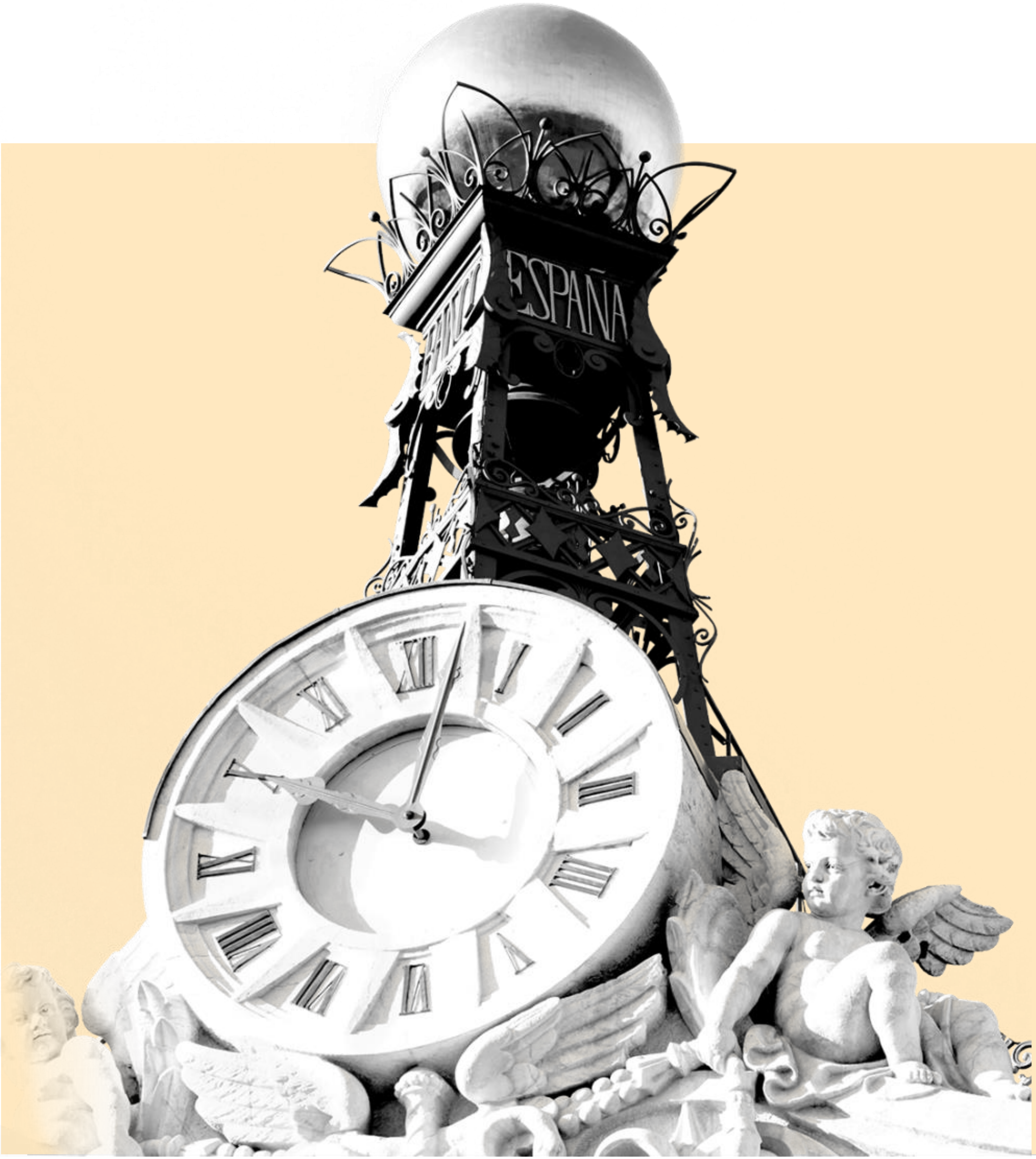
BANCO DE ESPAÑA
Eurosistema



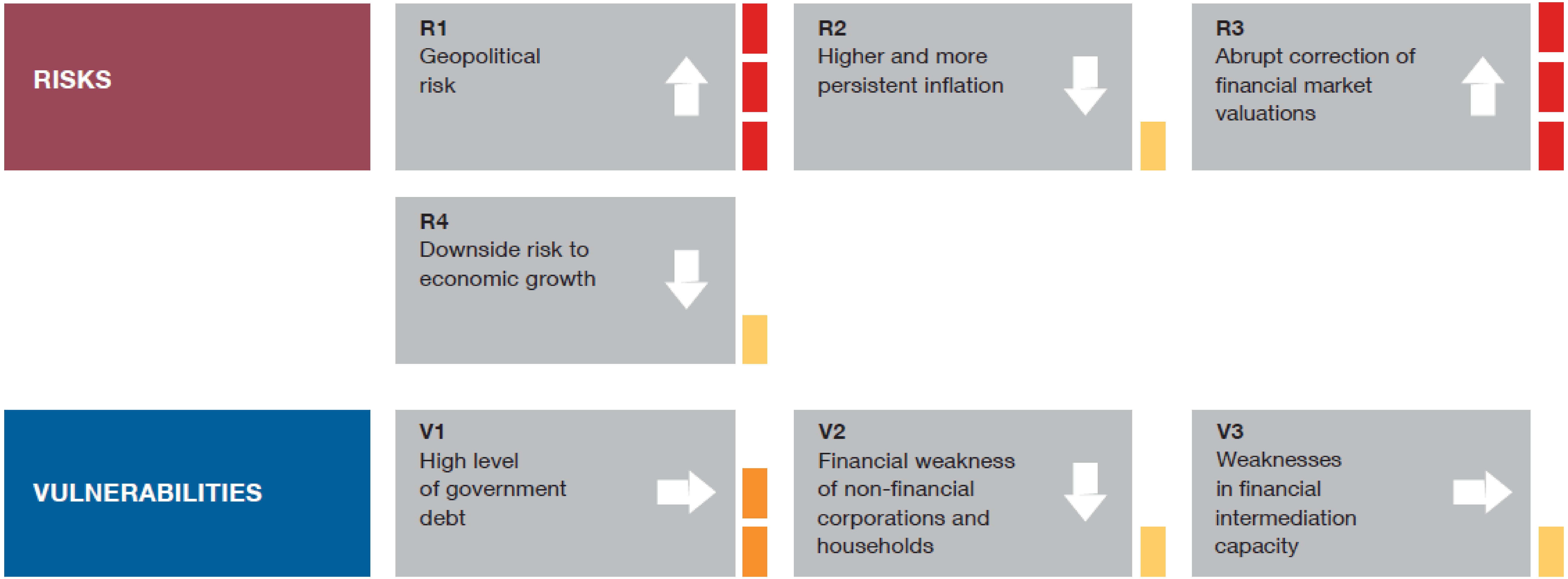
BANCO DE ESPAÑA

FINANCIAL STABILITY REPORT AUTUMN 2024

ÁNGEL ESTRADA
DIRECTOR GENERAL

5 November 2024

GEOPOLITICAL AND MARKET RISKS HAVE HEIGHTENED, BUT MACROECONOMIC RISKS HAVE DIMINISHED VULNERABILITY IS AT A MEDIUM LEVEL IN THE PUBLIC SECTOR AND HAS DECREASED IN THE PRIVATE SECTOR



a In this report, **the vulnerabilities** are defined as economic and financial conditions that increase the impact or probability of materialisation of **risks to financial stability**, which in turn are identified as adverse changes in economic and financial conditions, or in the physical or geopolitical environment, with an uncertain probability of occurrence, which hamper or impede financial intermediation, with negative consequences for real economic activity.

b The risks and vulnerabilities shown here are measured using the following scale: one yellow block denotes a low level, two orange blocks a medium level and three red blocks a high level. The arrows denote the change in the levels of the risks and vulnerabilities since the last FSR.

c In the last FSR, the R3 risk referred to greater risk aversion among agents, its main component being a possible abrupt financial market correction. In view of its greater relative importance, in this FSR it has been decided to identify the risk as a whole with its main component.

