

FINANCIAL STABILITY REPORT

Autumn 2022

Ángel Estrada

Director General

Banco de España
11 November 2022



RISKS FOR THE FINANCIAL STABILITY HAVE INCREASED SINCE THE LAST REPORT



GEOPOLITICAL RISK, THE MAIN DRIVER OF THE CURRENT SITUATION, IS AT VERY HIGH LEVELS

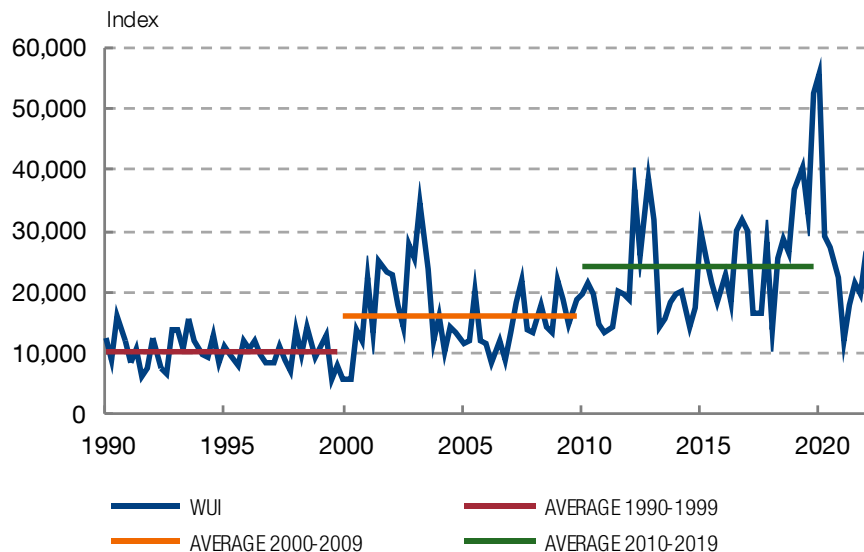


- The Russian invasion of Ukraine has pushed up energy and agricultural commodity prices and prompted much uncertainty
- But it has also led to a divided world order, which has been further fuelled by significant US-China trade disputes as well
- Box 1.1 contains a prospective analysis of Europe's exposure to this risk

Chart 1
GEOPOLITICAL RISK INDEX (a)



Chart 2
WORLD UNCERTAINTY INDEX (WUI) (b)

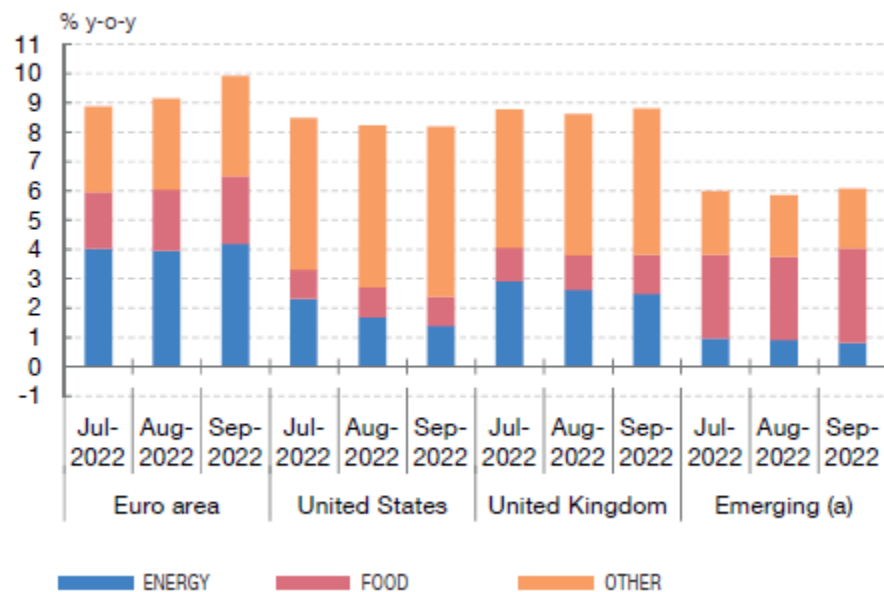


THE RISK OF HIGHER AND MORE PERSISTENT INFLATION POSES A THREAT TO ACTIVITY AND FINANCIAL CONDITIONS

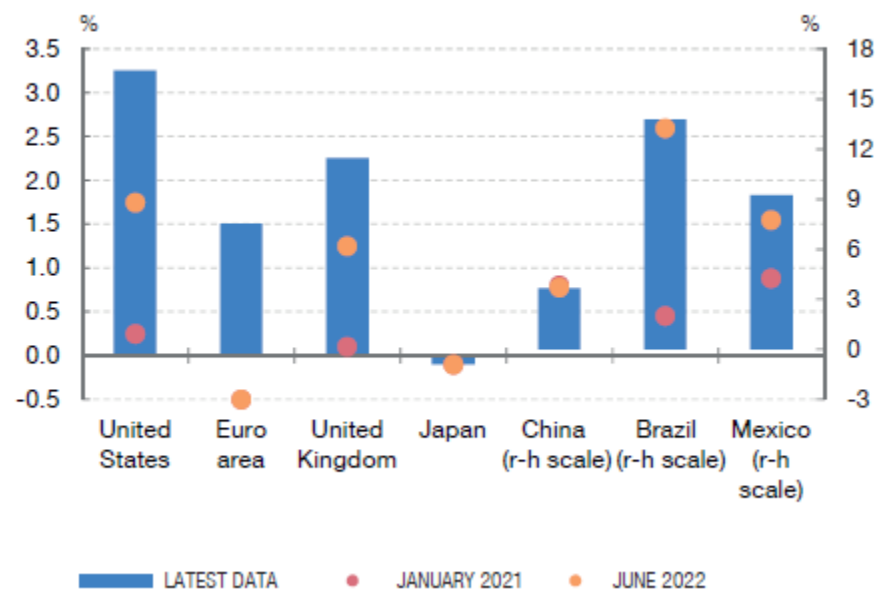


- Different supply and demand factors have contributed to this rise, with a notable role played by supply factors and, in particular, by the energy component and food prices in the euro area and Spain
- The ECB and other central banks are tightening monetary policy very sharply by historical standards

3 RECENT INFLATION DEVELOPMENTS



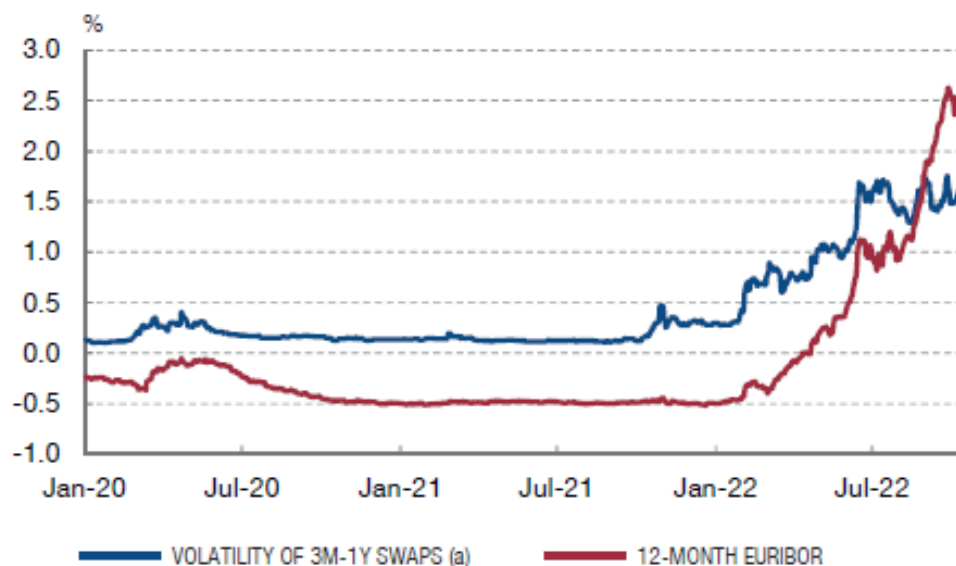
4 CHANGES IN MAIN POLICY INTEREST RATES



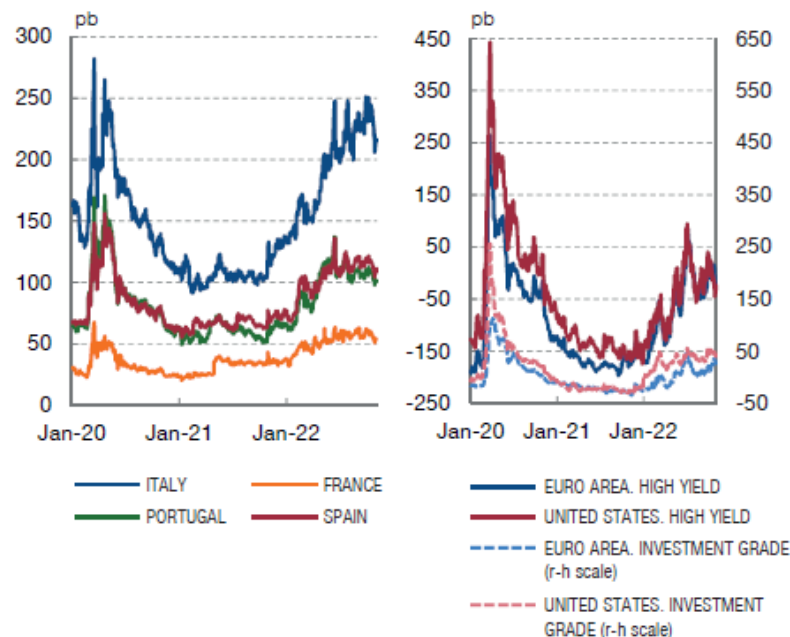
THE MARKET IMPACT HAS SO FAR BEEN CONTAINED, BUT VOLATILITY AND RISK PREMIA HAVE RISEN

