

FINANCIAL STABILITY REPORT

Spring 2023

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SOME RISKS TO FINANCIAL STABILITY HAVE MODERATED, BUT ELEVATED UNCERTAINTY MEANS THAT CAUTION IS ESSENTIAL

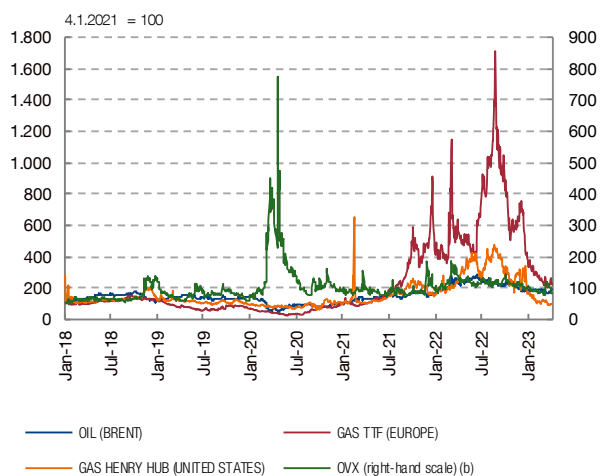
FINANCIAL STABILITY: MAIN VULNERABILITIES AND RISKS (a) (b)



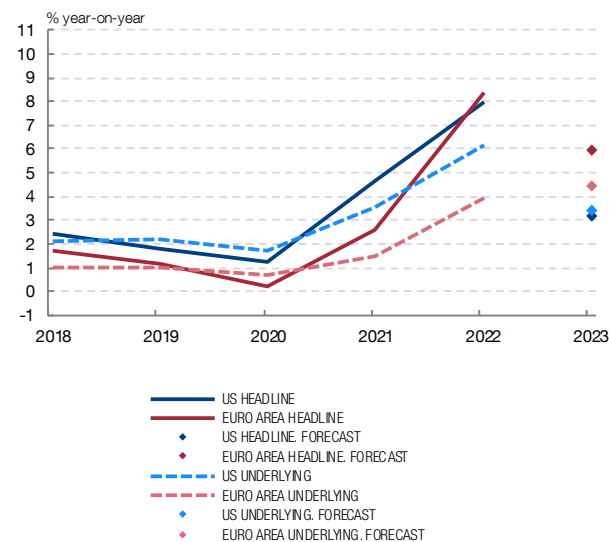
HEADLINE INFLATION HAS BEEN CONTAINED, BUT UNDERLYING INFLATION REMAINS HIGH

- The decline in energy prices in the second half of 2022 has been key to this behaviour
 - Second-round effects remain a risk, as does ...
 - ... the announcement by OPEC+ of cuts in oil production

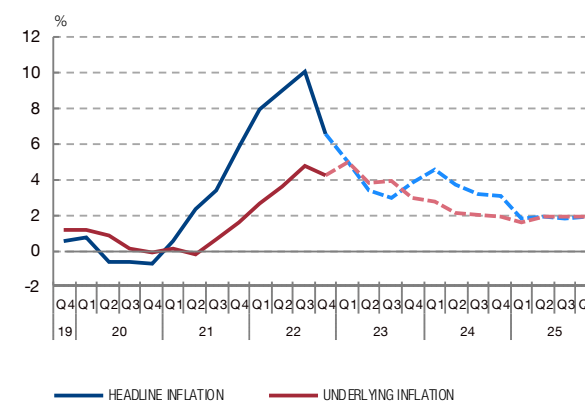
3 NATURAL GAS AND OIL PRICES (a)



4 INFLATION RATES IN THE EURO AREA AND THE UNITED STATES (c)



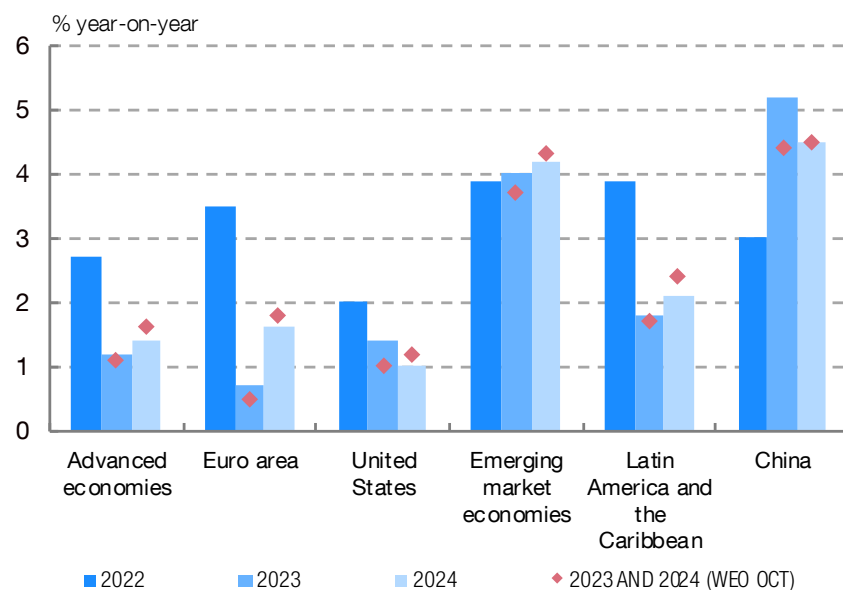
2 HEADLINE AND UNDERLYING INFLATION (a)



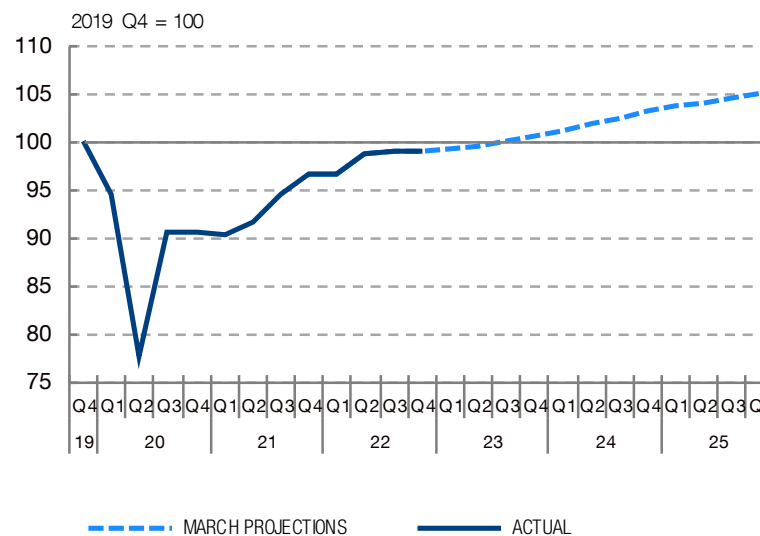
THE GROWTH OUTLOOK FOR 2023 POINTS TO A SLOWDOWN, ALTHOUGH A LESS SHARP ONE THAN WAS PREVIOUSLY EXPECTED

- Developments relating to the war in Ukraine and inflation, along with tightening financial conditions, are the main sources of uncertainty
 - The balance of risks is tilted to the downside

1 GDP GROWTH OUTLOOK (2022-2024) (a)



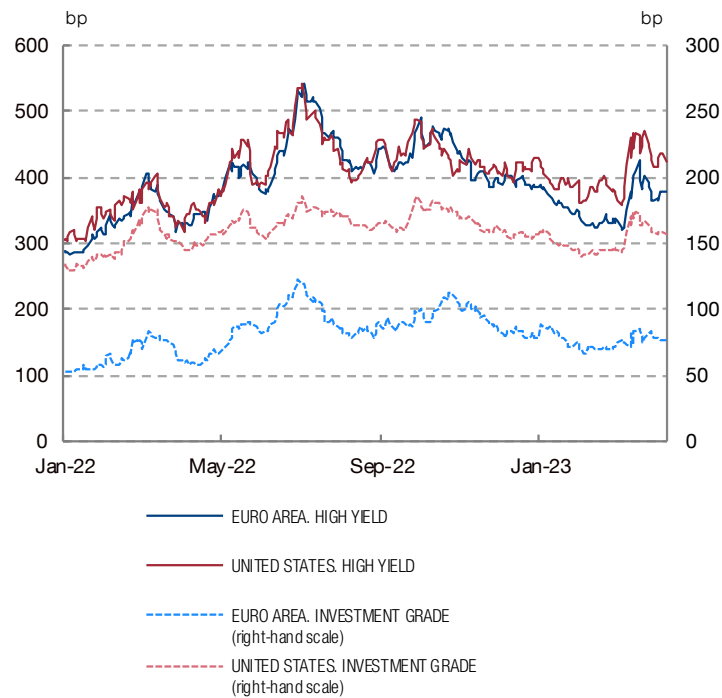
1 REAL GDP. SPAIN. LEVEL (a)



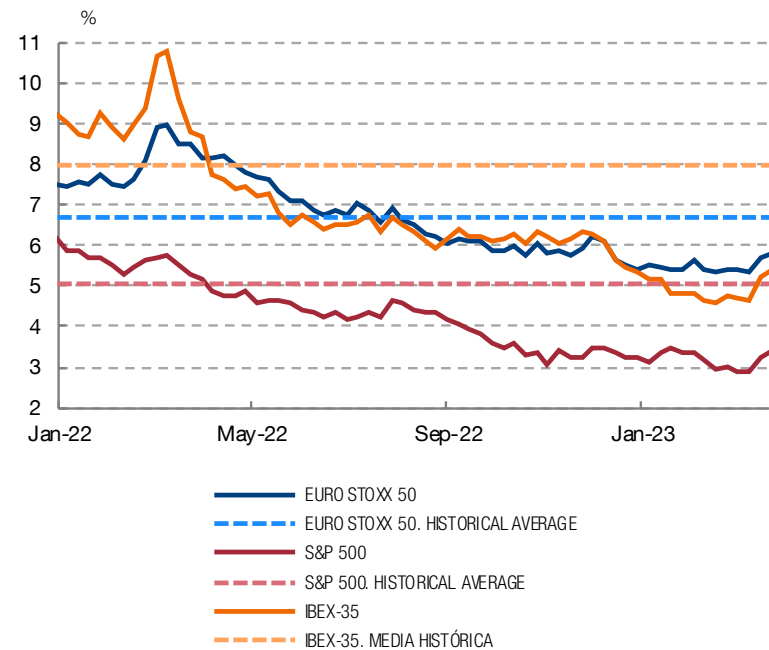
RISK PREMIA AND MARKET VOLATILITY WERE CONTAINED IN 2022

- With the turmoil of March 2023 they rose somewhat. Subsequently, this rise was partially corrected, ...
 - ... but they may increase again if macroeconomic risks materialise or global banking strains persist