SO FAR, MACRO-FINANCIAL DEVELOPMENTS HAVE BEEN RESILIENT TO GEOPOLITICAL TENSIONS, BUT THESE REMAIN THE MAIN RISK FACTOR

Chart 2
Changes in natural gas and oil prices (b), and in global trade

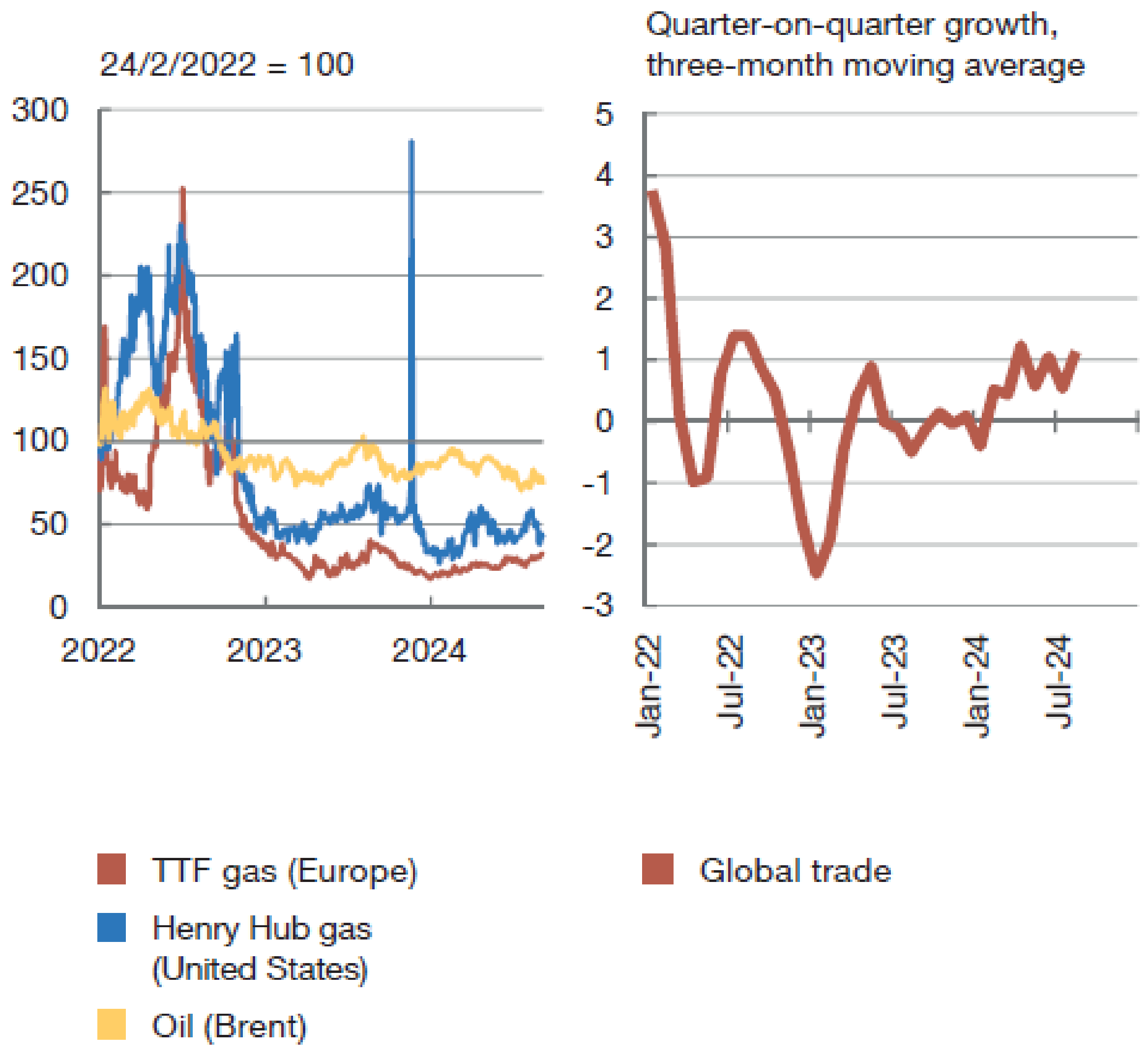
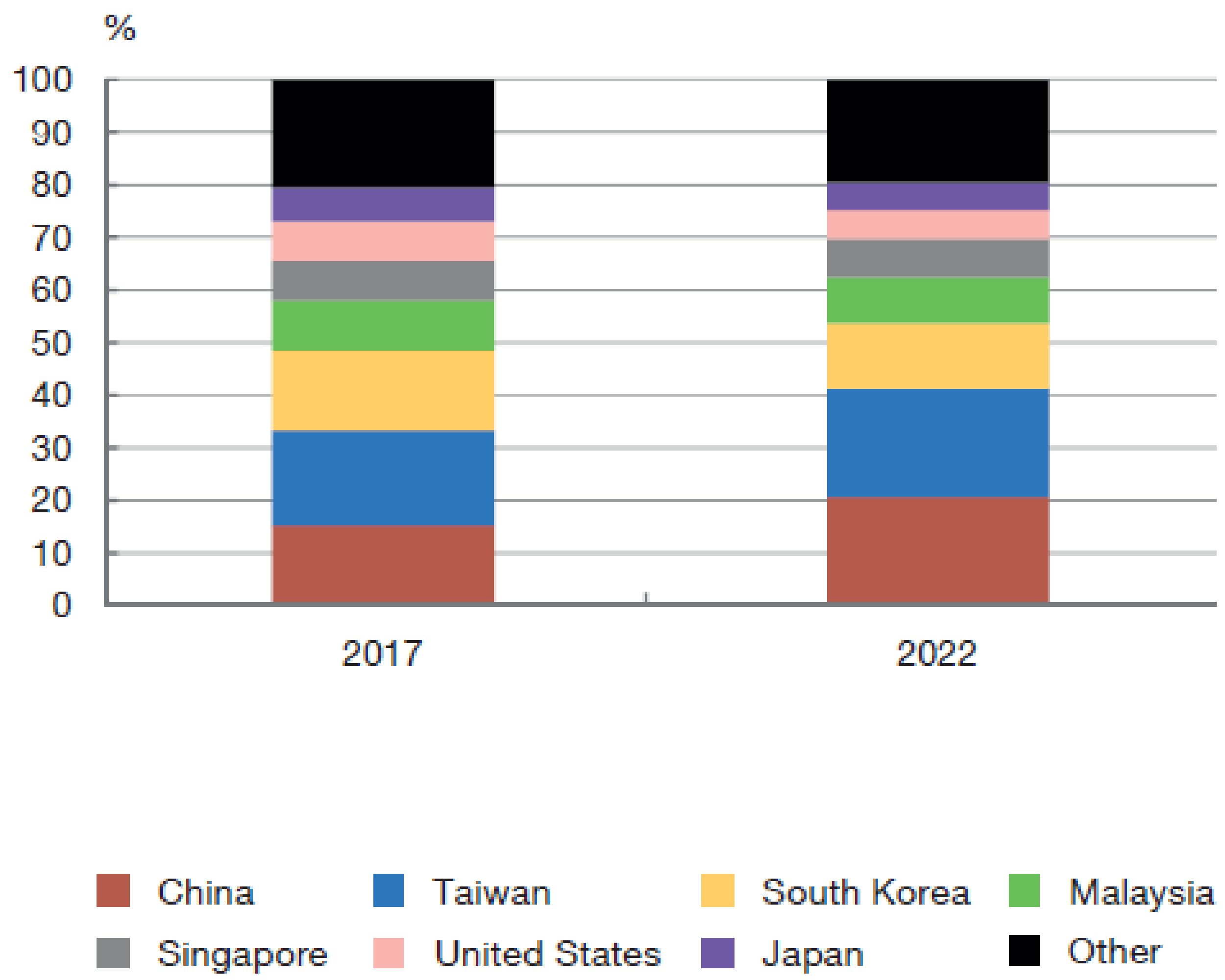