- Interest rates in the money markets and in the sovereign and corporate debt markets have shifted in response to monetary policy and to the uncertainty
 - Widespread appreciation of the dollar
- Some liquidity problems have been detected at certain operators (energy firms and pension funds in the United Kingdom), but the indicators suggest lower liquidity in key markets such as the sovereign debt market

1 EURO AREA: VOLATILITY OF 3M-1Y SWAPS AND 12-MONTH EURIBOR



2 TEN-YEAR SOVEREIGN YIELD SPREAD AGAINST GERMANY (L-H PANEL) AND DEVIATIONS FROM THE HISTORICAL AVERAGE OF THE SPREADS OF NFCs' BONDS AGAINST THE SWAP CURVE (R-H PANEL) (b)

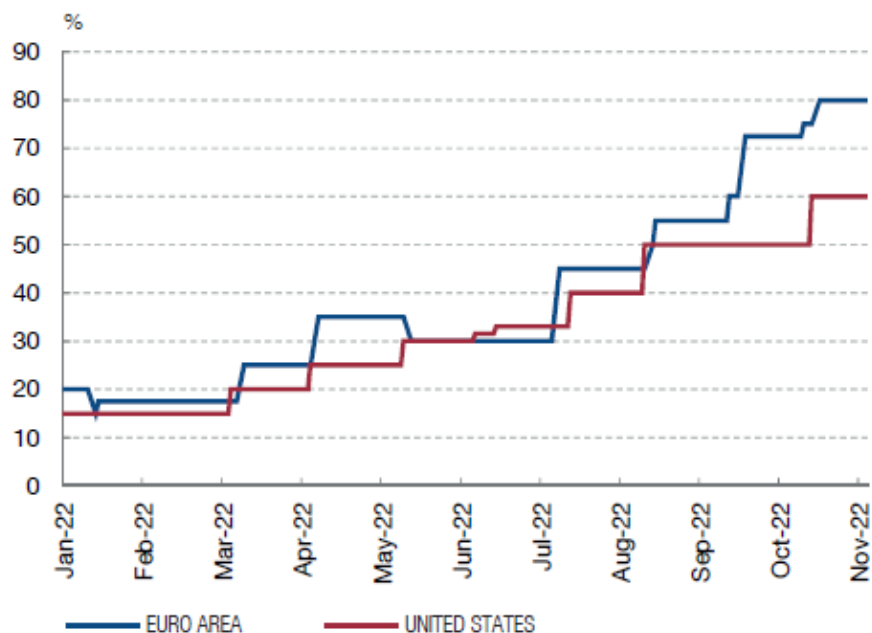


THE NEW RISK IDENTIFIED IN THIS REPORT RELATES TO A POSSIBLE CONTRACTION IN ACTIVITY

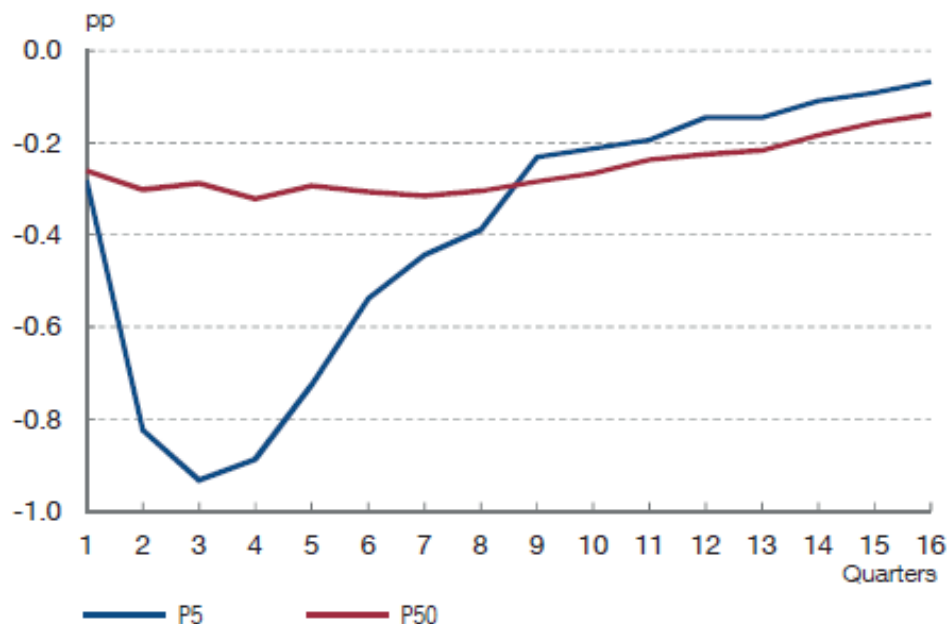


- Higher inflation and tightening financial conditions have increased the probability of recession in the main developed economies
- The Spanish economy is also showing signs of the economic impact of the war in Ukraine, with downward revisions to growth and the balance of risks to growth tilted to the downside

5 PROBABILITY OF RECESSION ONE YEAR AHEAD. EURO AREA AND UNITED STATES (a)



2 IMPACT OF AN INCREASE IN INFLATION ON FUTURE GDP GROWTH (b)

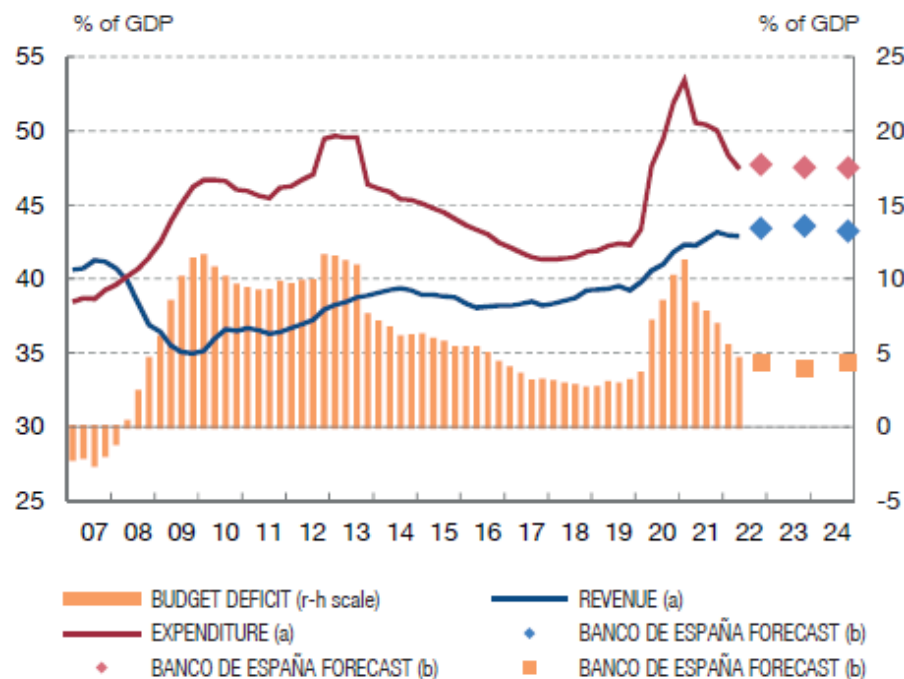


THE FIRST VULNERABILITY IDENTIFIED IS THE HIGH LEVEL OF GOVERNMENT DEBT

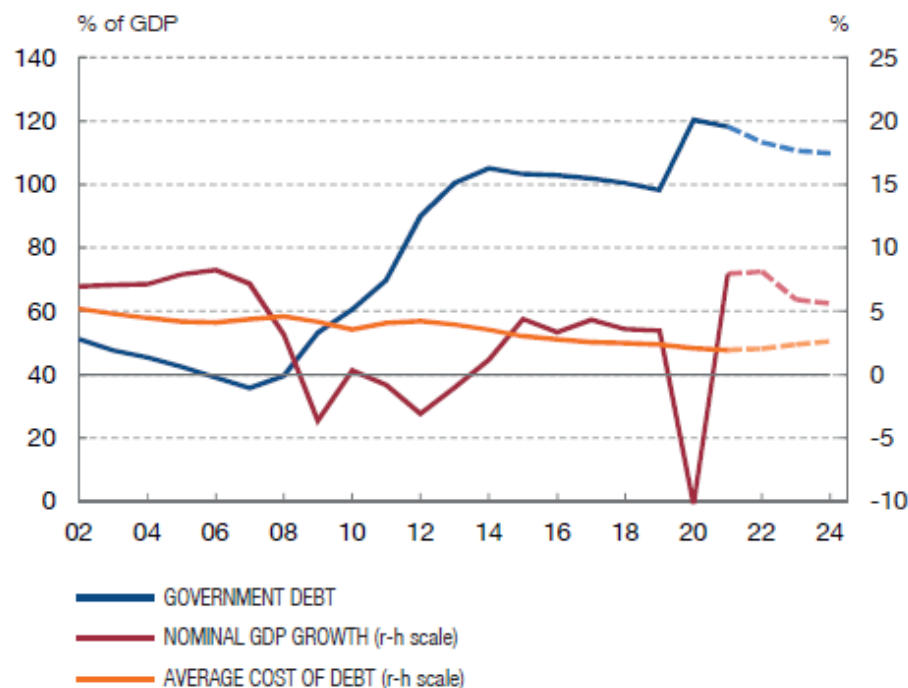


- The budget deficit fell to 4.6% of GDP in H1; however, in the absence of new measures, further improvements (also in public debt) will tend to taper off
 - Fiscal support, if needed, should be targeted and temporary
 - And it must be complemented with the start of a medium term fiscal consolidation plan that strengthens the sustainability of public finances