1 SPREADS OF NFCs' BONDS AGAINST THE SWAP CURVE



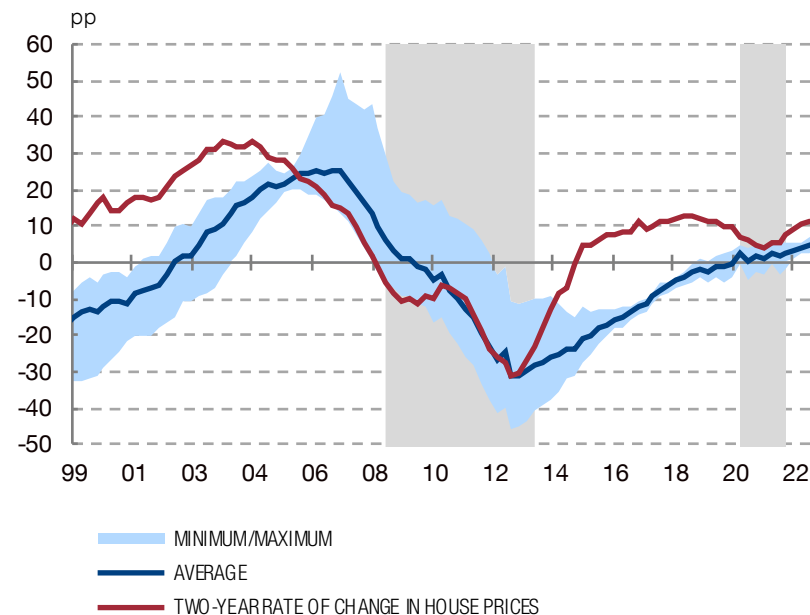
EQUITY RISK PREMIUM



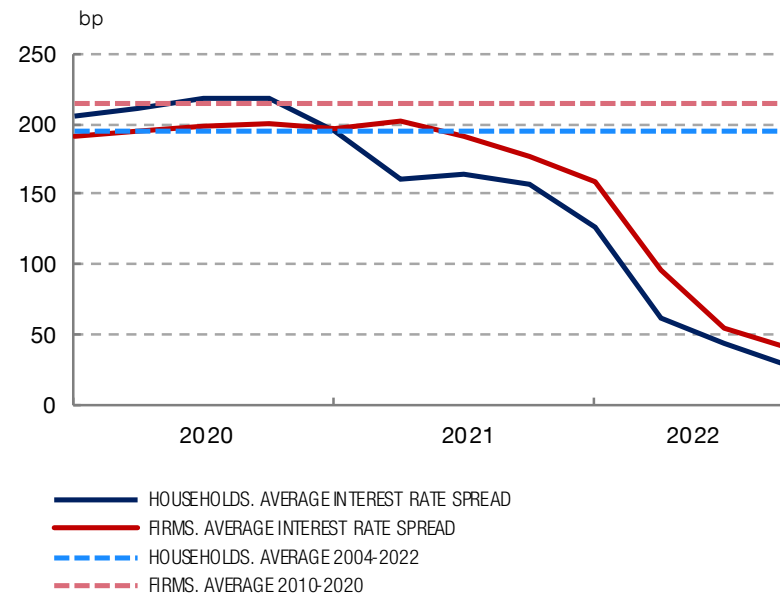
INDICATORS OF REAL ESTATE MARKET IMBALANCES CONTINUE TO SHOW INCIPIENT SIGNS OF OVERVALUATION.

- The tightening of financial conditions can be expected to contribute to dissipating the current signs of imbalance
 - It should be noted here that spreads over the risk-free interest rate have continued to fall significantly in lending to both households and firms

1 INDICATORS OF HOUSE PRICE IMBALANCES (a) (b)



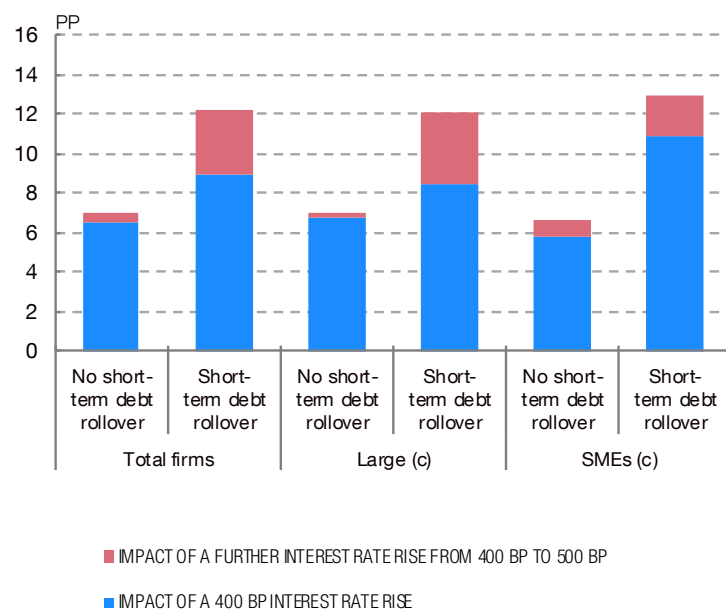
3 INTEREST RATE SPREADS (c)



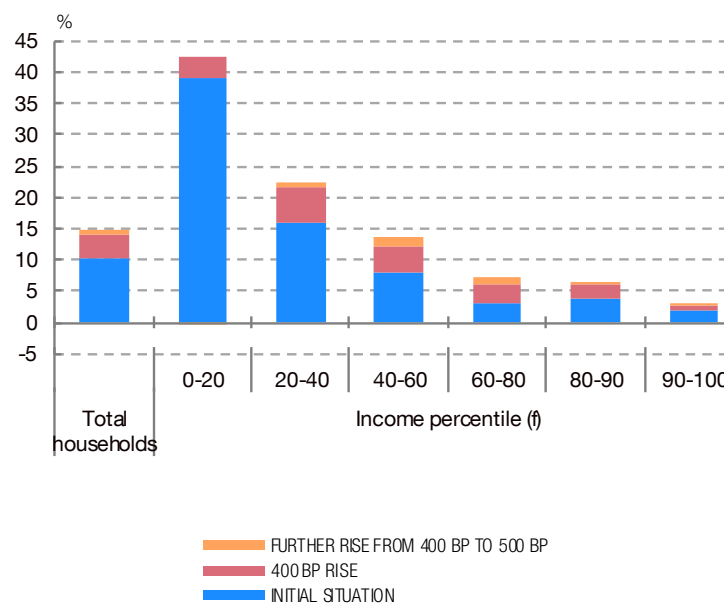
RISING INTEREST RATES ARE INCREASING THE PERCENTAGE OF VULNERABLE FIRMS AND HOUSEHOLDS

- In the case of SMEs with short-term debt rollover, for a cumulative increase of 400 basis points (bp) (currently approx. 365 bp), the debt of vulnerable firms could increase by 10.9 percentage points (pp), with respect to December 2021
- For households, a cumulative increase of 400 bp would entail an increase in this share of 3.5 pp (and up to 5.7 pp in the 20th-40th income percentile, the one most affected)

7 ESTIMATED INCREASE IN THE SHARE OF DEBT HELD BY FIRMS UNDER HIGH FINANCIAL PRESSURE DUE TO THE RISE IN INTEREST RATES (a) (b) (c)



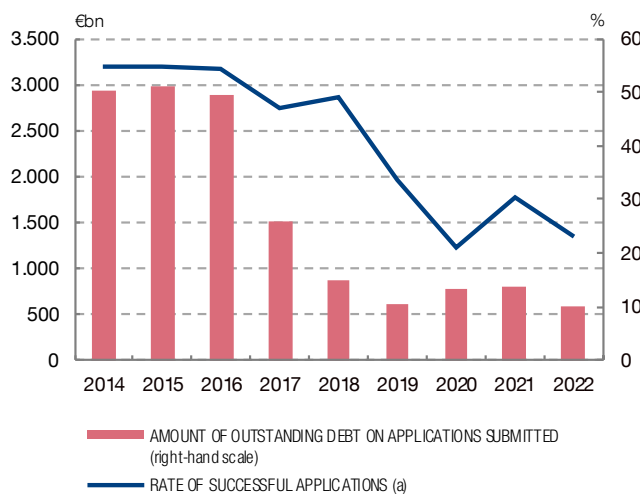
8 IMPACT OF THE INTEREST RISE ON THE PERCENTAGE OF INDEBTED HOUSEHOLDS WITH A HIGH NET DEBT BURDEN (d) (e)



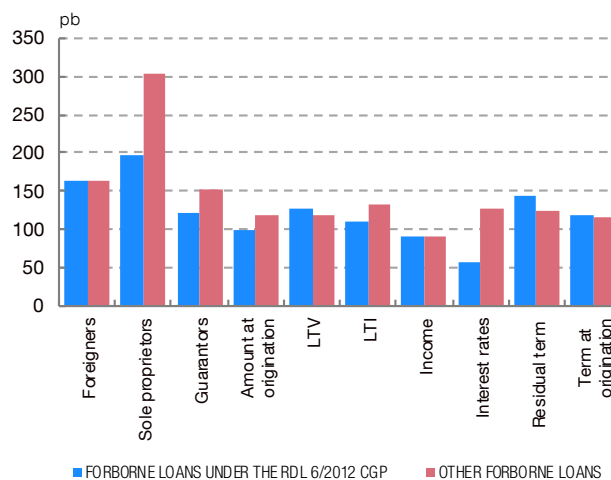
HOUSEHOLD DEBT FORBEARANCE IS SEEN AS ONE FORM OF FINANCIAL MANAGEMENT IN THIS CONTEXT

- 2012 saw the approval of a Code of Good Practices (CGP), from which some mortgagors benefitted; the volume of requests to have the CGP applied declined after the initial years of implementation, with a slight upturn during the pandemic
 - The rate of successful applications now stands at 25%
- These patterns suggest that such mechanisms now play a bigger role in absorbing the consequences of far-reaching crises, albeit also a secondary role in structural terms
- The profile of the loans shows some indications of greater risk, although not to a greater degree than in other forbearance arrangements

1 APPLICATIONS AND RATE OF SUCCESSFUL APPLICATIONS



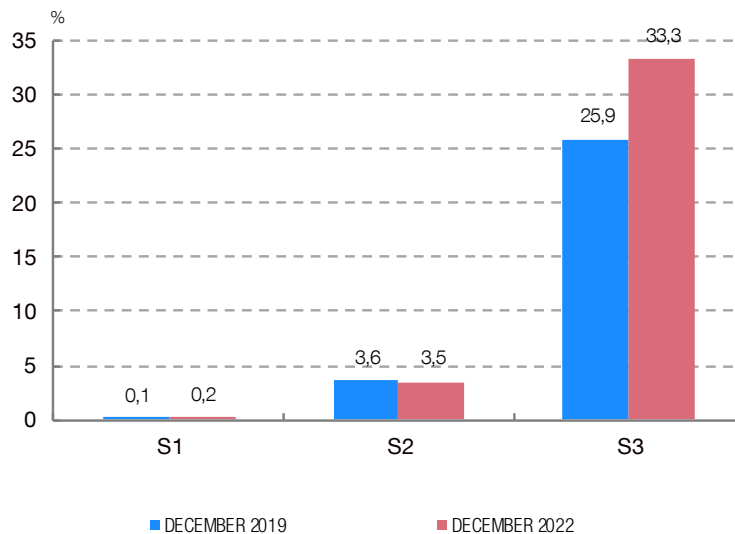
2 COMPARISON OF CHARACTERISTICS OF FORBORNE LOANS AND THE MORTGAGE PORTFOLIO AS A WHOLE (d)