Chart 1
Semiconductors. Share of main world exporters (a)



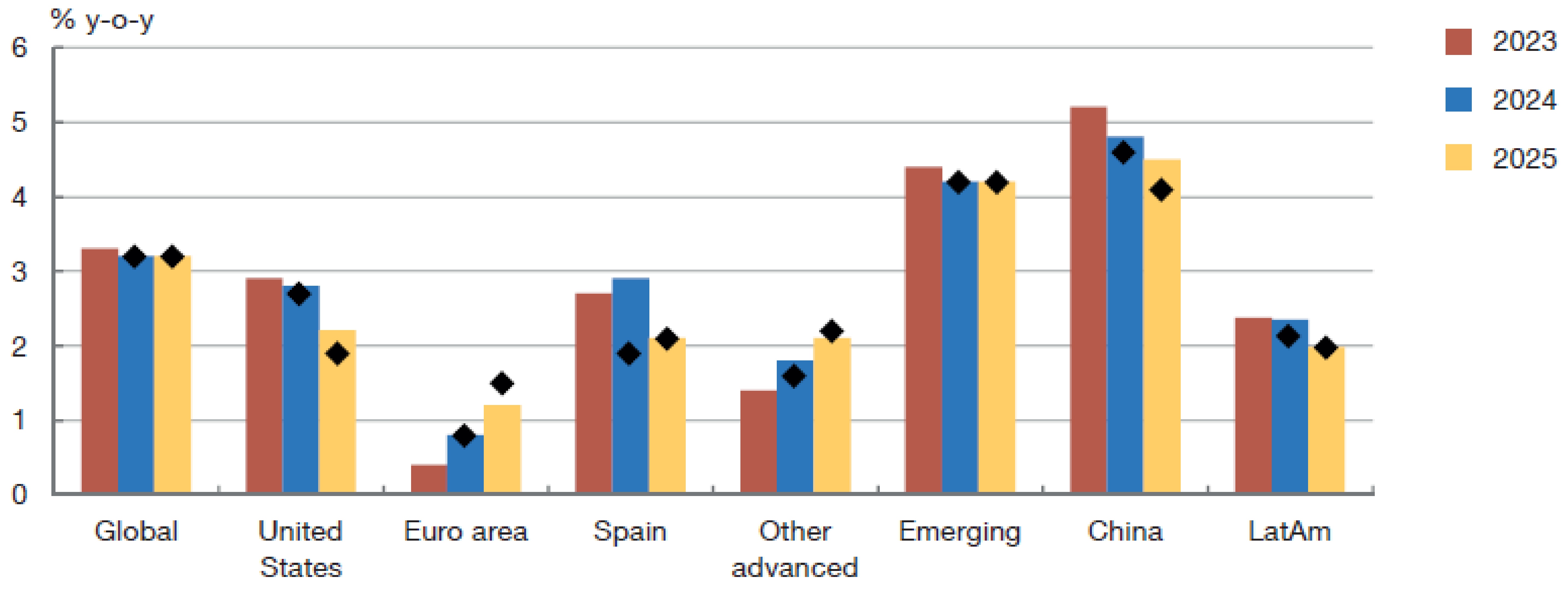
SOURCES: Centre d'Etudes Prospectives et d'Informations Internationales, Refinitiv Eikon and CPB.

a The data for China are adjusted and do not contain re-exports by Hong Kong of products from mainland China, to avoid double counting of flows.

b The spot prices for the three markets are expressed in euro for comparison purposes.