1 BUDGET BALANCE IN SPAIN
12-month cumulative change



2 GENERAL GOVERNMENT DEBT IN SPAIN (c)

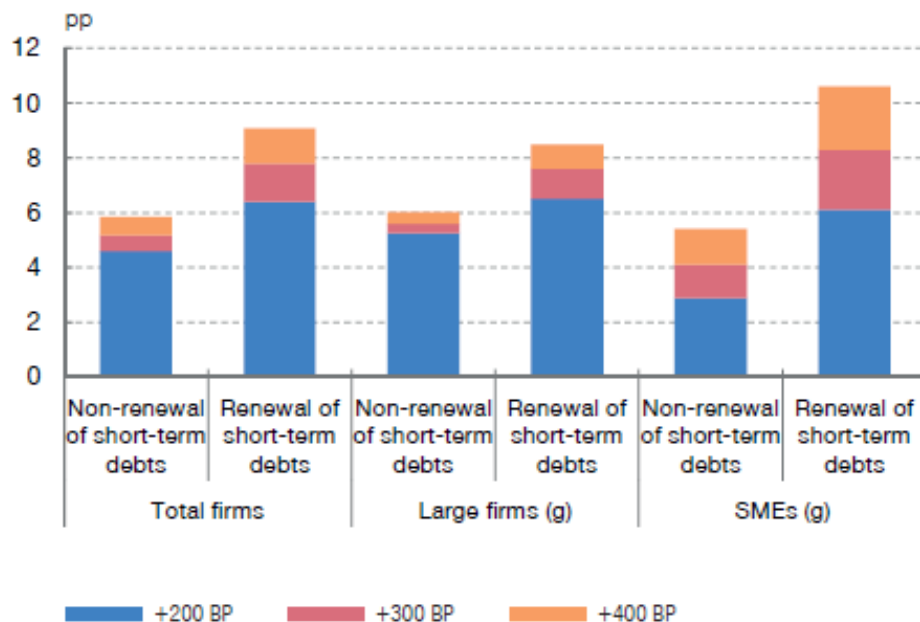


THE VULNERABILITY ASSOCIATED WITH THE FINANCIAL WEAKNESS OF FIRMS AND HOUSEHOLDS IS NOW MORE WIDESPREAD

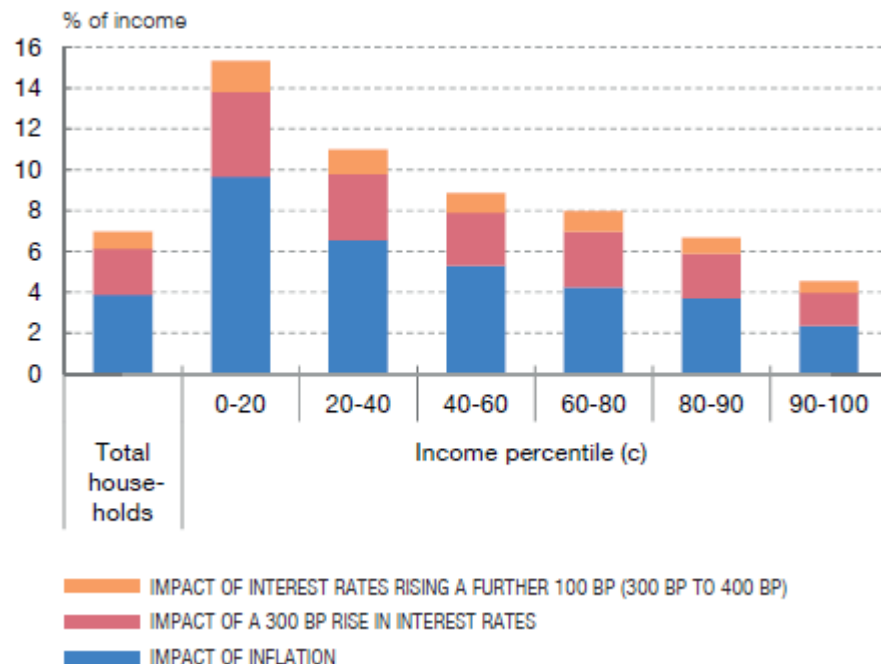


- Inflation associated with an imported cost push shock and the interest rate rise have an adverse impact on the financial situation of firms and households
- The debt burden of the most vulnerable households and firms may increase significantly
 - The potential support measures need to be targeted and temporary

2 ESTIMATED INCREASE IN THE WEIGHT OF DEBT OF FIRMS UNDER HIGH FINANCIAL PRESSURE OWING TO THE RISE IN INTEREST RATES (e) (f)



1 INCREASE IN INDEBTED HOUSEHOLDS' SPENDING ASSOCIATED WITH INFLATION AND HIGHER INTEREST RATES (a) (b)



THE PASS-THROUGH OF POLICY RATE RISES TO THE PRICE OF CREDIT IS PROVING MODERATE FOR NOW (BOX 1.2)

- This moderation is more pronounced in the case of average rates on loans to non-financial corporations (20%, compared with 53% in the past) and...
 - ...has less of an impact in the case of average mortgage rates
- This is attributable to factors such as the pace of the interest rate rises, the scant pass-through to deposit rates, banks' high liquidity, the greater share of fixed-rate mortgages and ICO-backed loans

Chart 5
CUMULATIVE CHANGE IN THE COST OF THE OUTSTANDING STOCK OF LOANS FOR HOUSE PURCHASE AND IN THE MARKET INTEREST RATE (a) (b)

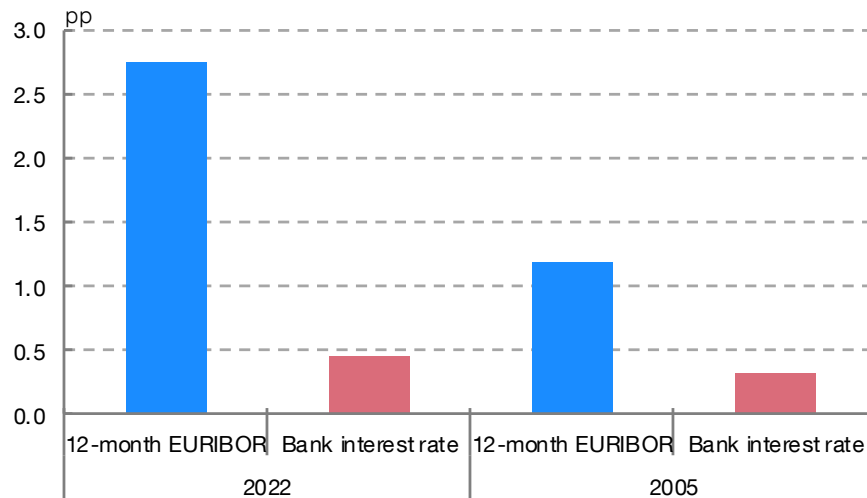
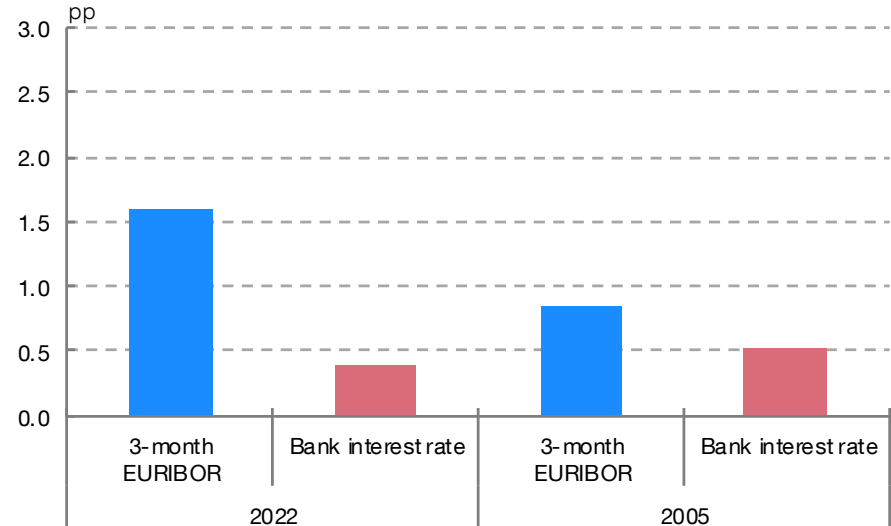


Chart 6
CUMULATIVE CHANGE IN THE COST OF THE OUTSTANDING STOCK OF LOANS TO NFCs AND IN THE MARKET INTEREST RATE (a) (b)