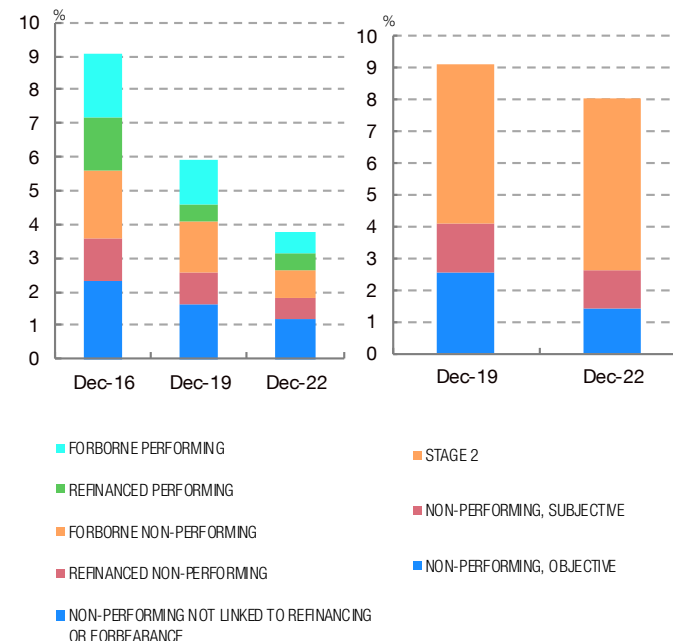
AN AMENDMENT TO CONTRACTUAL TERMS DOES NOT NECESSARILY ENTAIL A RECLASSIFICATION OF CREDIT QUALITY

- Conversely, more extensive forbearance arrangements, without which a debtor would be unable to service its debt, do appear to be associated with some degree of impairment
- If such contractual amendments can help prevent loans from sliding into worse classifications or ease their return to performance, the impairment costs will be reduced
- As things stand, the credit quality of mortgage lending to households is sound

2 COVERAGE RATIO FOR EACH RISK SITUATION. PORTFOLIO OF LOANS SECURED BY RESIDENTIAL PROPERTIES (a)



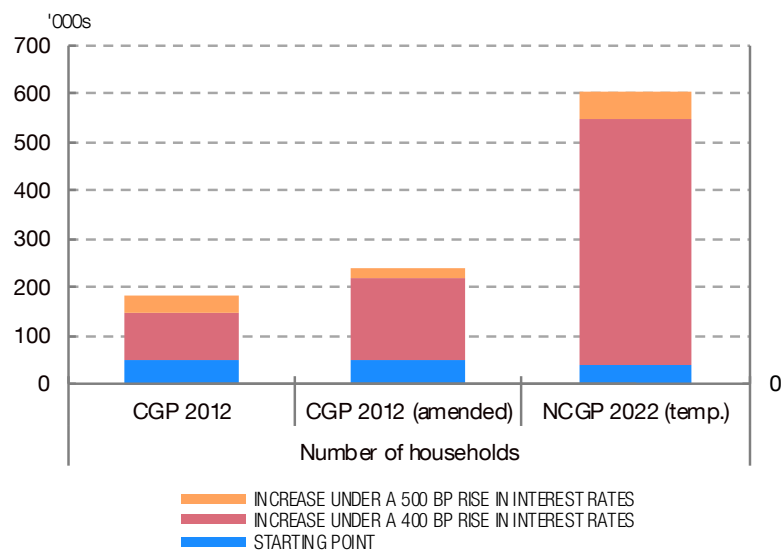
1 CREDIT QUALITY OF THE PORTFOLIO OF LOANS SECURED BY RESIDENTIAL PROPERTIES. PERCENTAGE OF TOTAL LOANS



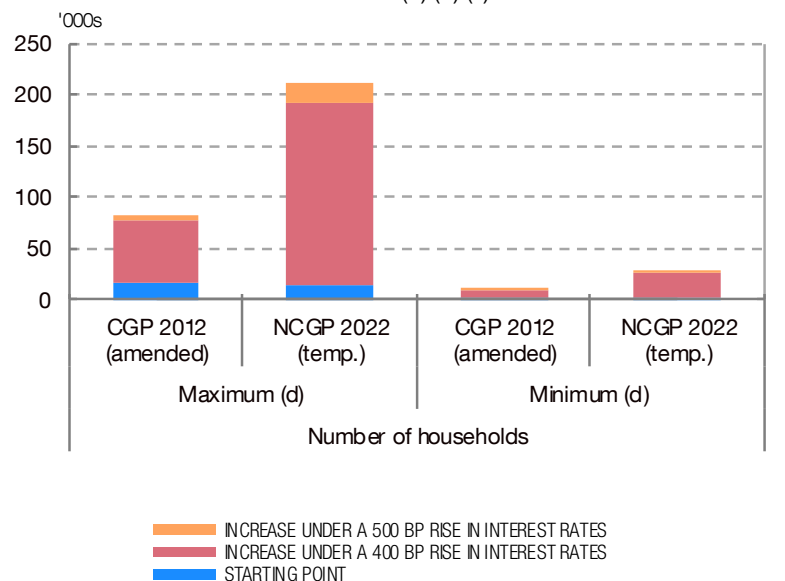
A SIGNIFICANT NUMBER OF HOUSEHOLDS ARE ELIGIBLE FOR THE CODE OF GOOD PRACTICE

- In the event of a 400 bp rise in the EURIBOR, some 200,000 households would be eligible to benefit from the CGP and 550,000 from the New Code of Good Practice (NCBP)
 - Many of these households are eligible for both
 - Past experience points to low beneficiary rates
- The macro impact of this instrument will depend on its use, the maximum impact standing at 0.15 pp of additional private consumption

1 HOUSEHOLDS WITH PRINCIPAL RESIDENCE MORTGAGE ELIGIBLE FOR THE CODES OF GOOD PRACTICE (a) (b) (c)



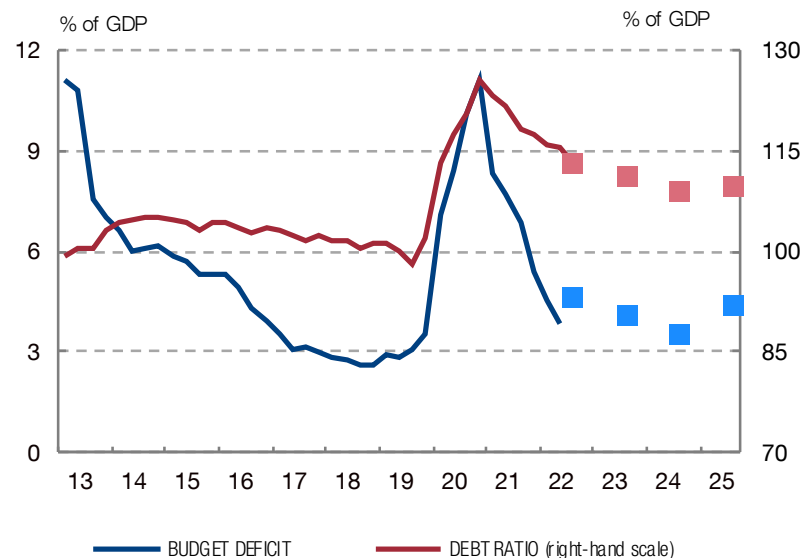
1 RANGE OF HOUSEHOLDS WITH PRINCIPAL RESIDENCE MORTGAGE WHICH COULD BE EFFECTIVELY AFFECTED BY THE NEW CODES OF GOOD PRACTICE (a) (b) (c)



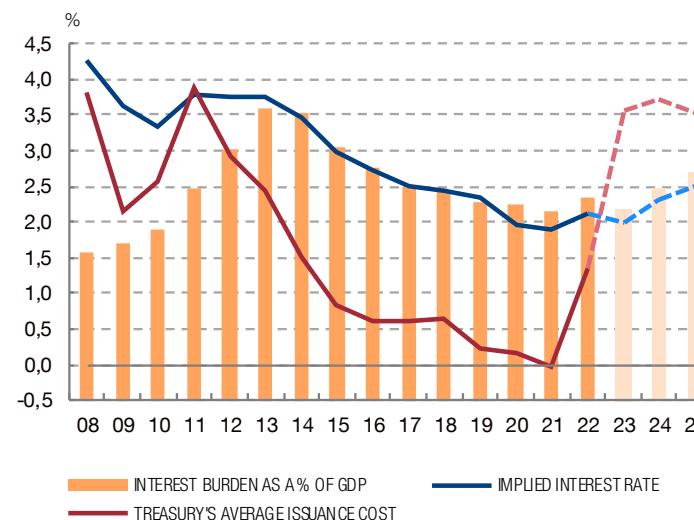
BOTH THE BUDGET DEFICIT AND PUBLIC DEBT FELL IN 2022, ALTHOUGH IN THE ABSENCE OF FURTHER MEASURES PUBLIC DEBT WILL REMAIN HIGH

- In the closing months of 2022 the improvement in the budget deficit was partly reversed
- The structure of the Spanish public debt portfolio (maturities, high interest rate on issues made during the global financial crisis) has limited the pass-through of the increase in issuance costs to the average rate
 - Expectations of further increase due to monetary policy adjustment and upward risks to the risk premia component