ECONOMIC GROWTH IS SHOWING SIGNS OF STABILISING WORLDWIDE …

1.1.b GDP growth forecasts (b) (c)



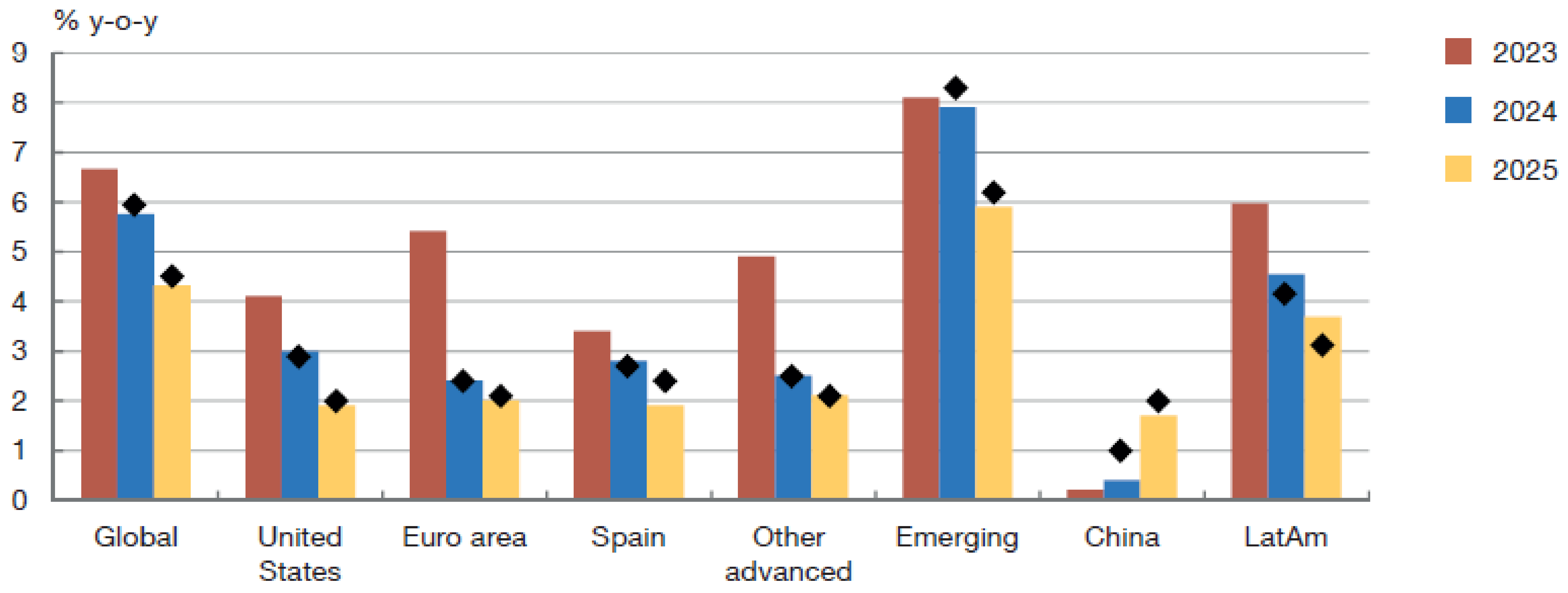
SOURCE: World Economic Outlook October 2024 (IMF).

b The bars represent the WEO October 2024 forecasts. The diamonds represent the WEO April 2024 forecasts.

c WEO aggregates except Latin America (Brazil, Chile, Colombia, Mexico, Peru).