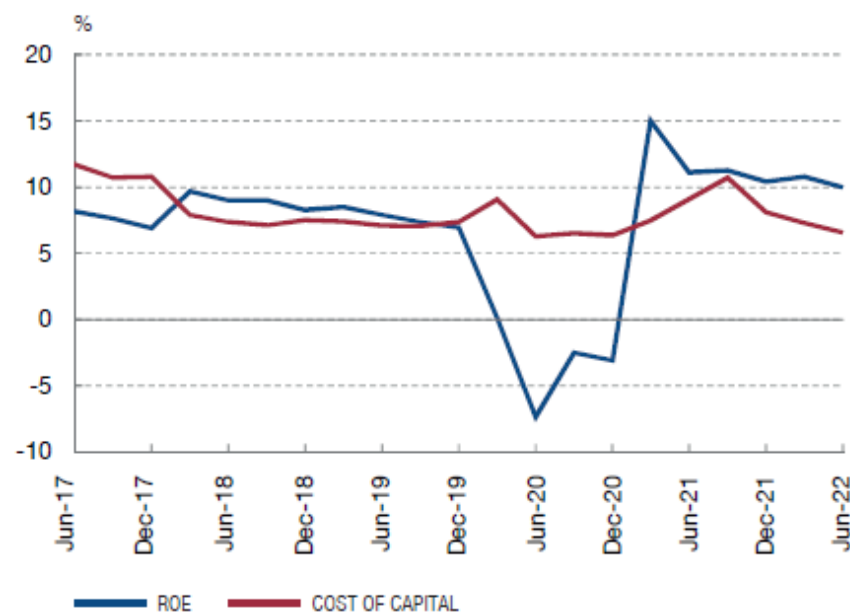


THE VULNERABILITY RELATING TO WEAKNESS IN FINANCIAL INTERMEDIATION CAPACITY HAS REMAINED UNCHANGED

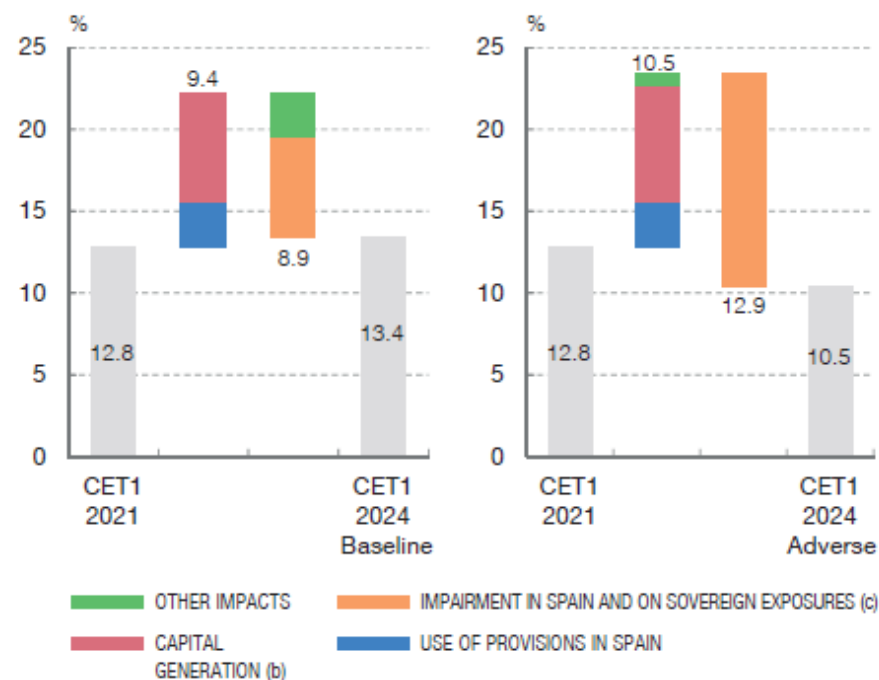


- Banks' profits have improved significantly (disregarding the extraordinary earnings in 2021) and exceed the cost of capital
- The stress tests evidence the existence of aggregate shock-absorbing capacity, but capital charges would be significant and uneven
 - Banks should maintain a prudent provisioning policy and plan their capital according to the new macroeconomic context

9 ROE AND COST OF CAPITAL IN THE BANKING SECTOR



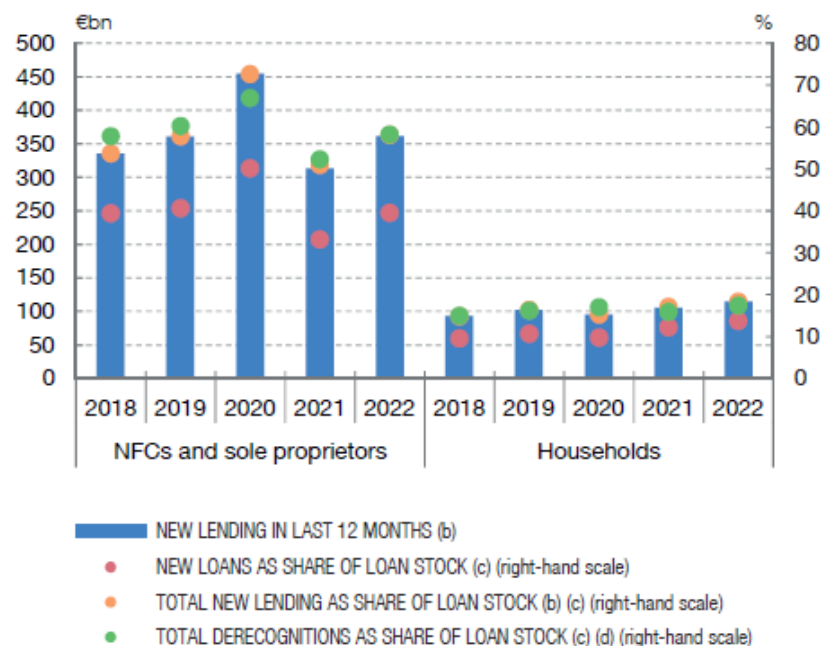
10 FLESB STRESS TESTS. IMPACT ON THE CET1 RATIO IN THE BASELINE SCENARIO (L-H CHART) AND ADVERSE SCENARIO (R-H CHART) (a)



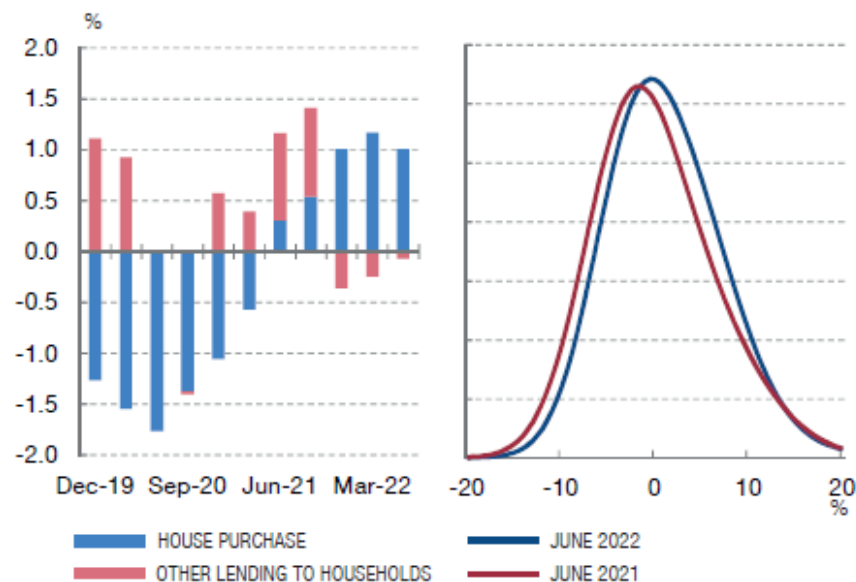
LENDING WAS STABLE IN 2022 H1: DERECOGNITIONS OFFSET THE FLOW OF NEW LENDING

- Loans for house purchase continue to drive the performance of lending to households (which grew 0.9% year-on-year in June 2022)
 - Consumer credit is contracting
- Lending to firms rose in summer, helped by large firms' replacement of their market financing
 - This can be explained by the differential between market and bank rates

2 VOLUME OF NEW LENDING IN LAST 12 MONTHS.
DATA AT JUNE FOR EACH YEAR
Business in Spain, ID



2 CONTRIBUTIONS TO THE Y-O-Y RATE OF CHANGE OF LENDING TO HOUSEHOLDS (L-H PANEL) AND DISTRIBUTION OF BANKS BY THE Y-O-Y RATE OF CHANGE OF LOANS FOR HOUSE PURCHASE (R-H PANEL) (b)
Business in Spain, ID



NON-PERFORMING LOANS FELL BY 12.4% YEAR-ON-YEAR AND STAGE 2 LOANS DECREASED BY 9.5%

- The NPL ratio fell below 4% for the first time since 2008 and the ratio of Stage 2 loans stood at 7.2% (still 1.3 pp above its 2019 level)
- The portfolio of ICO-backed loans deteriorated somewhat further, although the NPL ratio remains below that of the total corporate portfolio
 - For the time being, the loans whose grace periods have expired or whose maturity has been extended are not performing significantly worse than the others

2 NPL VOLUME (L-H PANEL) AND SIGNS OF EARLY IMPAIRMENT IN LENDING TO THE RESIDENT PRIVATE SECTOR (R-H PANEL) (a)
Business in Spain, ID