1 GENERAL GOVERNMENT'S FINANCIAL POSITION



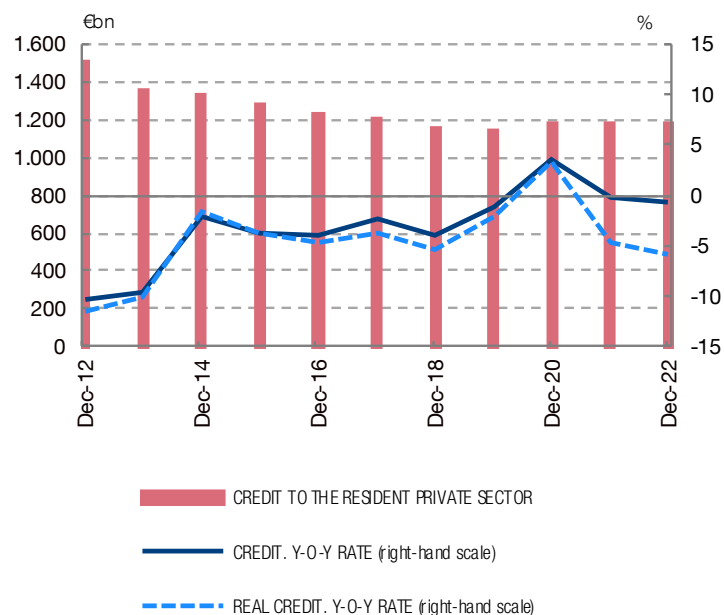
2 PUBLIC DEBT COST



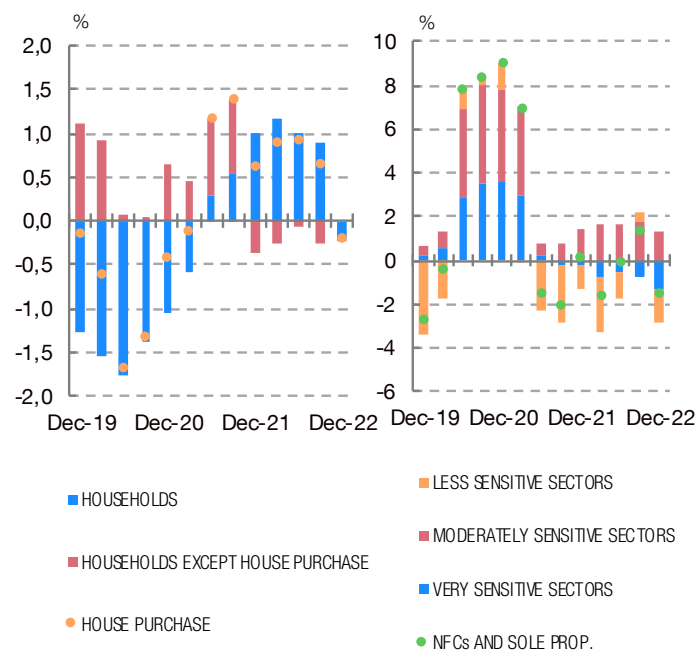
CREDIT TO THE RESIDENT PRIVATE SECTOR FELL IN 2022, DUE TO SUPPLY AND DEMAND-SIDE FACTORS

- In contrast to the trend over the previous two years, it fell by 0.7%
 - For households, credit decreased primarily on account of the behaviour of credit for house purchase (-0.2%)
 - Business lending also declined (-1.5%), with the sectors most affected by the pandemic seeing the largest decreases

1 VOLUME OF CREDIT AND Y-O-Y RATE OF CHANGE
Business in Spain, DI



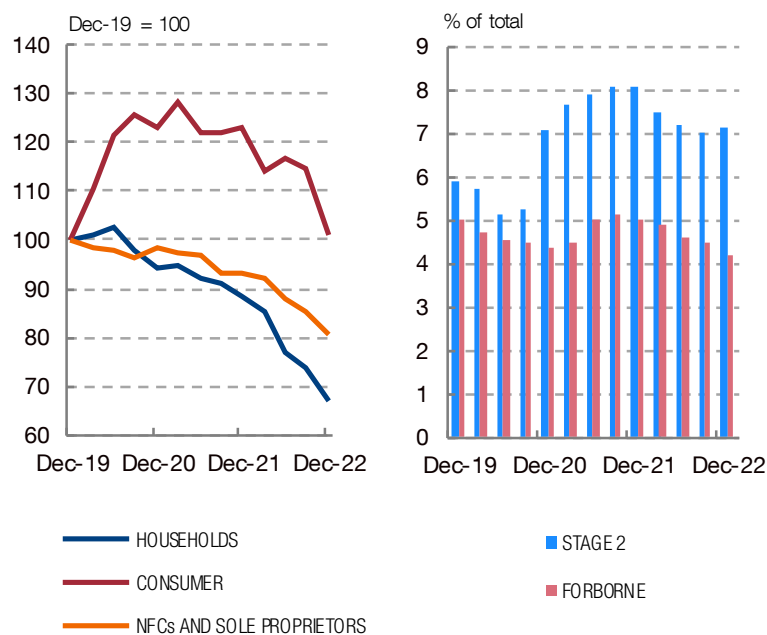
1 CONTRIBUTIONS TO THE Y-O-Y RATE OF CREDIT TO HOUSEHOLDS (LEFT) AND NFCs AND SOLE PROPRIETORS
Business in Spain, DI



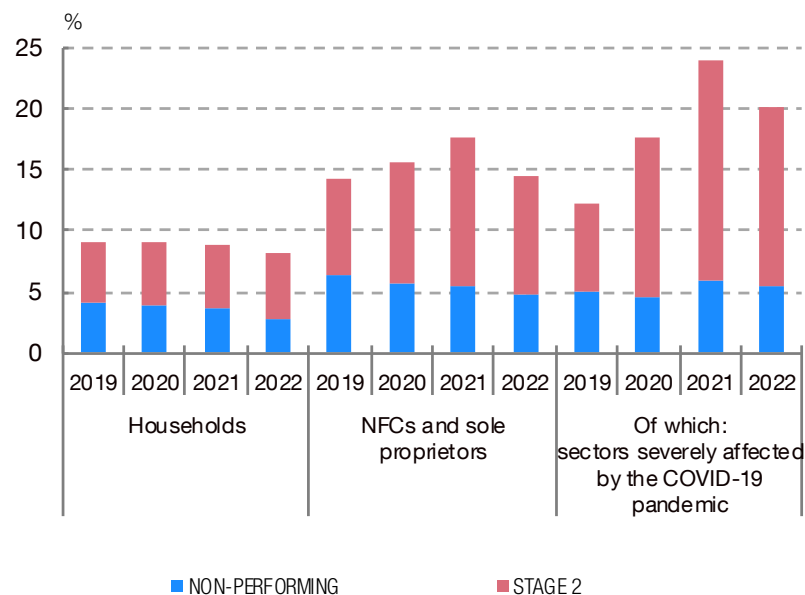
THE FALL IN NON-PERFORMING LOANS ACCELERATED IN 2022 AND THE NPL RATIO DECLINED TO 2008 LEVELS

- Non-performing loans fell by 18.5% year on year
 - And the decrease was broad-based across households and firms, and also among those most affected by COVID-19
- The percentage of loans classified as Stage 2 loans also fell, although in the case of households it increased slightly

2 VOLUME OF NPLs (LEFT) AND EARLY SIGNS OF IMPAIRMENT IN LENDING TO THE RESIDENT PRIVATE SECTOR (RIGHT) (a)
Business in Spain. DI



3 SHARE OF CREDIT CLASSIFIED AS NON-PERFORMING AND STAGE 2. HOUSEHOLDS, NFCs AND SOLE PROPRIETORS (b)
Business in Spain. DI



IN MARCH, THE FINANCIAL PROBLEMS OF SILICON VALLEY BANK (SVB) AND CREDIT SUISSE (CS) TRIGGERED MARKET TURMOIL

- The difficulties of these banks are specific, but the risks of a rise in financing costs and a liquidity squeeze have increased
- There are various factors that mitigate the risk for the Spanish banking sector:
 - (1) There are no systemic direct exposures to SVB or CS, (2) different retail-focused business model and broad coverage of the deposit guarantee scheme, (3) international regulatory standards applied across the board, (4) starting position with high liquidity

Chart 1
STOCK PRICES OF SVB AND CREDIT SUISSE AND OF THE OVERALL US AND EURO AREA BANKING SECTORS (a)

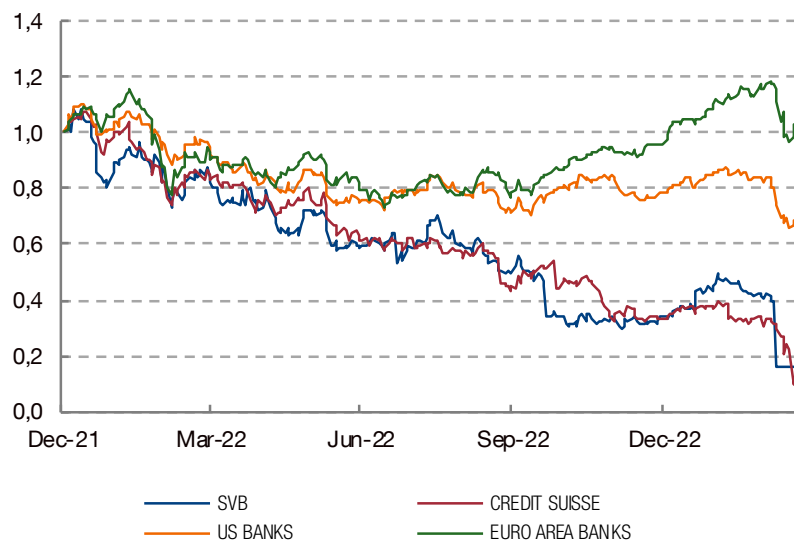
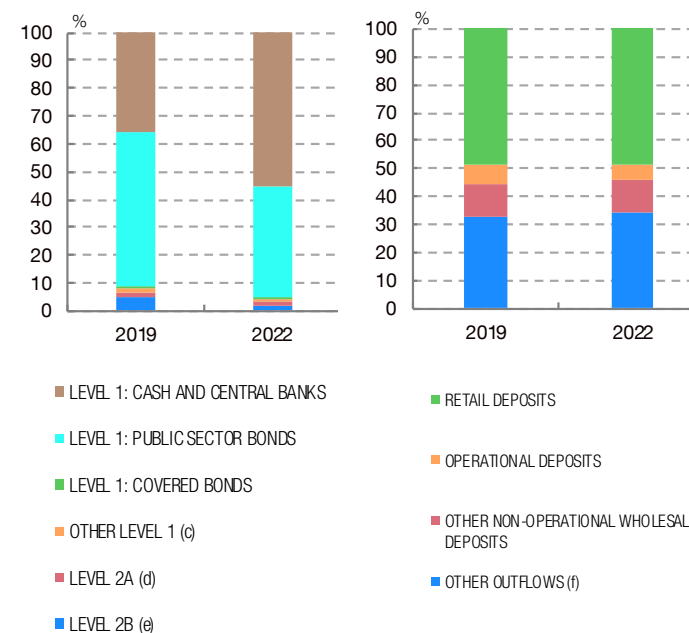


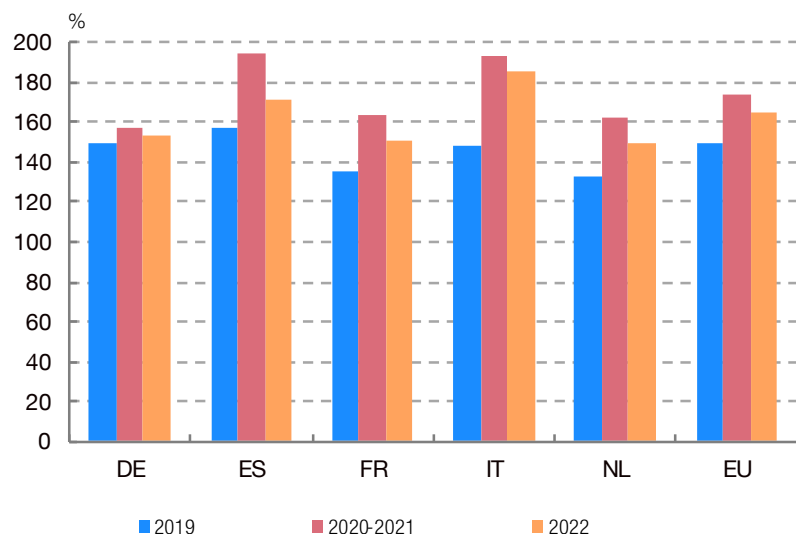
Chart 8
COMPOSITION OF HIGH QUALITY LIQUID ASSETS AND LCR CASH OUTFLOWS IN DECEMBER 2019 AND 2022 IN SPAIN (b)



