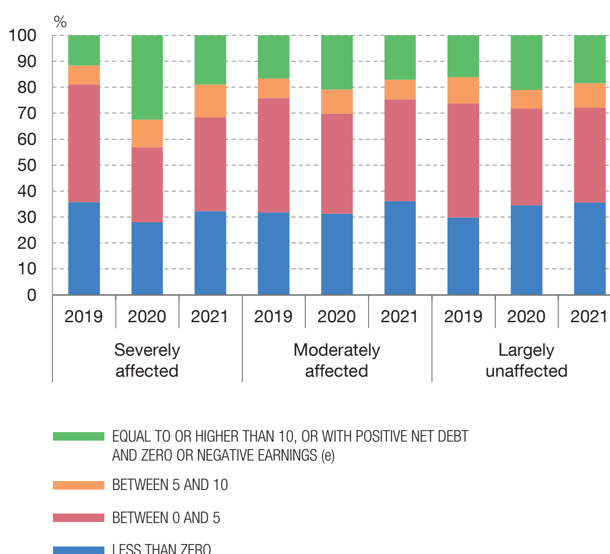
DESPITE THE ACROSS-THE-BOARD IMPROVEMENT IN FIRMS' PROFITABILITY AND FINANCIAL POSITION IN 2021, THE PROPORTION OF THE MOST VULNERABLE FIRMS REMAINS HIGHER THAN IN 2019, ESPECIALLY IN THE SECTORS SEVERELY AFFECTED BY THE PANDEMIC

According to the CBQ, which chiefly comprises large firms, the recovery in business turnover in 2021 has enabled an improvement in the ROA in all sectors. However, the proportion of firms with negative profitability remains higher than in 2019, particularly in the sectors that have been severely affected by the pandemic. Similarly, the increase in income and the moderate growth in debt have led to a reduction in the percentage of firms with a more vulnerable financial position. Despite this, the percentage of such firms appears to still be clearly higher than before the pandemic in the case of the severely affected sectors.

1 PERCENTAGE OF FIRMS BY RANGE OF RETURN ON ASSETS. BREAKDOWN BY SECTOR (a) (b) (c)



2 PERCENTAGE OF FIRMS BY TRANCHE OF RATIO OF NET DEBT / (GROSS OPERATING PROFIT + FINANCIAL REVENUE) (a) (c) (d)



SOURCE: Banco de España.

a Information from the CBQ sample.
b Return on assets = (Ordinary net profit + Financial costs) / Total assets net of non-interest bearing borrowing.
c Sectors are defined as severely affected if their sales fell by more than 15% in 2020; as moderately affected if their sales fell by between 9% and 15%; and as largely unaffected in other cases.
d Net debt is defined as interest-bearing borrowing minus cash and other equivalent liquid assets.

2024.[10] Given that business income may be expected to decline under such a scenario, this increase in the weight of interest expenses should be considered as a floor of the total impact of the rise in interest rates.

The increase in production costs associated with the surge in energy prices may also contribute to a downturn in some firms' economic and financial

10 The baseline scenario envisages a gradual rise in market interest rates, in line with the expectations implicit in the yield curves, that coincides with the "Macroeconomic projections for the Spanish economy (2022-2024)", Box 1, "Quarterly report on the Spanish economy", Economic Bulletin 1/2022, Banco de España. The alternative scenario envisages a hike in short and long-term interest rates that is 100 bp higher than that considered under the baseline scenario over the entire projection horizon. To simplify, it is assumed that the macro-financial variables, such as the gross operating surplus and the outstanding amount of debt, are not affected by the interest rate shocks, with the result that their levels will evolve in accordance with the baseline scenario. That is to say, the shock only has an effect on prices, not quantities.

situation. This impact would be felt regardless of whether firms pass on to their customers the rising costs (since, in this case, their sales could be affected) or if they don't (because their margins will narrow). Corporate profits would decline in either case and, consequently, some firms could become financially vulnerable. These effects would be partially mitigated by the temporary measures approved by the Government to reduce the cost of oil products.[11] Box 1.4 uses simulation exercises to analyse the sensitivity of firms' financial situation to the rise in energy prices, finding moderate average effects, albeit with notable sectoral heterogeneity, for the size of price hikes studied, which is 25%. This rise corresponds to the increase in the average price of energy goods in 2023, between the Banco de España projections published on 17 December 2021 and on 5 April 2022.