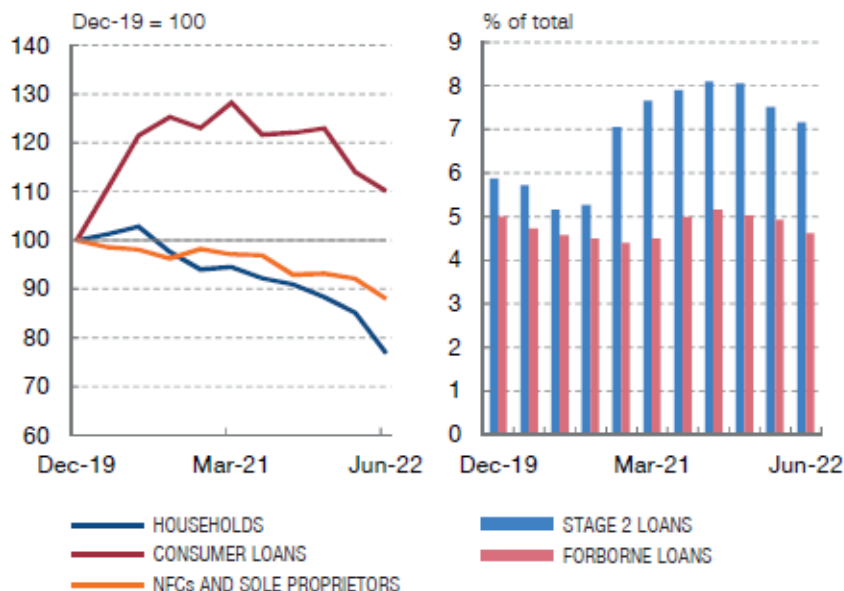
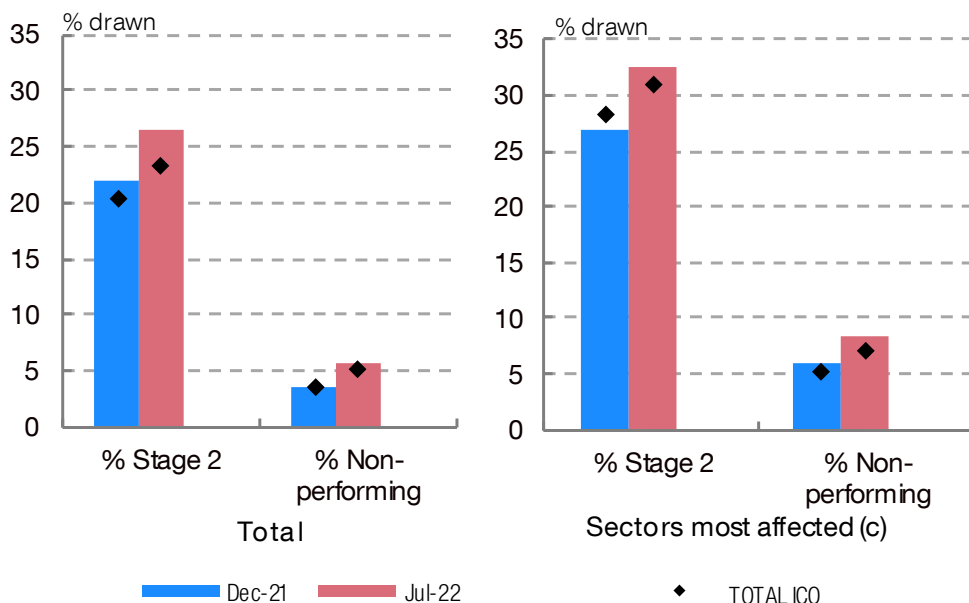


Chart 2
CREDIT QUALITY OF ICO-BACKED LOANS WITH EXPIRED GRACE PERIOD:
TOTAL (l-h panel) AND SECTORS MOST AFFECTED (r-h panel)

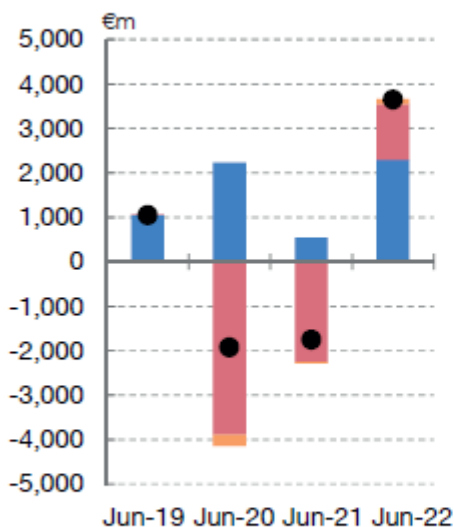


HIGHER NET INTEREST INCOME AND FEES AND COMMISSIONS ARE BEHIND THE IMPROVEMENT IN BANKS' PROFITABILITY

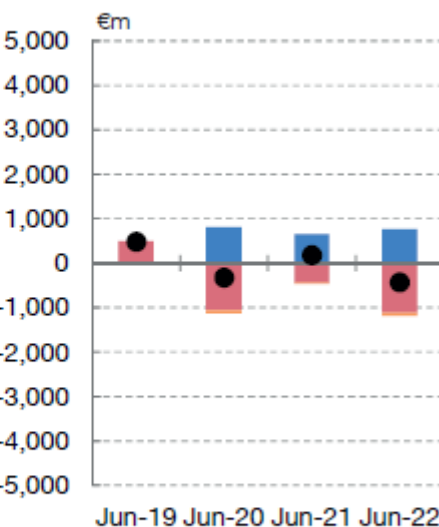
- The improvement in net interest income is due to a price effect and, above all, a quantity effect
 - This improvement is still not observed in business in Spain
 - At consolidated level, provisioning held steady and operating expenses grew
- The Spanish banking sector's ROA was among the highest in the euro area

1 BREAKDOWN OF CHANGE IN NET INTEREST INCOME (a)

Consolidated business



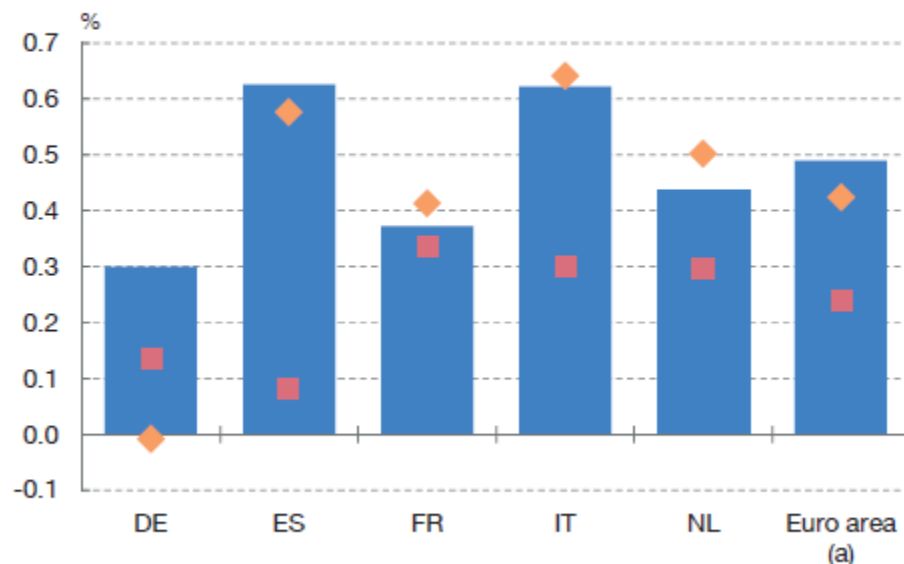
Business in Spain (individual data)