… AGAINST A BACKDROP OF GLOBAL DISINFLATION

1.1.c Inflation forecasts (b) (c)



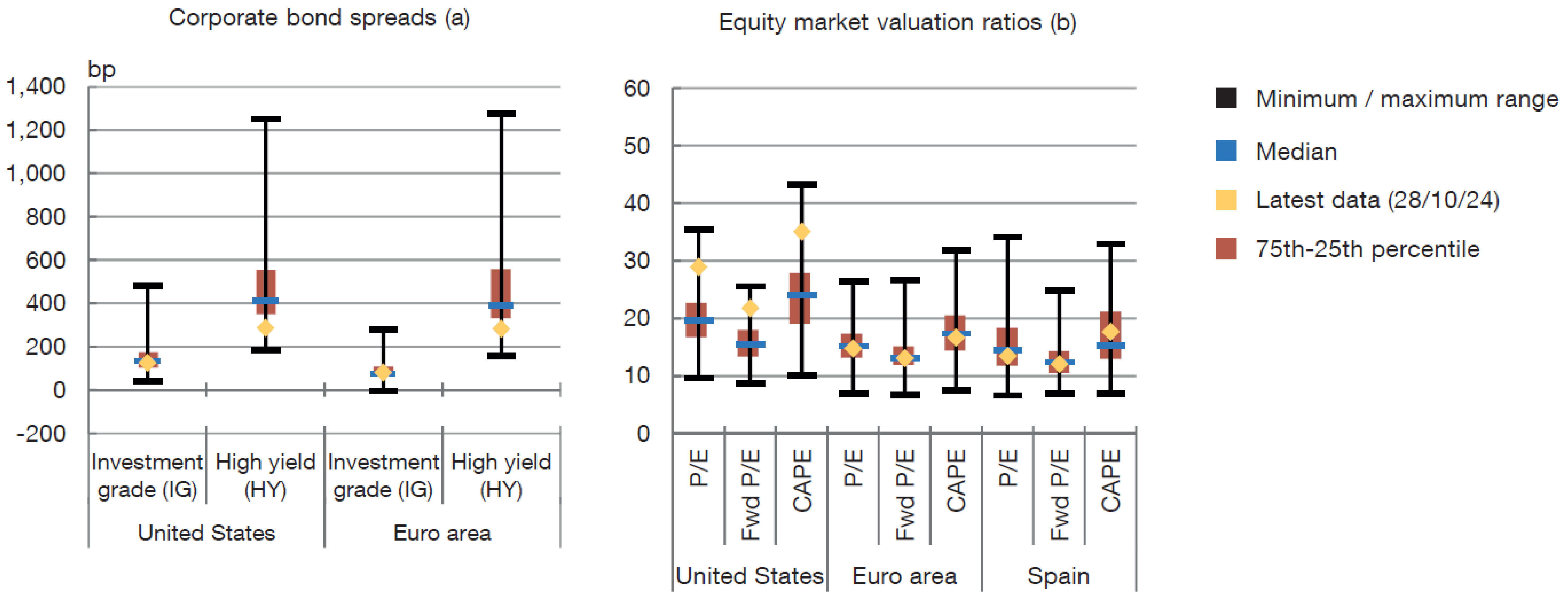
SOURCE: World Economic Outlook October 2024 (IMF).

b The bars represent the WEO October 2024 forecasts. The diamonds represent the WEO April 2024 forecasts.

c WEO aggregates except Latin America (Brazil, Chile, Colombia, Mexico, Peru).

SIGNS OF HIGH VALUATIONS PERSIST IN SOME SEGMENTS OF THE FIXED INCOME AND EQUITY MARKETS

1.4.a Corporate bond and equity market metrics



SOURCES: Refinitiv Datastream y Banco de España.

a Corporate spreads over the swap curve of the ICE Bank of America Merrill Lynch indices. Monthly series data since 1998.

b Drawing on monthly data from the stock market index series constructed by Datastream (since 1985 for the euro area and the United States and since 1987 for Spain). The sample is somewhat smaller for Spain's CAPE ratio and the euro area Fwd P/E ratio. Ratios provided by Datastream, except for the CAPE (cyclically adjusted price/earnings) ratio which is calculated as the value of the stock market index in real terms (adjusted for CPI) divided by a 10-year moving average of the index firms' earnings in real terms. The price/earnings (P/E) ratio and 1-year forward P/E (Fwd P/E) ratio capture the relationship between the stock price and earnings per share (observed or expected).