Favourable labour market and income developments appear to be contributing to the recovery in households' economic situation. Effective social security registrations[12] have exceeded the pre-pandemic employment level since November 2021. In March 2022, they were 2.1% higher, on a seasonally adjusted basis, than employment in February 2020. Nevertheless, the total number of effective weekly hours worked in 2021 Q4 was 3.8% lower than in 2019 Q4. In 2021, households' gross disposable income (GDI) grew 2.2% in nominal and year-on-year terms, but remained 2.8% down on 2019. Assuming the economy recovers as envisaged under the baseline scenario, this trend may be expected to continue, albeit at a slower rate given the anticipated slowdown in growth. However, according to the European Commission's monthly consumer survey,[13] in March 2022 most households (except those in the top income quartile) expected their financial situation to worsen somewhat in the following 12 months, in line with the economic losses that they anticipated at the beginning of the pandemic.

The information available does not indicate that the pandemic prompted a deterioration in households' financial position. Between the onset of the health crisis and 2021 Q4, their aggregate net wealth increased by 9.8%. This has been fostered by the higher amount of financial assets holdings (driven by the rise in savings) and, above all, by the increase in value of real estate assets (as a result of the appreciation of housing), in addition to the relative debt stability. Preliminary estimates at microeconomic level (available up to 2021 Q3) would suggest that this pattern has been fairly widespread across wealth deciles and according to the

11 The measures adopted in response to the crisis deriving from the war in Ukraine, which were approved on 29 March 2022 by the Council of Ministers, include a minimum rebate of €0.20 per litre of fuel and certain electricity tax reductions. They are part of a package of direct aid amounting to €6 billion and of measures in other spheres (minimum living income, limits to rental increases, etc.). The plan approved also includes a new ICO guarantee facility amounting to €10 billion and certain improvements in the terms of conditions applied to some existing guaranteed loans, which are discussed in greater detail in Chapter 2.

12 Effective social security registrations are total registrations excluding workers subject to furlough schemes (ERTEs, by their Spanish acronym).

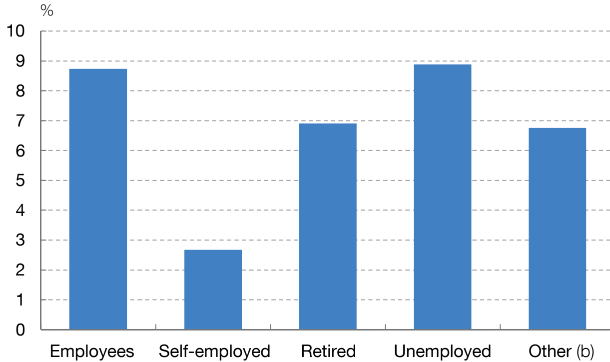
13 The European Commission's monthly consumer survey is available here.

Chart 1.11

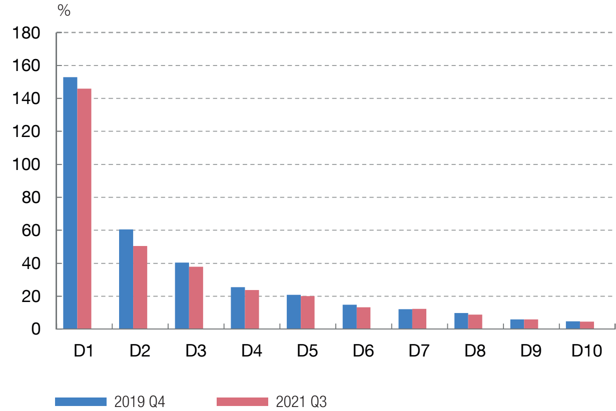
NO DETERIORATION HAS BEEN OBSERVED IN HOUSEHOLDS' FINANCIAL POSITION SINCE THE ONSET OF THE PANDEMIC

According to the provisional information available, between end-2019 and 2021 Q3, households' average net wealth increased, irrespective of the employment status of the household reference person. Similarly, during the same period, the bank debt-to-total asset ratio appears to have decreased across nearly all household net wealth deciles, particularly in the bottom deciles.