■ QUANTITY EFFECT
 ■ PRICE EFFECT
 ■ COMBINED EFFECT
 • TOTAL CHANGE

1 RETURN ON ASSETS (ROA)

Consolidated data

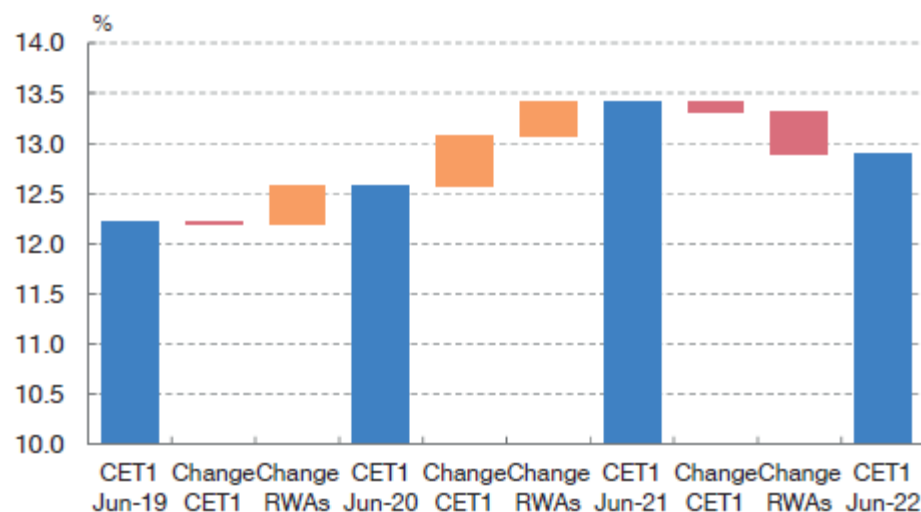


■ JUNE 2022
 ■ JUNE 2021-JUNE 2020 AVERAGE
 ◆ JUNE 2019

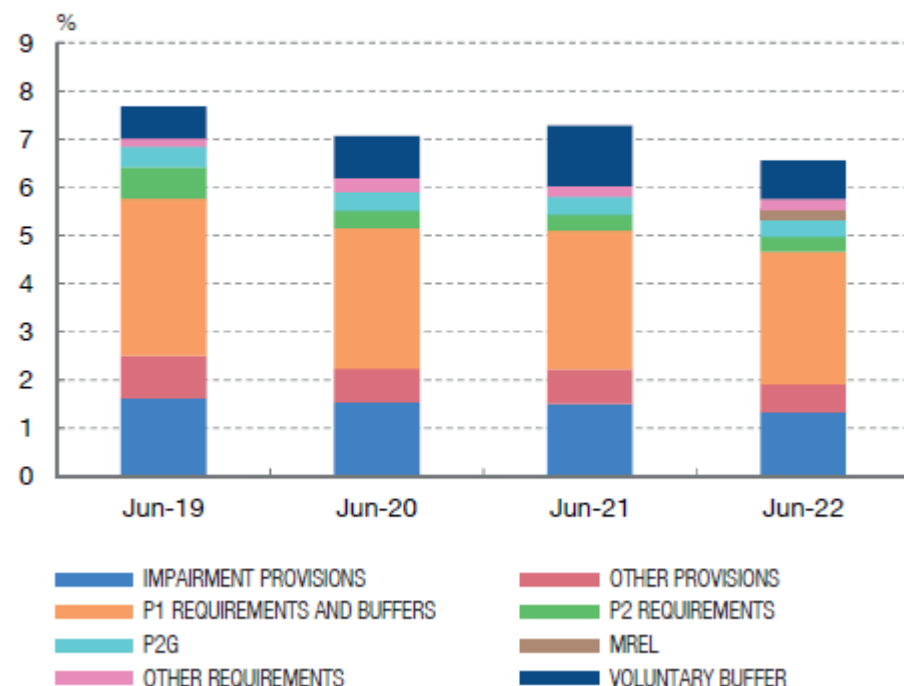
BANKS' SOLVENCY LEVEL HAS FALLEN, BUT IT REMAINS ABOVE PRE-PANDEMIC LEVELS

- The decline was mainly due to the increase in RWAs (3.3%), while CET1 fell slightly (-0.7%)
- In the last year, provisions and CET1 as a percentage of total assets have fallen
 - The voluntary buffer also decreased

1 BREAKDOWN OF CHANGE IN THE CET1 RATIO BETWEEN JUNE 2019 AND JUNE 2022. CHANGE IN NUMERATOR AND DENOMINATOR
Consolidated data



1 BREAKDOWN OF CET1 CAPITAL AND PROVISIONS, AS A PERCENTAGE OF TOTAL ASSETS (a)
Consolidated data



THE STRESS TEST'S ADVERSE MACROECONOMIC SCENARIO ASSUMES AN EXTREME MATERIALIZATION OF THE RISKS

- Specifically, the additional increase in energy prices would push inflation up further still, triggering more monetary policy action
 - Confidence would also be dented
- GDP would fall in cumulative terms and the stock market would record losses
 - House prices would fall relatively little, as the initial imbalance is small and it is assumed that house prices will be supported by the inflationary setting

Chart 1
BASELINE AND ADVERSE SCENARIOS FOR SPAIN. MACROECONOMIC IMPACT (a)

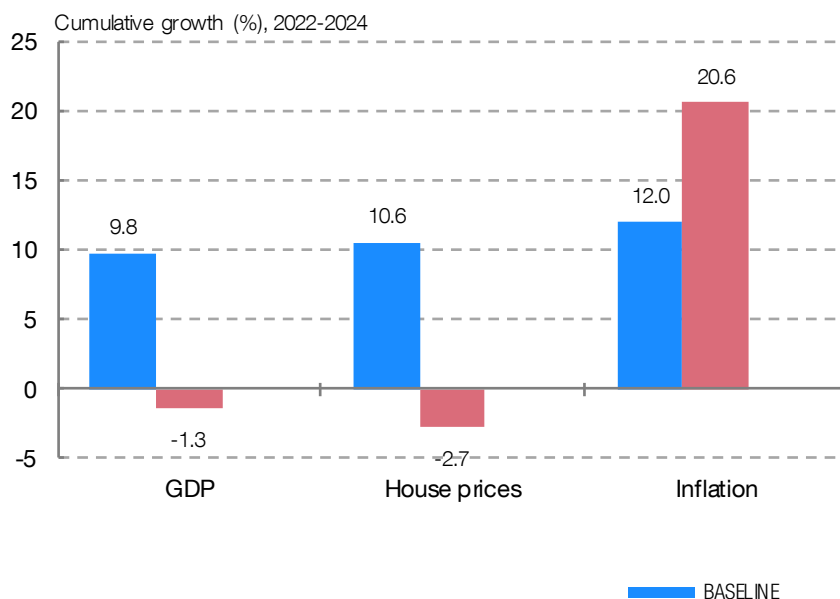
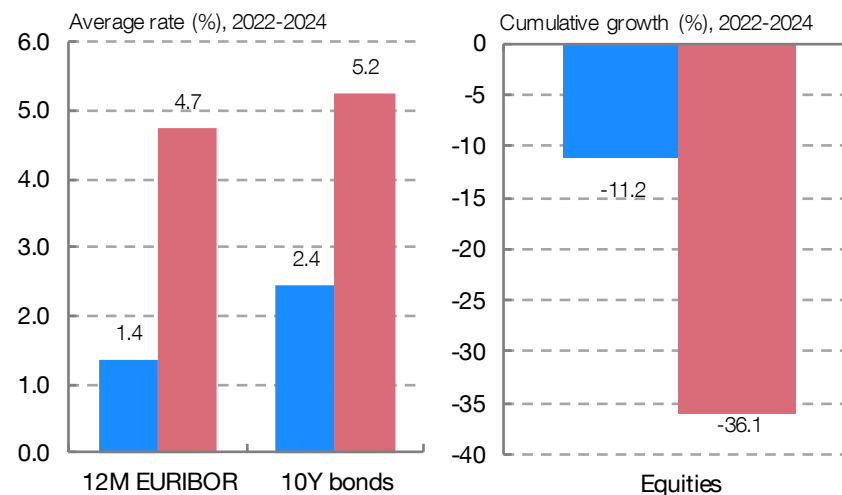


Chart 2
BASELINE AND ADVERSE SCENARIOS FOR SPAIN. IMPACT ON FINANCIAL ENVIRONMENT (b)



THE RESULTS POINT TO A COUNTERBALANCING EFFECT OF HIGHER INTEREST RATES ON THE INCOME STATEMENT

- Under the adverse scenario, higher net interest income is more than offset by the increase in provisions and impairment losses on sovereign exposures
- Capital consumption is lower at banks with significant international activity, whose profitability shows greater resilience
 - The solvency of LSIs increases under the adverse scenario, due to the characteristics of their business, which limit credit losses, but do not prevent them from capitalizing on higher interest rates

Chart 8
DISTRIBUTION AMONG BANKS OF THE IMPACT ON THE INTEREST MARGIN, PROVISIONS AND THE SOVEREIGN EFFECT RELATIVE TO 2021 RWAs (a). SIs

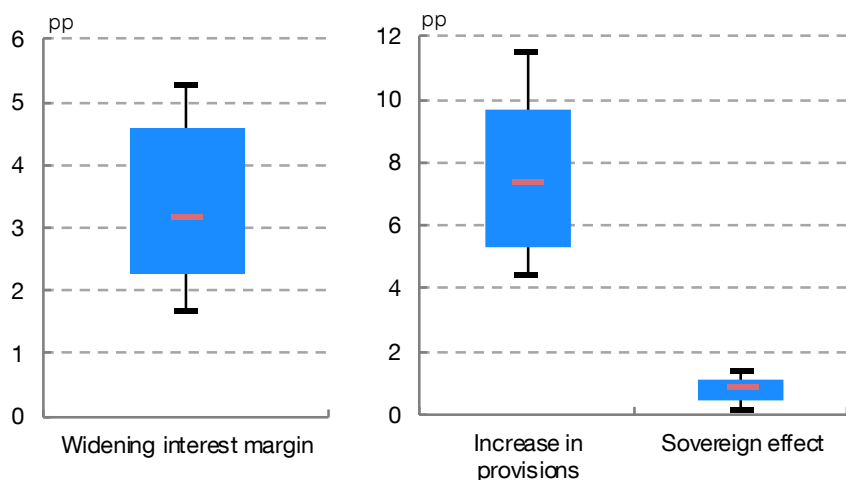
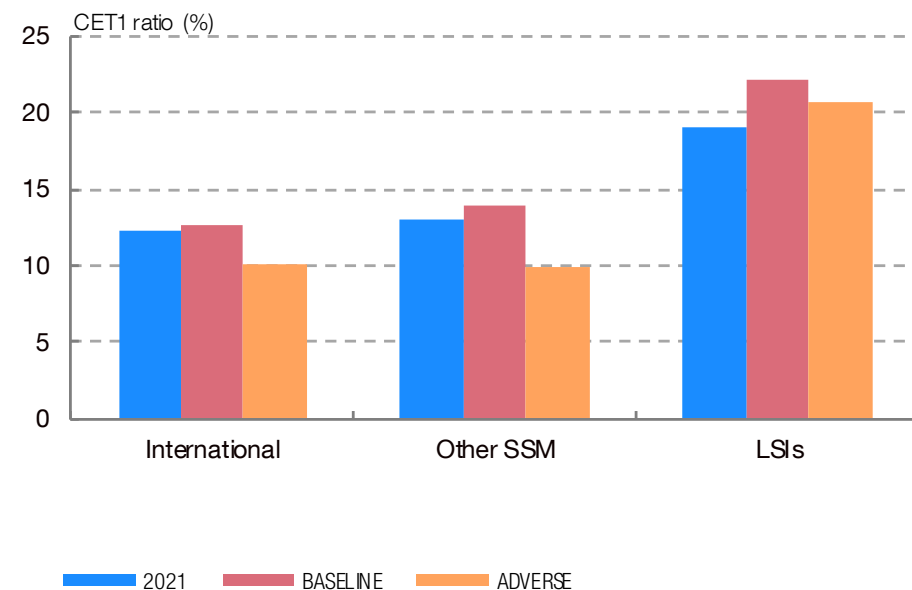