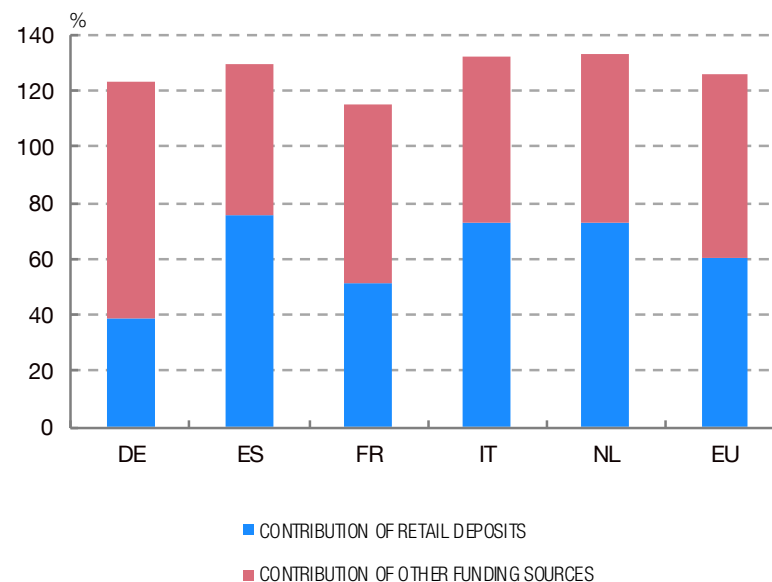
SPANISH (AND OTHER EUROPEAN) BANKS HAVE AMPLE LIQUIDITY BUFFERS

- In December 2022, among their European peers, Spanish banks' short-term liquidity coverage ratio (LCR) was among the highest, and well above the required level.
- The more long-term stable funding situation is also favourable. Spanish, Italian and Dutch banks have higher shares of retail deposits in this funding.

1 LIQUIDITY COVERAGE RATIO: EUROPEAN COMPARISON



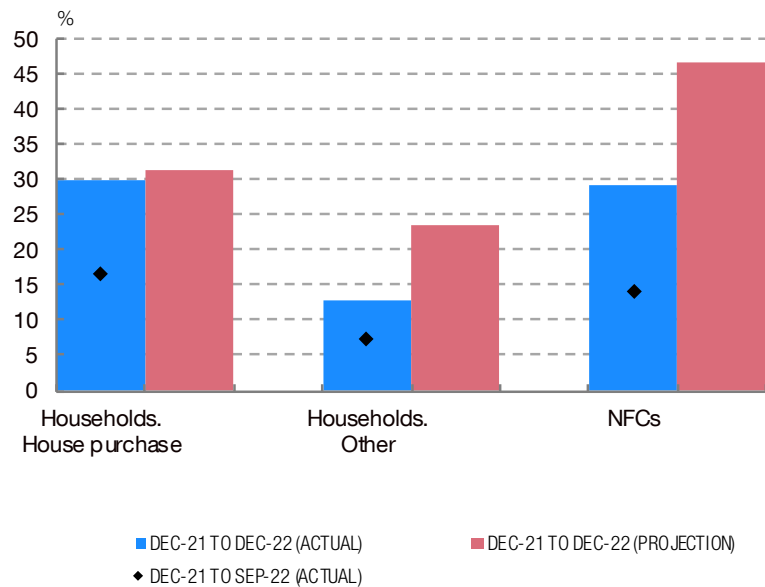
2 NET STABLE FUNDING RATIO: EUROPEAN COMPARISON (a)



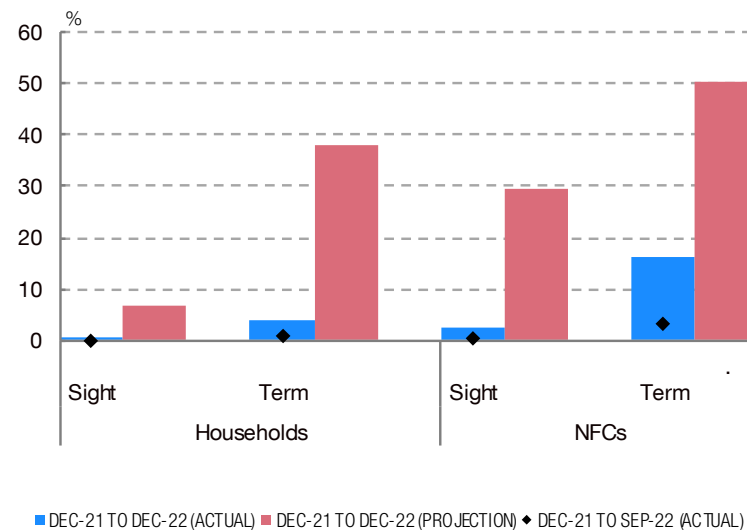
THE INCREASE IN THE REFERENCE INTEREST RATES HAS PASSED THROUGH TO LENDING RATES TO A GREATER EXTENT THAN TO DEPOSIT RATES

- In the case of retail lending, the degree of pass-through up to December 2022 stood at 30% for mortgages and loans to non-financial corporations
 - The rate of pass-through appears to have accelerated somewhat in recent months
- In the case of deposits, a degree of growth has been observed only in firms' fixed-terms deposits
 - Recent events may accelerate this process

1 PASS-THROUGH OF THE INCREASE IN THE EURIBOR TO INTEREST RATES ON THE PORTFOLIO OF LOANS TO HOUSEHOLDS AND NFCs (a)



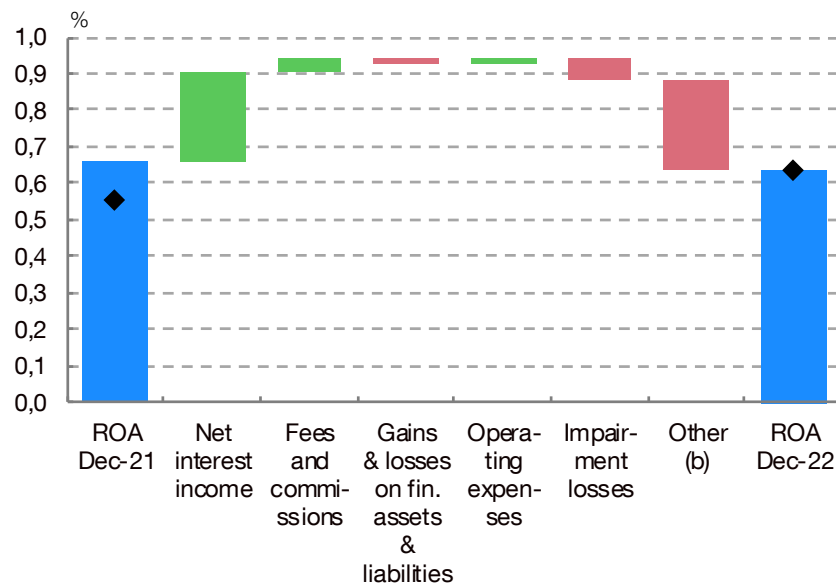
2 PASS-THROUGH OF THE INCREASE IN THE EURIBOR TO DEPOSIT RATES (b)



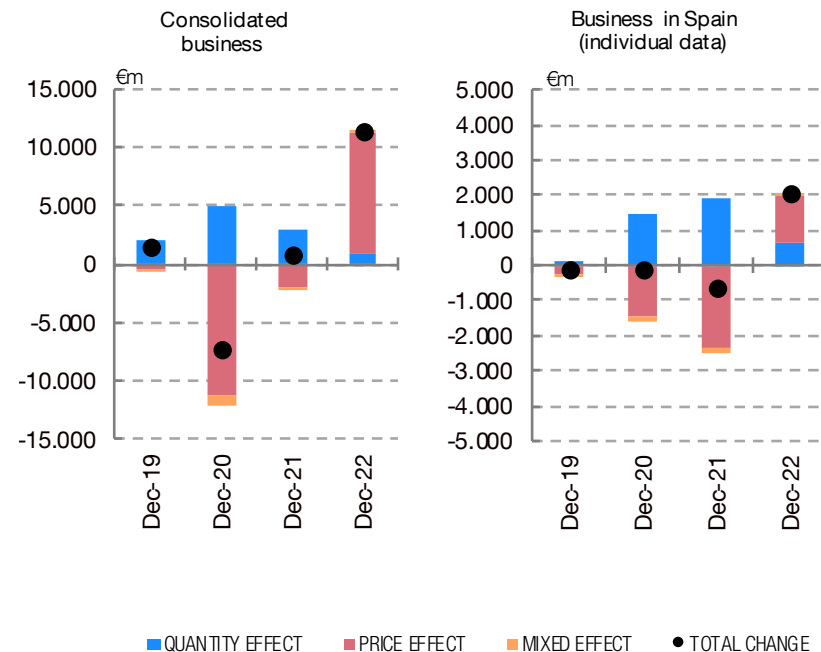
DISCOUNTING THE EFFECT OF NON-RECURRING ITEMS, PROFIT WAS 18.3% HIGHER IN 2022 THAN A YEAR EARLIER

- Growth in net interest income and business in Latin America were the main drivers of this good performance, and impairment losses remain moderate for the time being
- Net interest income made a very positive contribution in 2022, now including both price and quantity effects, both in Spain and at consolidated level

1 BREAKDOWN IN CHANGE OF PROFIT
Consolidated net profit as a percentage of ATAs (a)



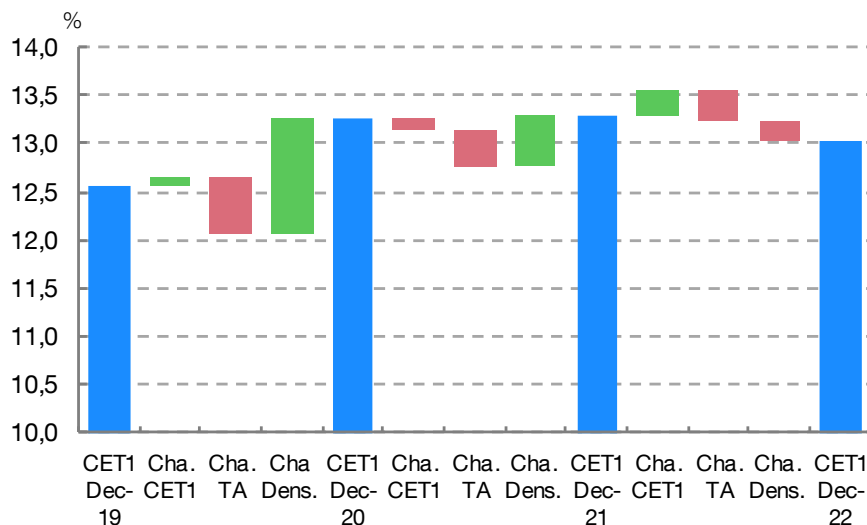
1 COMPOSITION OF CHANGE IN NET INTEREST INCOME (a)