1 CHANGE IN AVERAGE HOUSEHOLDS' NET WEALTH BETWEEN 2019 Q4 AND 2021 Q3, BY EMPLOYMENT STATUS OF HOUSEHOLD REFERENCE PERSON (a)



2 BANK DEBT-TO-TOTAL ASSET RATIO BY NET WEALTH DECILE (a) (c)



SOURCES: ECB and Banco de España.

a These results should be treated with caution, as they come from an experimental statistic that is subject to review and improvement and, while the coverage of the instruments is very broad, it is not complete. It combines information from the quarterly sectoral accounts with that of the EFF, the latest available edition of which relates to 2017. Thus, this statistic assumes that the distribution of asset and liability instrument holdings is stable over time during the intervening periods between the different editions of the EFF.

b Includes all households whose reference person is in any of the following situations: is a student, has a permanent disability, is engaged in domestic tasks, does not have remunerated work, or whose employment status is unknown.

c The denominator of the bank debt-to-total asset ratio includes financial and non-financial assets.

employment status of the household reference person[14] (see Chart 1.11.1). There has been quite a broad-based decline in the bank debt-to-total asset ratio,[15] particularly in the bottom net wealth deciles (see Chart 1.11.2). In any event, in the first net wealth decile, debt continues to far exceed the value of assets (by around 50%), signalling this segment's vulnerability to adverse shocks.

Having deteriorated after the outbreak of the pandemic owing to the fall in income, households' debt repayment capacity has improved thanks to the economic recovery, and it is not expected to be severely affected by moderate interest rate hikes. Despite stable household indebtedness, the fall in GDI initially

14 These estimates should be treated with caution, as they come from an experimental statistic that is subject to review and improvement and, while the coverage of the instruments is very broad, it is not complete. It combines information from the quarterly sectoral accounts with that of the Spanish Survey of Household Finances (EFF, by its Spanish acronym), the latest available edition of which relates to 2017. Thus, this statistic assumes that the distribution of asset and liability instrument holdings is stable over time during the intervening periods between the different editions of the EFF.

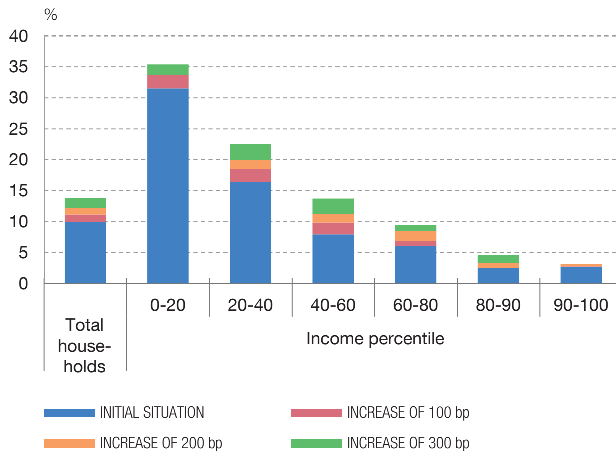
15 Total assets include both financial and non-financial assets.

Chart 1.12

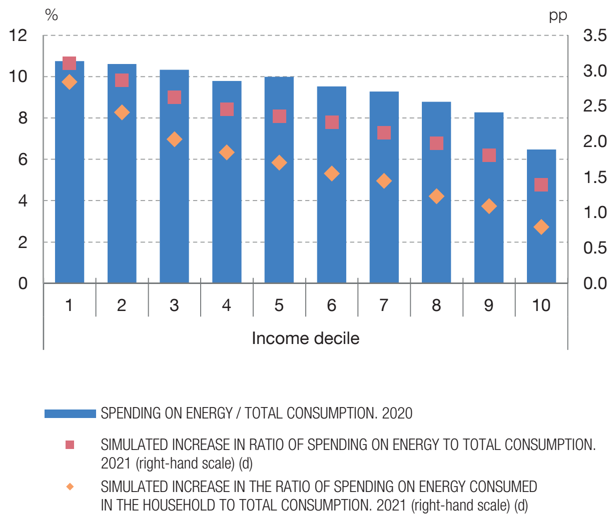
INDEBTED HOUSEHOLDS ON THE LOWEST INCOMES ARE EXPECTED TO BE HIT HARDEST IN THE EVENT OF INTEREST RATE RISES AND A HIKE IN ENERGY PRICES

The proportion of indebted households with a high net interest burden as a result of interest rate rises is expected to increase to a greater extent among those between the 20th and 40th income distribution percentiles. Similarly, spending on energy accounts for a higher percentage of lower-income households' consumption, and the hike in prices in 2020 and 2021 has had a more significant impact on them.