Chart 6
CET1 RATIO OBSERVED IN 2021 AND RESULTS IN 2024 OF BASELINE AND ADVERSE SCENARIOS

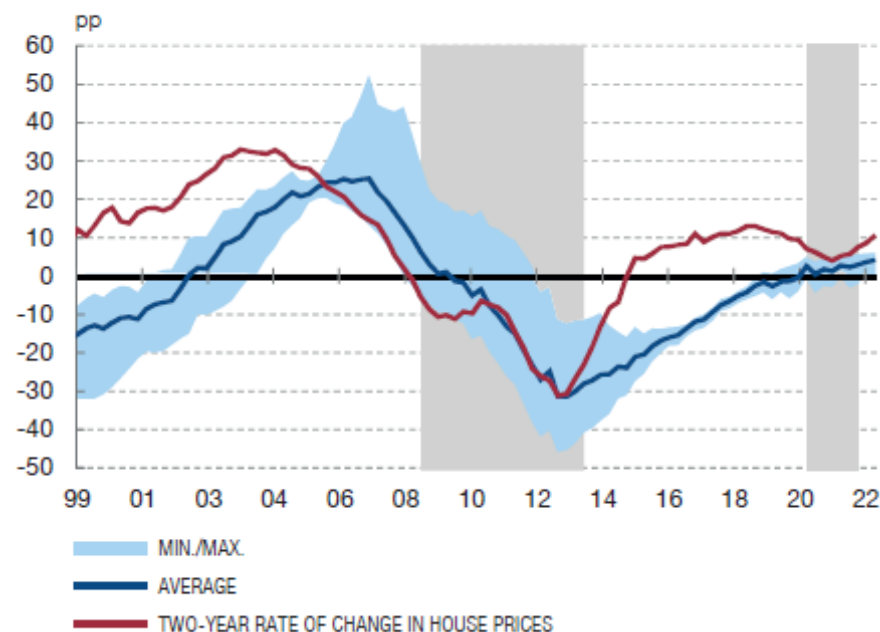


LOW LEVEL OF THE NEW VULNERABILITY (INCIPIENT SIGNS OF REAL ESTATE IMBALANCES)

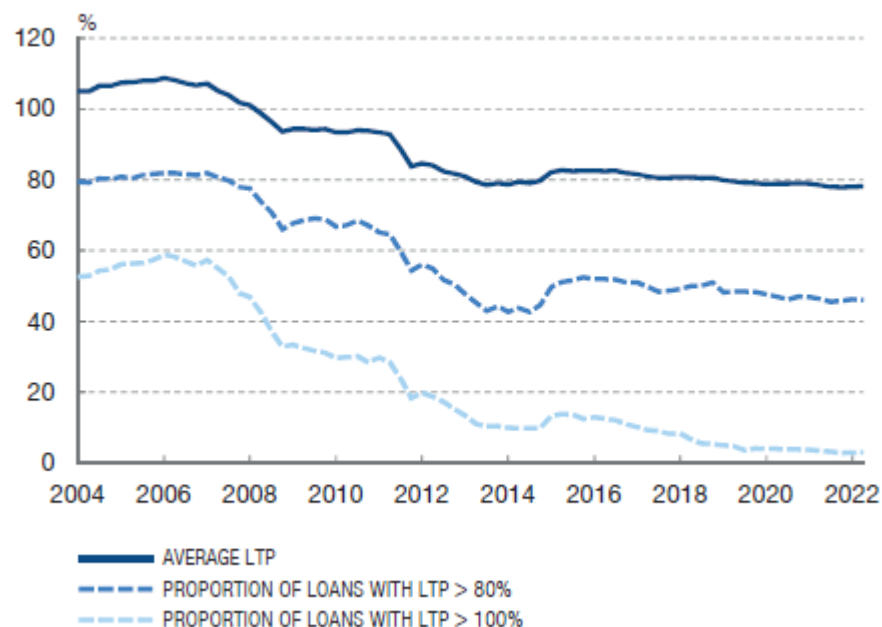


- Real estate market activity and prices continue growing, although there are signs of deceleration against a backdrop of higher interest rates and a deterioration in the economic outlook
- Now it is the probability of the risk materialising that is increasing
 - Both the low level of housing overvaluation and prudent credit standards for mortgage loans mean that the potential impact on banks' balance sheets is moderate

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



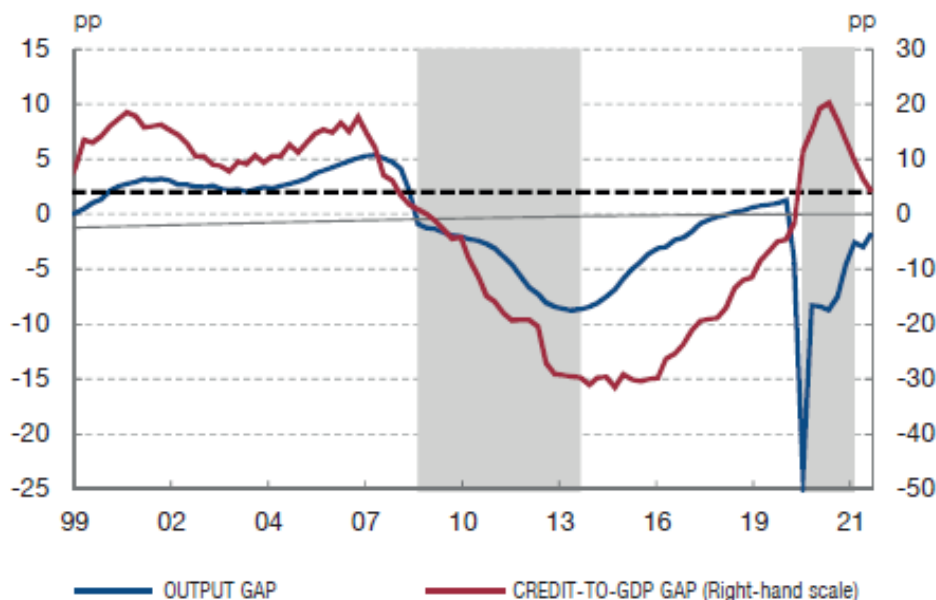
1 LTP RATIO (a)



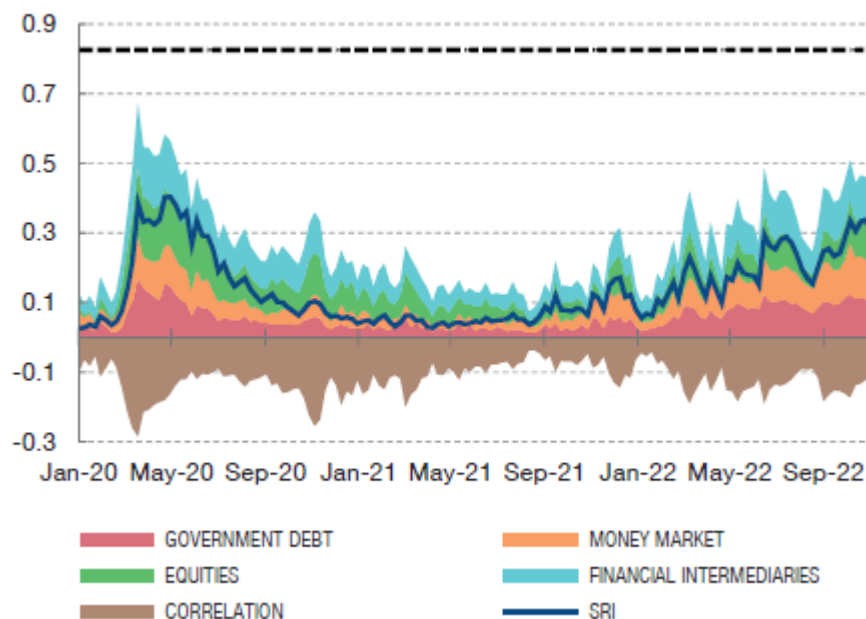
OTHER INDICATORS OF SYSTEMIC RISK ARE NOT SIGNALLING THE BUILD-UP OF RISKS EITHER

- The Basel gap continues to correct and it is now close to being below the recommended activation threshold
 - The output gap remains in negative territory
- Lastly, the systemic risk indicator has risen significantly
 - Consequently, the risk of acting procyclically advises against the activation of macroprudential tools

1 CREDIT-TO-GDP GAP AND OUTPUT GAP (a)



1 SYSTEMIC RISK INDICATOR (a)



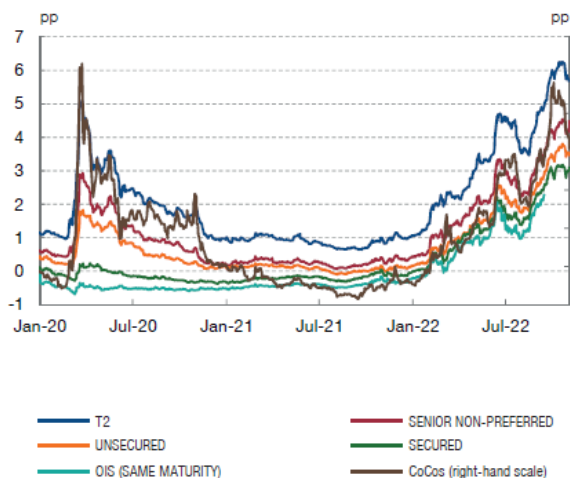
THANK YOU FOR YOUR ATTENTION

CHAPTER 2

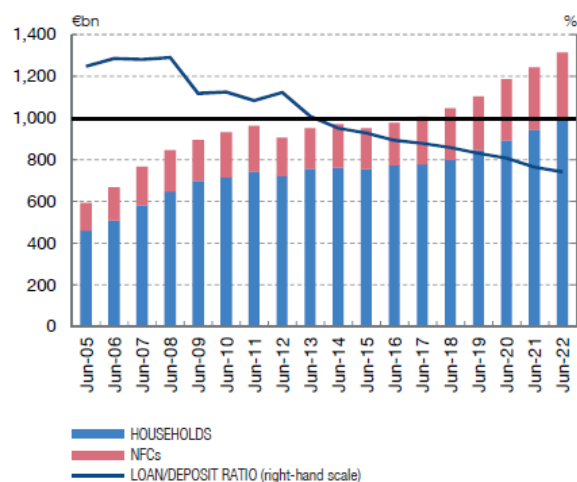
Deposits and cost of financing

- Greater expectations for interest rates have led to higher wholesale bank funding costs, which have been passed through to the cost of different debt instruments
- Deposits have grown significantly in Spain in recent years, despite the low interest rate environment, which has prompted them to be concentrated in sight deposits rather than in time deposits
- The recent increase in reference interest rates has not yet been passed through to retail deposit rates, unlike in past episodes of interest rate rises