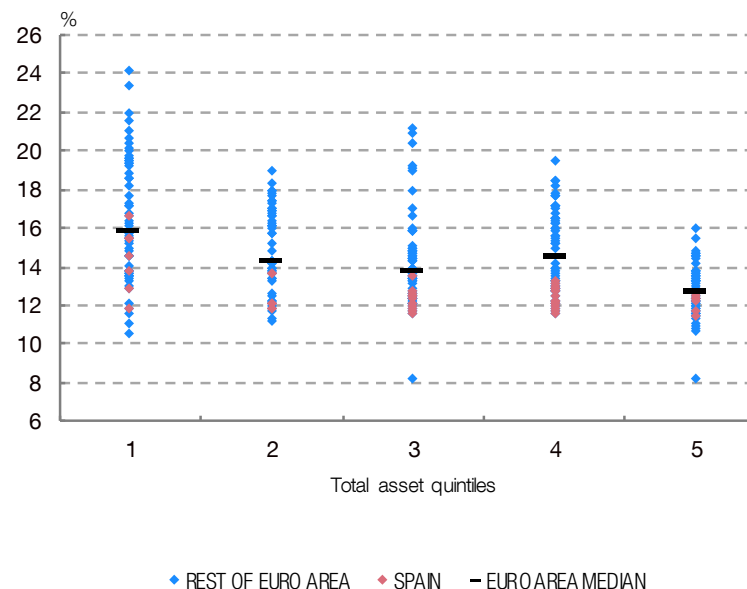
THE SPANISH BANKING SECTOR'S CET1 RATIOS FELL IN 2022 AND REMAIN AT THE LOWER END OF THE EUROPEAN RANKING

- CET1 ratios declined by 25 bp, owing to an increase in total assets and in density (RWAs/TAs)
 - The volume of CET1 increased, albeit not enough to offset the above effects
- In general, the larger banks operate with lower CET1 ratios
 - Across different categories of size and business model, Spanish banks generally fall below the median CET1 ratio

1 BREAKDOWN OF THE CHANGE IN THE CET1 RATIO BETWEEN 2019 AND 2022. CHANGE IN THE NUMERATOR AND THE DENOMINATOR (a)



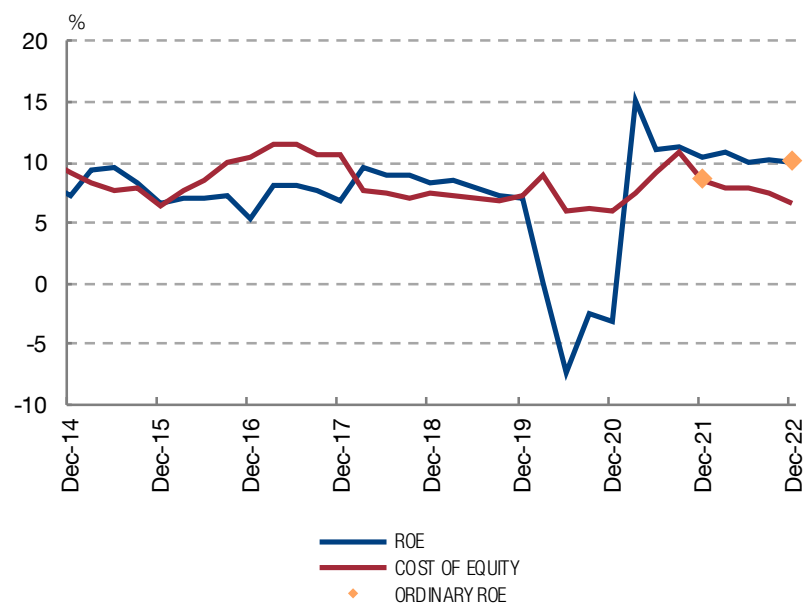
2 CET1 RATIO BY SIZE AND TYPE OF BUSINESS MODEL (a) (b)
Consolidated data. 2015-2022 (l-h) and December 2022 (r-h)



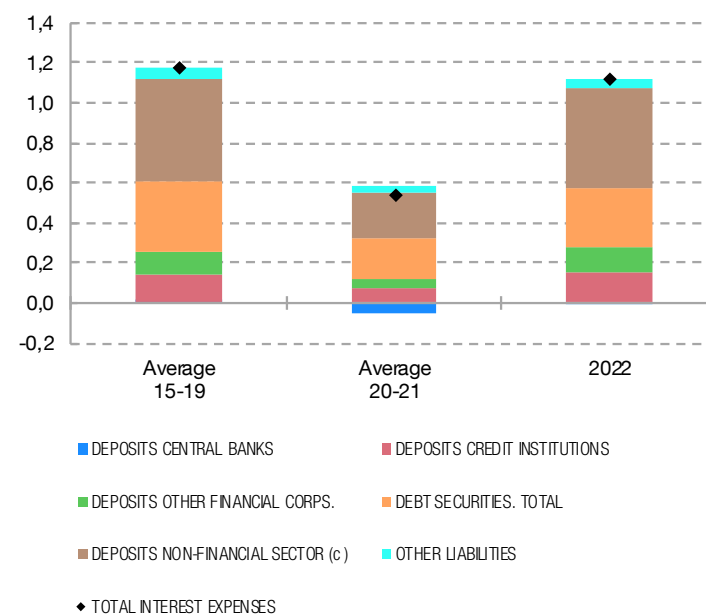
OVERALL, THE CURRENT FINANCIAL POSITION OF THE SPANISH BANKING SECTOR IS SOUND, THOUGH IT FACES SIGNIFICANT RISKS

- In 2022, improvements in terms of balance sheet quality and profitability helped banks reduce their cost of capital, a situation that was partially reversed following the turmoil seen in March
- In the current setting, banks should carefully plan their provisions and capital to address potential future unexpected losses
 - The current favourable position is unlikely to prevent a deterioration in profitability or solvency should any of the macro-financial risks identified materialise, particularly in terms of financing costs

9 ROE AND COST OF EQUITY (LEFT-HAND PANEL) AND DISTRIBUTION OF THE SRISK SYSTEMIC RISK INDICATOR (RIGHT-HAND PANEL) (a)



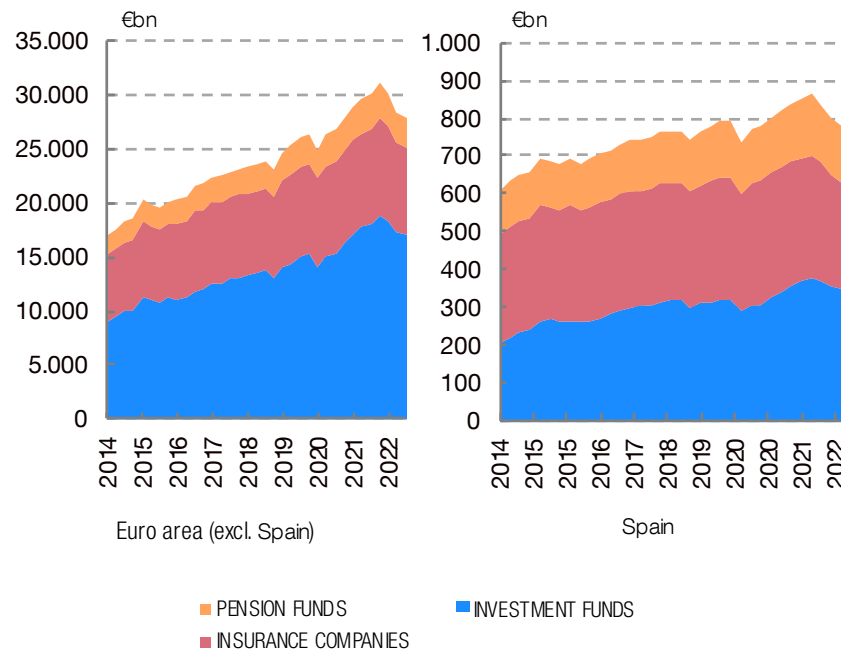
INTEREST EXPENSES ON FUNDING



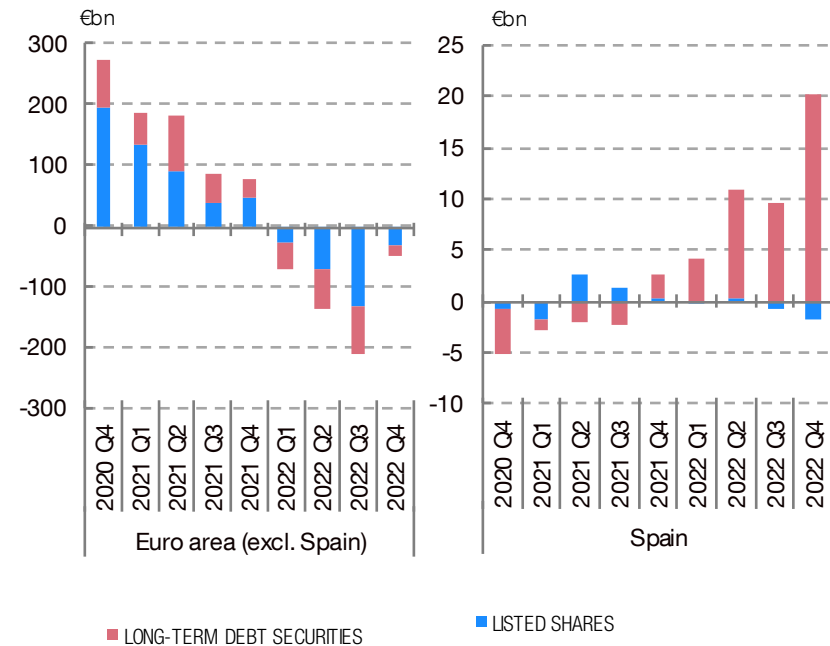
BOTH IN EUROPE AND IN SPAIN, THE UPWARD TREND IN THE NON-BANK FINANCIAL SECTOR CAME TO AN END IN 2022

- The downturn affected investment funds, pension funds and insurance companies
- In terms of holdings and unlike the trend observed in other European countries, net purchases of fixed-income securities remained positive and relatively significant