1 IMPACT OF AN INTEREST RATE RISE ON THE PERCENTAGE OF HOUSEHOLDS WITH A HIGH NET INTEREST BURDEN. BREAKDOWN BY INCOME PERCENTILE (a) (b)



2 WEIGHT OF SPENDING ON ENERGY ITEMS AND MEDIAN IMPACT OF THE HIKE IN ENERGY PRICES (2021 AVERAGE VS 2020 AVERAGE). BREAKDOWN BY INCOME DECILE (c)



SOURCES: Banco de España and EFF (2017).

a The increase in debt service expenses is calculated for households with floating-rate debt. It is assumed that the hike in short-term interest rates is passed through in full to the interest rate on floating-rate debt. In the case of deposits, it is assumed that 15% is passed through to sight deposits and 76% to fixed-term deposits.

b The net interest burden is considered to be high when the ratio of (debt service expenses - interest income from deposits) / household income is higher than 40%. Households without debt are excluded from this calculation.

c Income distribution is proxied drawing on total household consumption which, in the case of households owning their own home, is adjusted to reflect an imputed rent.

d Increase in percentage points, assuming stability in the amounts of energy consumed and a price increase equal to the average observed in 2021.

prompted an increase in the average debt and debt burden ratios, which began to decline in 2021 as incomes started to recover. A potential interest rate rise could contribute to the debt repayment capacity deteriorating somewhat, especially if the hike is much sharper than expected. In any event, the effect of a moderate interest rate rise is not expected to be very significant, in part because of the increase in the share of fixed-rate mortgages (households' main liability) observed in recent years, which accounted for 24.9% of the outstanding balance in December 2021. Specifically, on Banco de España simulations, it is estimated that the proportion of households with a high net interest burden[16] would rise by 1.2 pp, 2.3 pp and 3.9 pp if interbank interest rates were raised by 100 bp, 200 bp and 300 bp. Such effects would be felt more strongly among indebted households between the 20th and 40th

16 The net interest burden is considered to be high when the ratio of (debt service expenses - interest income from deposits) / household income is higher than 40%.

income distribution percentiles (see Chart 1.12.1).[17] These percentages should be considered as lower levels of the total impact of the interest rate rise, as it would also reduce agents' income by adversely impacting activity, in addition to slowing down their accumulation of wealth, given the greater debt burdens.

The steep rise in energy prices in 2021 and in 2022 to date could jeopardise the debt repayment capacity of low-income households as spending on this item accounts for a higher proportion of their consumption. Thus, households below the third income decile spent more than 10% of consumption on energy in 2020 (see Chart 1.12.2). Moreover, it was precisely these households whose spending on energy, as a share of their consumption, increased the most in 2020 and 2021. While the impact of the hike in energy prices on households' debt repayment capacity can be cushioned by temporarily reducing their saving rate or using the funds already built up (in particular, the extraordinary savings accumulated during the pandemic), their ability to do so varies by income stratum. Lower-income households will have less scope to absorb such a hike this way, as their saving rates tend to be lower and only a small proportion of such households was able to build up extraordinary savings during the pandemic. The proportion of indebted lower-income households facing a high net interest burden is higher than in the top income strata, and their debt repayment capacity will therefore be comparatively more affected by energy price rises (see Chart 1.12.1). The measures approved by the Government to alleviate the hike in oil derivative prices may mitigate this impact, although they will not help households to reduce their degree of energy dependence.

1.3.2 General government in Spain

The general government deficit fell by 3.4 pp in 2021, to 6.9% of GDP (see Chart 1.13.1), although some less positive developments are also observed. First, there was strong growth in government receipts (11% on 2020), underpinned by the improved economic situation and higher inflation, although the elasticities to their macroeconomic determinants were much higher than have been recorded on average in the past.[18] Thus, in 2021 tax revenue as a percentage of GDP (including social security contributions) stood 3.7 pp above its 2019 levels, an exceptional circumstance that may be expected to be corrected, at least in part, over the coming years. Second, the growth rate of government expenditure declined to 5%, half that posted a year earlier. This was facilitated by the decline in pandemic-related disbursements, which fell from 3.9% of GDP in 2020 to 3% in 2021. Nevertheless,

17 These simulations are based on the data from the latest EFF for 2017. They draw on observed data, applying a hike in short-term market interest rates, which is passed through in full to the interest rate on floating-rate debt. In the case of deposits, 15% is passed through to sight deposits and 76% to fixed-term deposits.