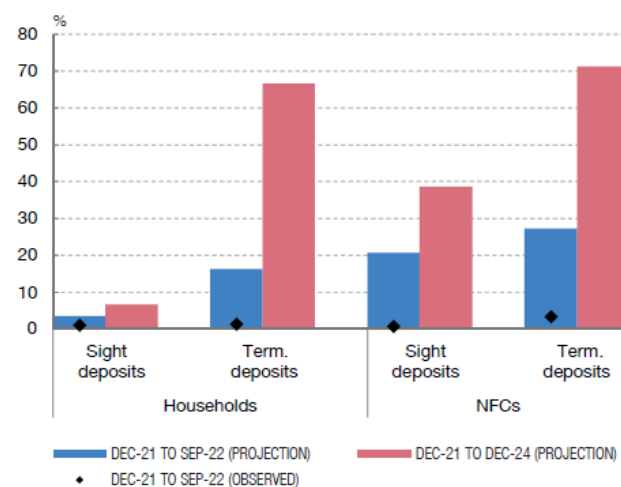
3 COST OF WHOLESALE BANK DEBT. SECONDARY MARKET. SPANISH BANKS (b)



2 DEPOSITS OF HOUSEHOLDS AND NFCs AND THE LOAN/DEPOSIT RATIO (b)
Business in Spain, ID



4 PASS-THROUGH OF AN INCREASE IN EURIBOR TO DEPOSIT INTEREST RATES (c)

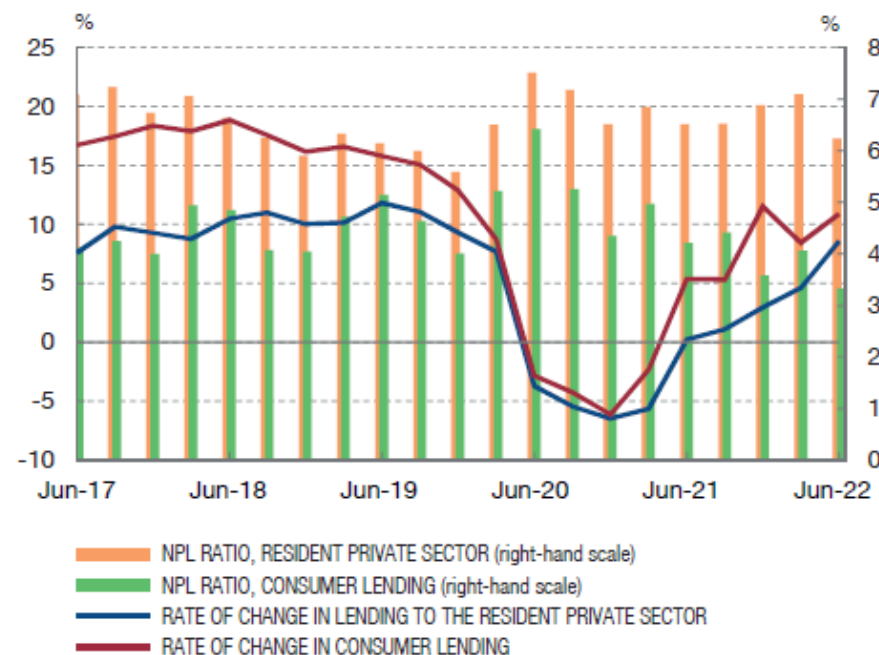


CHAPTER 2

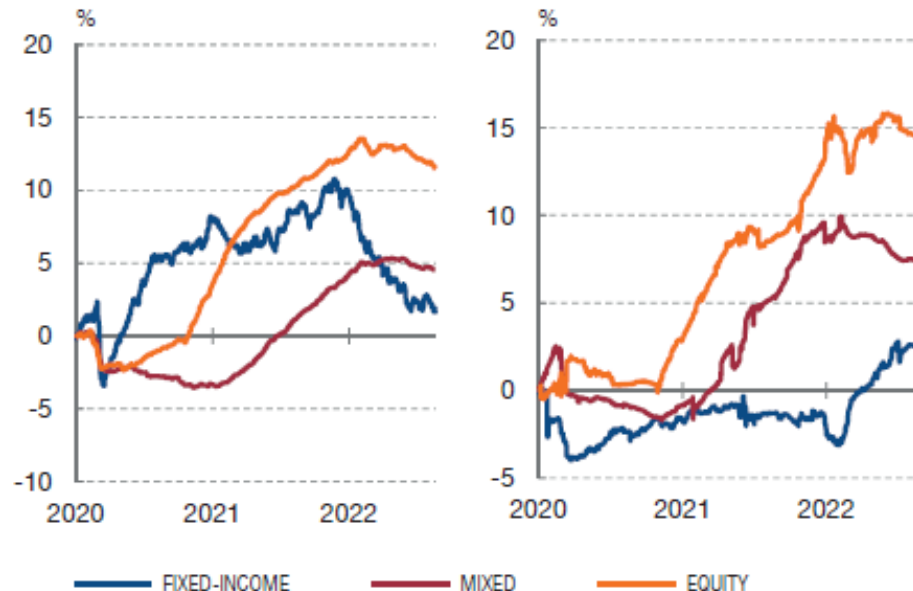
Specialised lending institutions and investment funds

- Lending by specialised lending institutions increased over the last year, above all in the consumer credit segment, while NPL ratios fell
- Since early 2022, capital inflows into European equity funds have slowed, while there have been net outflows from fixed-income investment funds
- In Spain, the trends are similar for equity funds, although there were net capital inflows into fixed-income investment funds

1 RATE OF CHANGE IN LENDING AND NPL RATIOS AT SPECIALISED LENDING INSTITUTIONS (b)



1 INVESTMENT FUND FLOWS IN THE EURO AREA (EXCL. SPAIN) (L-H PANEL) AND IN SPAIN (R-H PANEL) (a) (b)

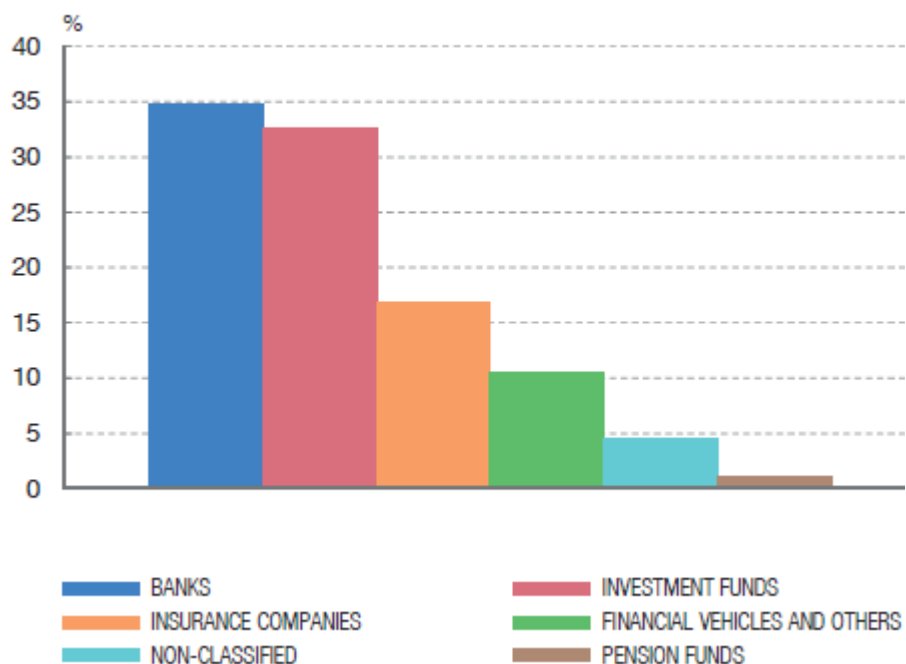


CHAPTER 2

Collateralised loan obligations (CLOs) and crypto-assets

- The non-banking financial sector has a high degree of exposure to CLOs
- The market value of crypto-assets has been dented in 2022, with a high correlation between these instruments and equities

2 DISTRIBUTION OF CLO HOLDINGS IN THE EURO AREA IN 2022 Q2, BY INSTITUTIONAL SECTOR (a)



2 CORRELATION BETWEEN DAILY RETURNS ON A CRYPTO ASSET INDEX AND ON EQUITY MARKET INDICES - EUROPE, UNITED STATES AND EMERGING MARKETS (b)