1 TOTAL ASSETS OF NON-BANK FINANCIAL INTERMEDIARIES IN THE EURO AREA (EXCL. SPAIN) AND IN SPAIN (a)



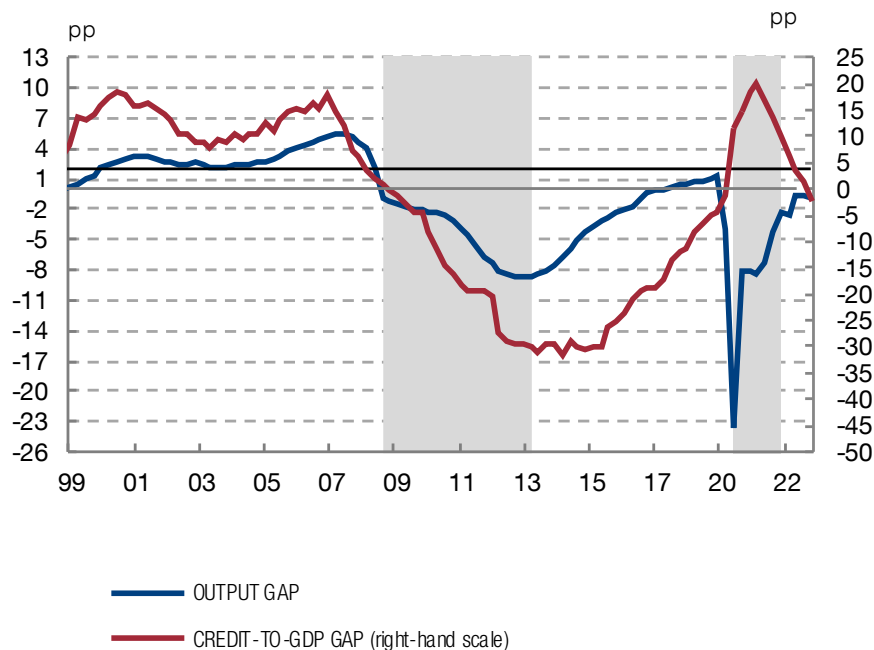
2 NET ACQUISITIONS OF LISTED SHARES AND LONG-TERM DEBT SECURITIES BY NON-BANK FINANCIAL INTERMEDIARIES IN THE EURO AREA (EXCL. SPAIN) AND IN SPAIN (b)



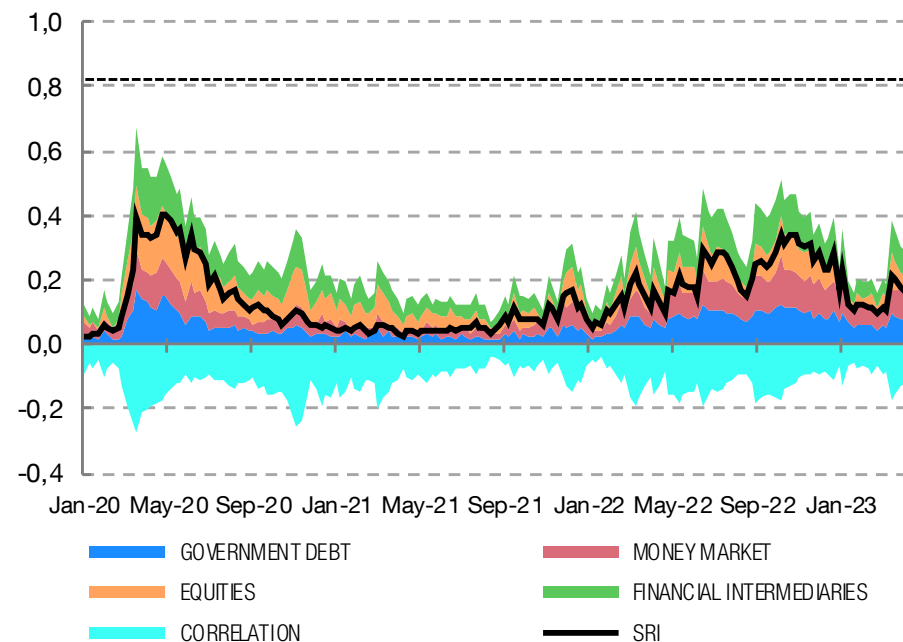
THE INDICATORS DO NOT SHOW ANY SIGNS OF A BUILD-UP OF SYSTEMIC RISK, AND THE CCyB HAS THEREFORE BEEN HELD AT 0%

- The Basel gap remains below the risk thresholds
- The easing of inflationary and energy pressures in Europe appears to have helped lessen the systemic tensions on the financial markets
 - Such tensions returned somewhat with the financial turmoil in March 2023

10 CREDIT-TO-GDP GAP AND OUTPUT GAP (b)



1 SYSTEMIC RISK INDICATOR (a)



THANK YOU FOR YOUR
ATTENTION

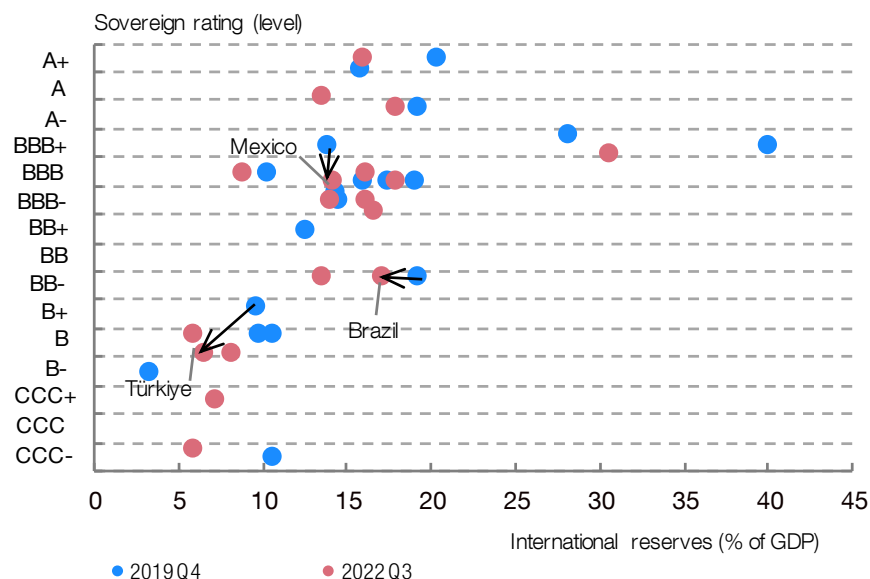


ADDITIONAL RISKS LINKED TO THE MACRO-FINANCIAL ENVIRONMENT

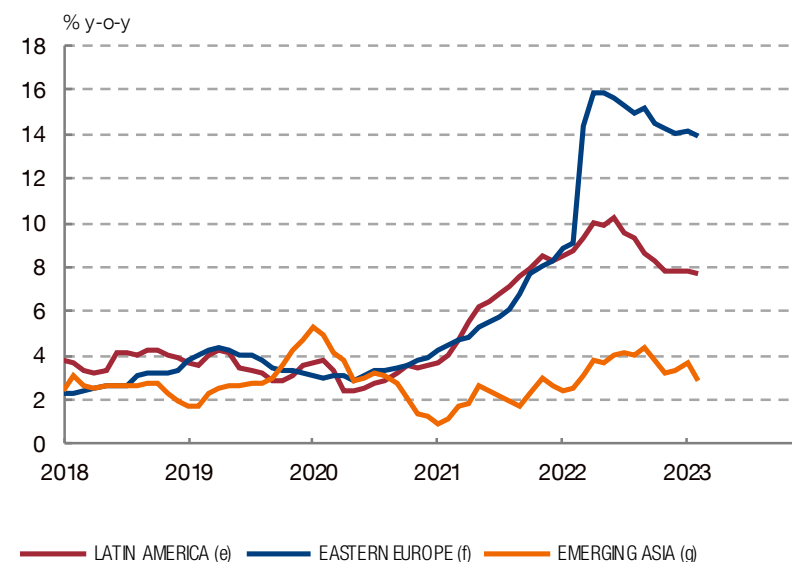
Emerging economies

- The level of vulnerability of several of the most relevant economies for Spanish banks remains higher than it was before the pandemic
- The disinflation process in these economies is generally expected to be slow, with end-2023 rates exceeding those recorded in early 2021

4 VULNERABILITY INDICATORS



2 INFLATION (d)

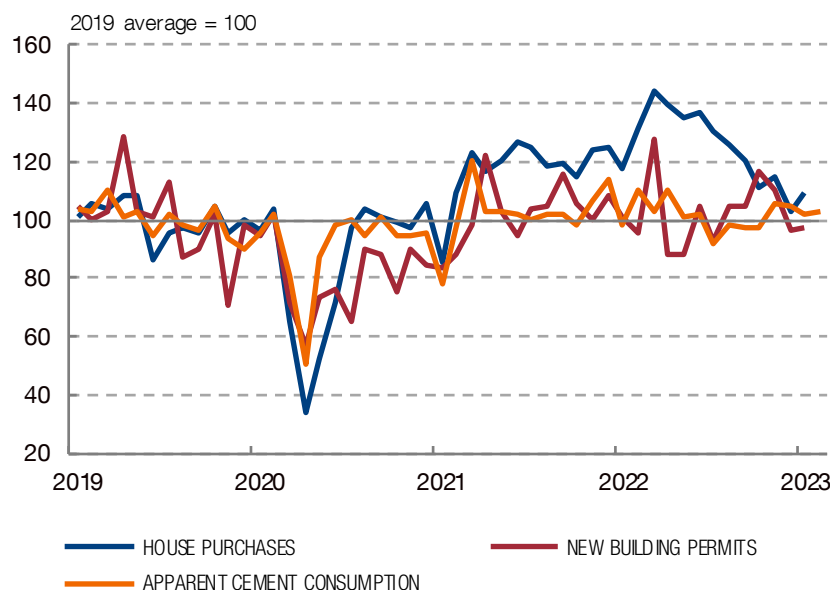


ADDITIONAL RISKS LINKED TO THE MACRO-FINANCIAL ENVIRONMENT

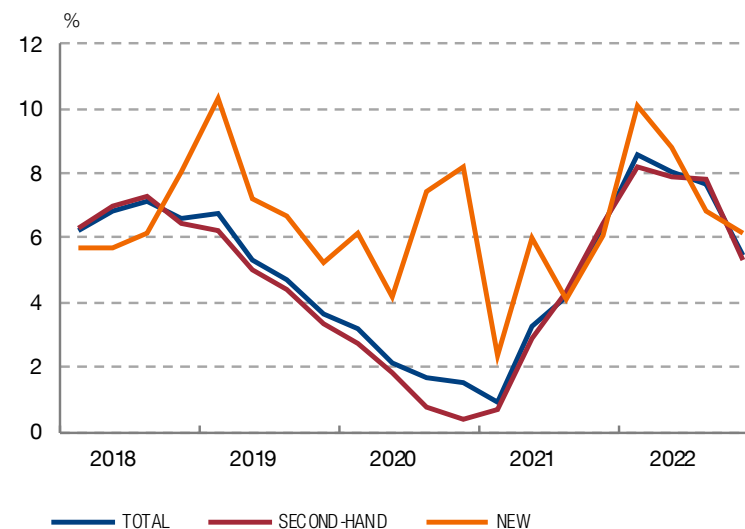
Real estate market

- House purchases trended downwards, returning to their pre-pandemic level at the end of the year, with a further slowdown in the opening months of 2023
- House prices have decelerated notably, although they are proving more resilient than the volume of transactions or the flow of new credit
 - Prices in the commercial property market have declined in the last quarter