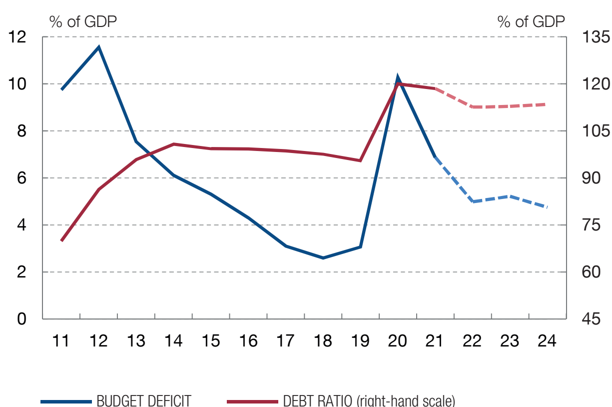
18 The various revenue measures had a modest impact, with the tax hikes included at the start of the year being offset by the subsequent cuts adopted to curb the effects on consumers of the sharp surge in electricity prices.

Chart 1.13

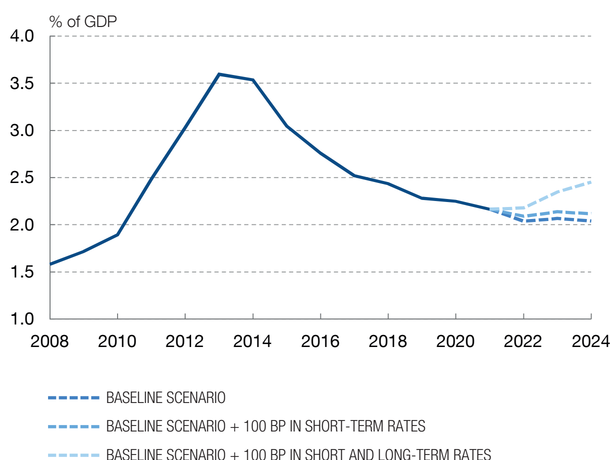
SPAIN'S BUDGET DEFICIT DECLINED IN 2021. HOWEVER, IN THE ABSENCE OF NEW MEASURES, IT WILL REMAIN ABOVE ITS PRE-PANDEMIC LEVEL UNTIL 2024, WITH DEBT LEVELS EXCEEDING 110%

The general government deficit fell by 3,4 pp in 2021, to 6.9% of GDP, and is expected to continue to decline in 2022. However, in the absence of new measures and given the higher expenses stemming from population ageing, deficit and public debt levels will remain high, which will be a source of vulnerability for the Spanish economy. Market interest rate increases are now expected to have a larger impact on the debt burden, on account of the higher debt levels. As a result, in the more medium and long term, a credible and sustained consolidation process, that reduces this vulnerability, will be needed.

1 GENERAL GOVERNMENT FINANCIAL POSITION (a)



2 SENSITIVITY OF INTEREST PAYMENTS (b)



SOURCES: IGAE and Banco de España.

a For 2022-2024, the Banco de España's macroeconomic projections, published on 5 April 2022, are used.
b Under the baseline scenario, short and long-term interest rates rise gradually, in line with market expectations at 31 March 2022. Merely for illustration purposes, the alternative scenarios simulate the results of an additional 100 bp increase in short-term interest rates and in short and long-term interest rates, from April 2022.

spending in 2021 was 15.8% higher than in 2019, with notable buoyancy in the components not linked to COVID-19 (6.9% compared with 2020). At the same time, public debt stood at 118.4% of GDP, down 1.6 pp on 2020.

The Banco de España's latest projections, published on 5 April,[19] envisage the general government balance continuing to improve, but remaining at high levels over the entire projection horizon (see Chart 1.13.1). These projections (which, owing to the lack of an approved plan, do not include consolidation measures) place the general government deficit for 2024 clearly above its pre-pandemic level, in line with the structural deficit in Spanish public finances (estimated at over 3%). In this regard, the invasion of Ukraine has not only resulted in a more negative macroeconomic scenario in the short term, but it has also put more pressure on public spending. This has led, for the time being, to the Government's approval at end-March of an emergency (albeit temporary) action plan that would raise the

19 See Box 1, "Macroeconomic projections for the Spanish economy (2022-2024)", in the "Quarterly Report on the Spanish Economy", *Economic Bulletin* 1/2022, Banco de España.

deficit by 0.5 pp of GDP. Nevertheless, public debt is set to decline slightly, to somewhat above 110% of GDP, owing to the growth in nominal GDP, which is expected to more than offset the effect of the negative balances foreseen for the next few years.

In the absence of a consolidated plan and/or sustained improvement in productivity growth, and given the foreseeable spending increase associated with population ageing, public debt will tend to hold unchanged or rise in subsequent years, posing a clear risk to the Spanish economy and its agents. In this regard, the first part of the public pension system reform, approved in December 2021, incorporates aspects that will raise expected future spending, such as the return of the indexation to the CPI and the repeal of the sustainability factor. However, for general government as a whole, this increase in expenditure is not sufficiently offset by the other measures included, such as the changes to early retirement penalty schemes, the rebate for late retirement and the new intergenerational equity mechanism.

High debt levels entail public finances' greater sensitivity to market interest rate movements. The low interest rates posted in recent years prompted a continuous decline in the interest burden as a percentage of GDP (see Chart 1.13.2). At the same time, longer average debt maturities limit the short-term impact of increases in issuance costs. That said, under a baseline scenario consistent with the latest projections for the Spanish economy in which market rates are raised according to agents' expectations,[20] the debt burden as a percentage of GDP would cease to decrease over the coming years. The sensitivity of these results to developments in the financial markets is well illustrated by a simple exercise that shows how a permanent 100 bp increase in both short and long-term interest rates as from April 2022, while keeping the rest of variables constant, would push up interest payments (and, therefore, the budget deficit) by 0.4 pp of GDP in 2024.

Consequently, in the medium and long term, these high public debt levels would make the Spanish economy vulnerable. This could only be avoided with a credible and sustained process of fiscal consolidation. From a sustainability perspective, the high structural deficit has so far been amply offset by interest rates being lower than the economy's potential growth. However, as already mentioned, this favourable differential may gradually disappear over the coming years. For this reason, the longer it takes to announce measures countering the current structural deficit and the growing expenses in respect of population ageing, the more likely it is that agents will start to lose confidence in the effective application of these measures, or that a new adverse economic shock will emerge, which the Spanish economy would face with limited scope for manoeuvre. The

20 To -0.2%, 1.0% and 1.3%, in 2022, 2023 and 2024 respectively, for the 3-month interbank rate, and to 1.4%, 1.8% and 1.9%, for the 10-year interest rate.

Russian invasion of Ukraine and the ensuing war will also put pressure on public spending in the short and medium run. Specifically, Europe's need to reduce its external energy dependence could lead to an acceleration of the transition towards a more environmentally-friendly productive system, but the greater urgency of this transition could make it more disorderly, with costs increasing in the short term. Moreover, it also appears that steps are being taken towards strengthening Europe's defensive capacity. All these factors have a clear European dimension, which, together with the nature of this shock (exogenous to countries, and with heterogeneous effects), suggests the need for implementing a public financing programme where such expenses are shared, as was implemented in the pandemic.

Reinforcing the sustainability of Spanish public finances will require, once the pandemic and the adverse effects of the conflict in Ukraine have been overcome, the rigorous implementation of a multi-annual fiscal consolidation plan. Such a programme should be structured around a detailed definition of the budgetary objectives sought and the timeframes and measures required to achieve them. In particular, the plan should put special emphasis on the composition of the adjustment between receipts and expenditure, as it is key to minimising the adverse effects of fiscal consolidation on economic growth. Also, although it may be implemented subsequently, the announcement of the strategy to reduce fiscal imbalances should be made soon, as this would have significant benefits for the credibility of Spanish economic policy and would help boost the expansionary effects of current fiscal actions.

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

In 2021 H2, net financial flows with the rest of the world were positive, although they moderated significantly compared with H1, on both the asset side and, especially, the liability side. Of note are international investors' sales, in net terms, of general government and NFC debt securities (in the case of NFCs, in related companies, i.e. under the "direct investment" heading). Investments abroad by Spanish residents were mainly concentrated in investment fund shares, although to a lesser extent than in the early months of the year, while they divested from shares in the "direct investment" heading and from debt securities issued by monetary financial institutions.