1 NOTARIAL HOUSE PURCHASES, NEW BUILDING PERMITS AND APPARENT CEMENT CONSUMPTION (a)



1 HOUSE PRICES Y-o-y change



BOX 2.1

Additional analysis of the Spanish banking sector's wholesale funding

- The rise in the risk-free interest rate (OIS) in 2022 explains a significant part of the higher cost of issuing bank debt
- Moreover, more profitable banks with a lower leverage ratio tend to have a lower cost of financing
- Issuance costs on the primary market were increasingly sensitive to the price of equivalent instruments on the secondary markets in 2022

Chart 1
FACTORS BEHIND DIFFERENCES IN ISSUANCE COSTS, BY COUNTRY (a)

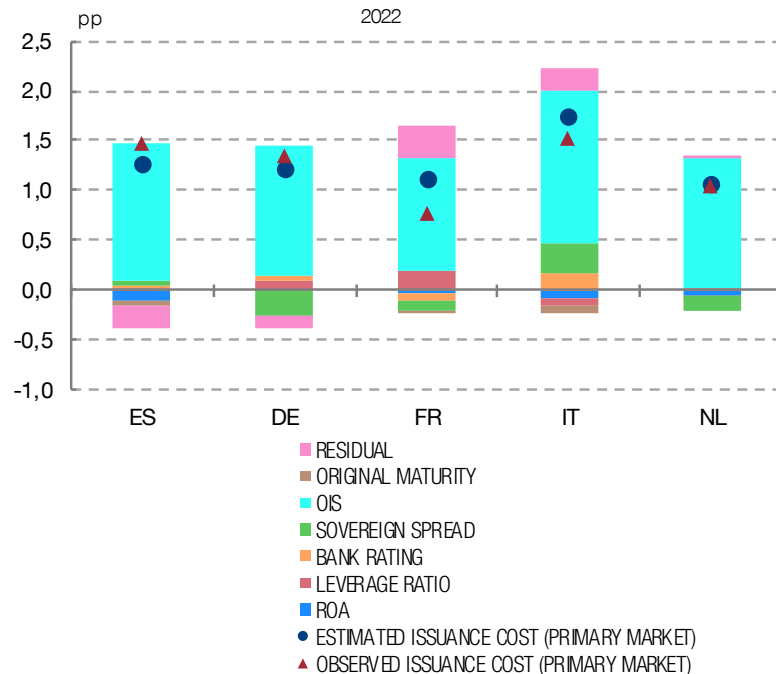
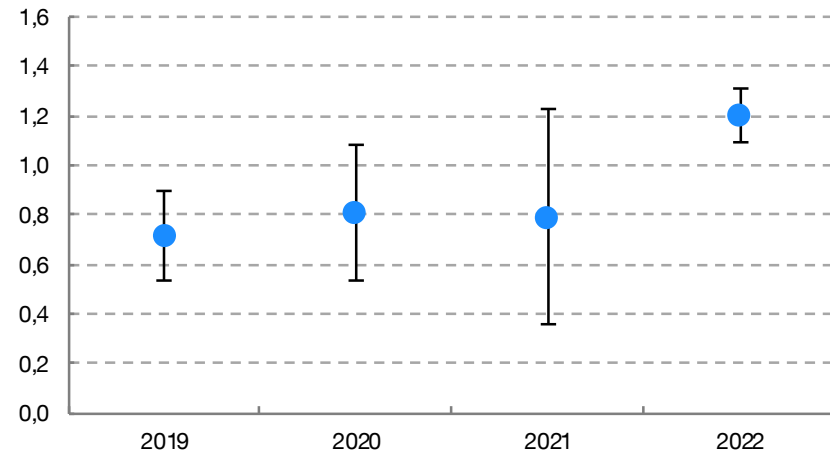


Chart 4
RELATIONSHIP BETWEEN PRIMARY AND SECONDARY MARKET COSTS FOR SPANISH BANKS (d)



BOX 3.1

Analysis of the cyclical behaviour of mortgage defaults

- A higher LTI ratio at mortgage origination increases the probability of default (PD), as do lower household income levels
 - The same is true of falls in income in the first years following origination
- Higher interest rates and lower GDP growth both lead to a significant rise in PD
 - The impact of rate hikes is greater on mortgages with higher LTV and LTI ratios

Chart 2
IMPACT OF DIFFERENT ADVERSE SHOCKS ON THE PROBABILITY OF MORTGAGE DEFAULT (b)

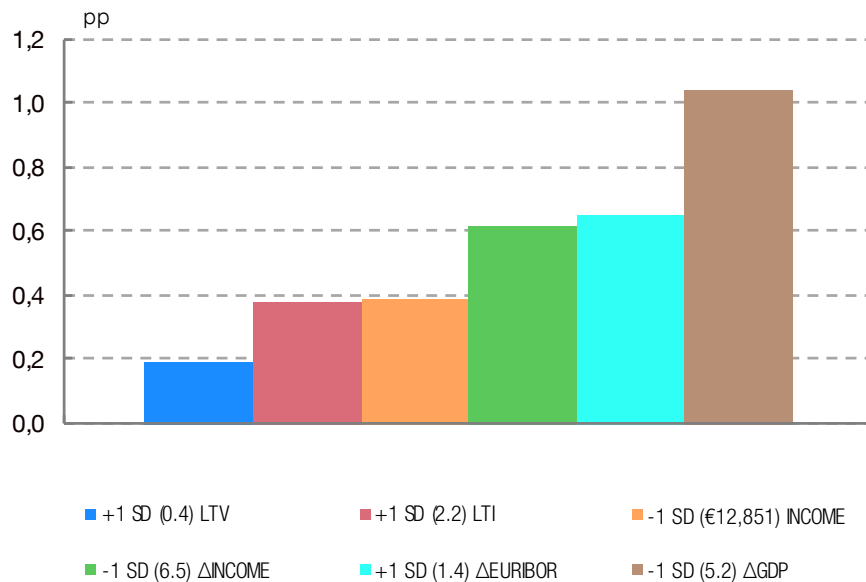
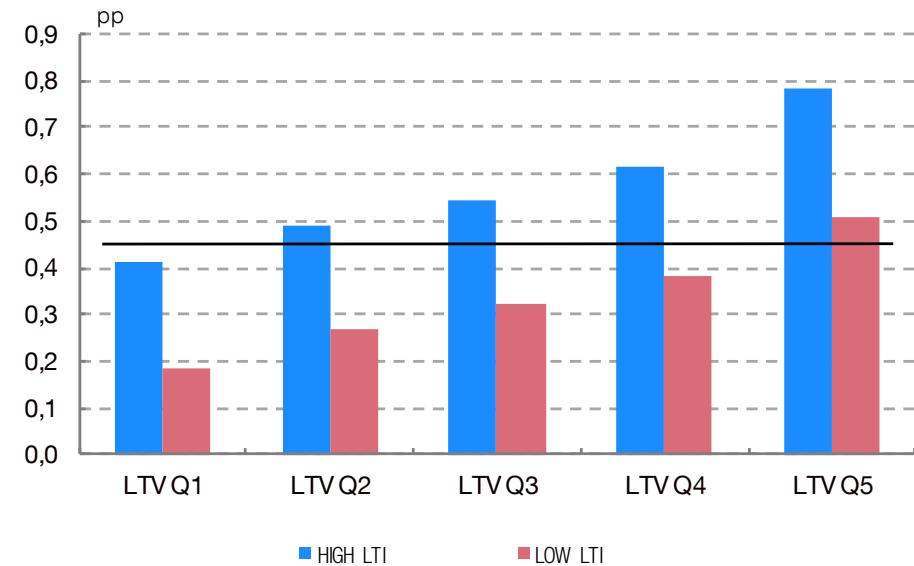


Chart 4
IMPACT ON THE PROBABILITY OF DEFAULT OF A +1 PP INCREASE IN THE EURIBOR BY LTV QUINTILES AND FOR DIFFERENT LEVELS OF LTI (b) (d)



SPECIAL FEATURE – CODES OF GOOD PRACTICE

Main features of the Code

- The Royal Decree-Law 6/2012 CGP was approved in order to facilitate the forbearance of vulnerable households' mortgage loans after the global financial crisis
 - It also sought to **safeguard and maintain the soundness** of the Spanish mortgage system by making adoption by lenders voluntary and limiting its effects to the most vulnerable mortgagors

- Royal Decree-Law 19/2022 envisages the reform of the CGP and other additional measures in a context of inflation and the sharp rise in interest rates in 2022:
 - Following the reform under RDL 19/2022, the CGP continues to target vulnerable households, although the **exclusion threshold** has been lowered
 - A **new Code of Good Practice** (NCGP) is introduced, aimed at households at risk of becoming vulnerable; it contemplates more limited contractual amendments and is temporary in nature (until 2024)
 - It also includes measures to reduce **fees for early repayment or conversion to a fixed interest rate** and to facilitate the subrogation of creditors, which will also make it easier to modify terms and conditions
 - Lastly, various **financial education**-related measures are envisaged

BOX 3.2

Crypto-assets: recent regulatory developments and future outlook

- MiCA Regulation: classification of crypto-assets (EMTs, ARTs, other) and associated services (custody, exchange, placement, advice, etc.), supervisory powers (inspections, requests for information, temporary trading bans, etc.).
- BCBS prudential standards: division of banks' exposures into two groups: (1) tokenised assets and stablecoins, and (2) other. The first group may be subject to capital requirements based on the Basel risk weights for the underlying financial assets.
- Outlook: greater concentration in more stable crypto-assets with a lower risk profile, which could strengthen the interconnections with the traditional financial system.

PRICE OF SOME CRYPTO-ASSETS AGAINST THE DOLLAR

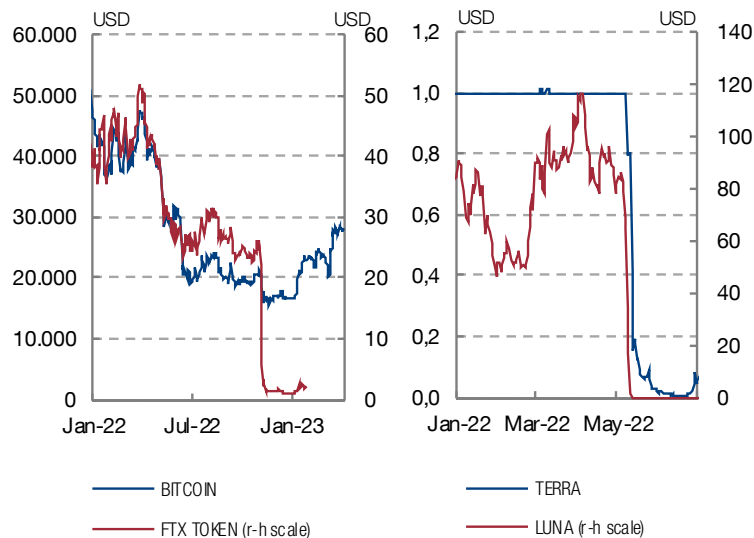


Chart 2

MARKET VALUE SHARES OF THE MAIN UNBACKED CRYPTO-ASSETS AND STABLECOINS (a) (b)