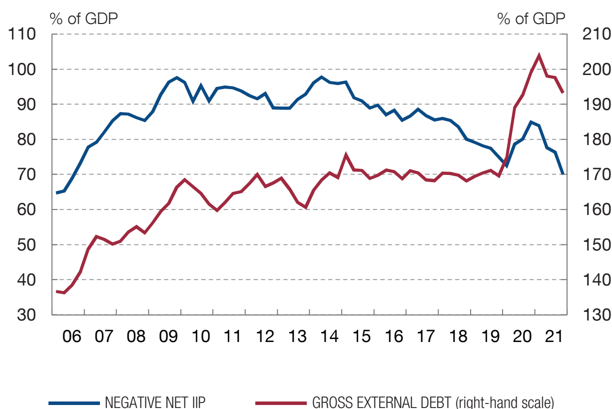
The initial adverse impact of the pandemic on the negative net international investment position (IIP) corrected significantly over the course of 2021, particularly in the final stretch of the year, to stand at 70%, the lowest level since 2006 (see Chart 1.14.1). This is 14.9 pp less than in 2020, of which only 5.9 pp are explained by the growth in output (see Chart 1.14.2). Thus, in terms of volume, the negative net IIP decreased by €108 billion thanks to the positive amounts of financial transactions with the rest of the world (€32.6 billion) and, especially,

Chart 1.14

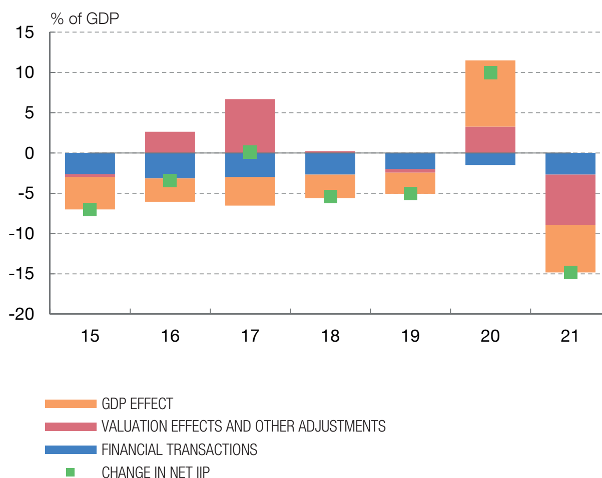
GDP GROWTH IN 2021 HAS REDUCED THE HIGH GROSS EXTERNAL DEBT RATIO AND PARTIALLY CONTRIBUTED TO THE SIGNIFICANT DECREASE IN THE NEGATIVE NET IIP RATIO

Spain's external debt continued to rise and reached a record high at end-2021, although the growth in GDP has led the ratio to begin to decline. Conversely, the negative net IIP saw a significant correction in 2021 to stand, in GDP terms, at levels not observed since 2006, thanks to economic growth but, in particular, on account of valuation effects and other positive adjustments.

1 NEGATIVE NET IIP AND GROSS EXTERNAL DEBT (a) (b)



2 DETERMINANTS OF THE CHANGE IN NEGATIVE NET IIP (a)



SOURCE: Banco de España.

a The net IIP is the difference between the value of resident agents' foreign assets and that of the liabilities to the rest of the world.

b External debt comprises the balance of all liabilities that entail future repayment of principal, interest or both (i.e. all financial instruments, except equity securities, financial derivatives and monetary gold bullion).

valuation effects and other adjustments (€75.8 billion). The latter were primarily the result of the increase in the value of assets and, to a lesser extent, the decrease in that of liabilities. Asset revaluation was mainly concentrated in investment fund shares and units owing to the increase in the price of these instruments, but also as a result of the depreciation of the euro. The decline in the value of the liabilities was mainly the result of the increase in long-term interest rates which affected debt securities, particularly those issued by general government.

Conversely, Spain's gross external debt rose by €94.5 billion in 2021, reaching its historical high, although it fell in GDP terms (by 5.9 pp, to 193.2%), thanks to output growth. This increase in liabilities was concentrated in Banco de España and, to a lesser extent, monetary financial institutions. Spain's gross external debt has increased by €218 billion, or 23.7 pp of GDP, since the outbreak of the pandemic. The high external debt is an element of vulnerability as it exposes issuers to a potential rollover risk and higher financing costs if the conditions for access to international markets tighten or become more expensive. However, these risks are mitigated by the composition of the liabilities, as they have lengthy average repayment periods and are predominantly at fixed rate, and by the fact that 57% is public sector debt (general government and the Banco de España).