THE CONCENTRATION OF MARKET CAPITALISATION IN US TECH FIRMS POSES CERTAIN MARKET RISKS

Chart 3
Capitalisation of the S&P 500 technology indices

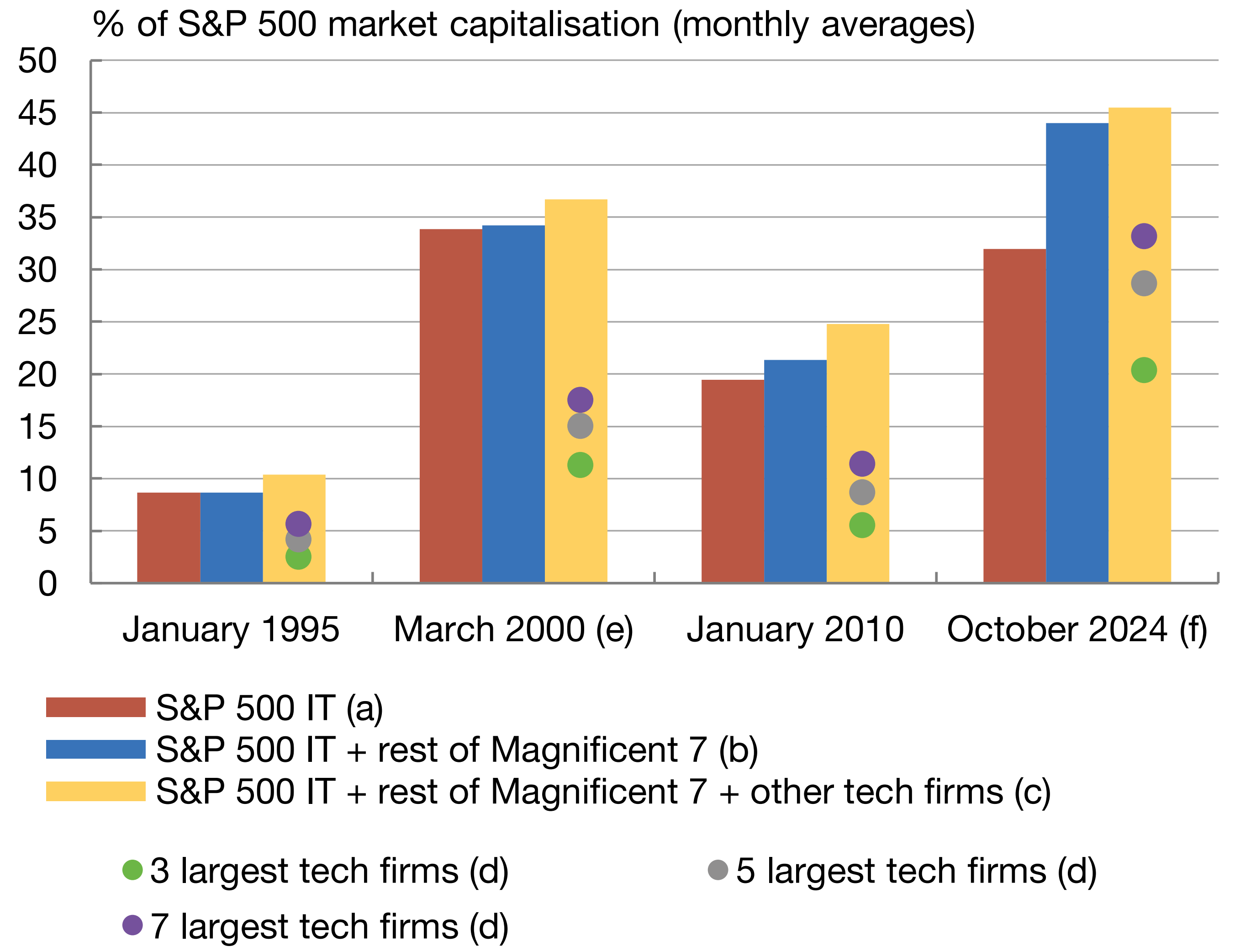
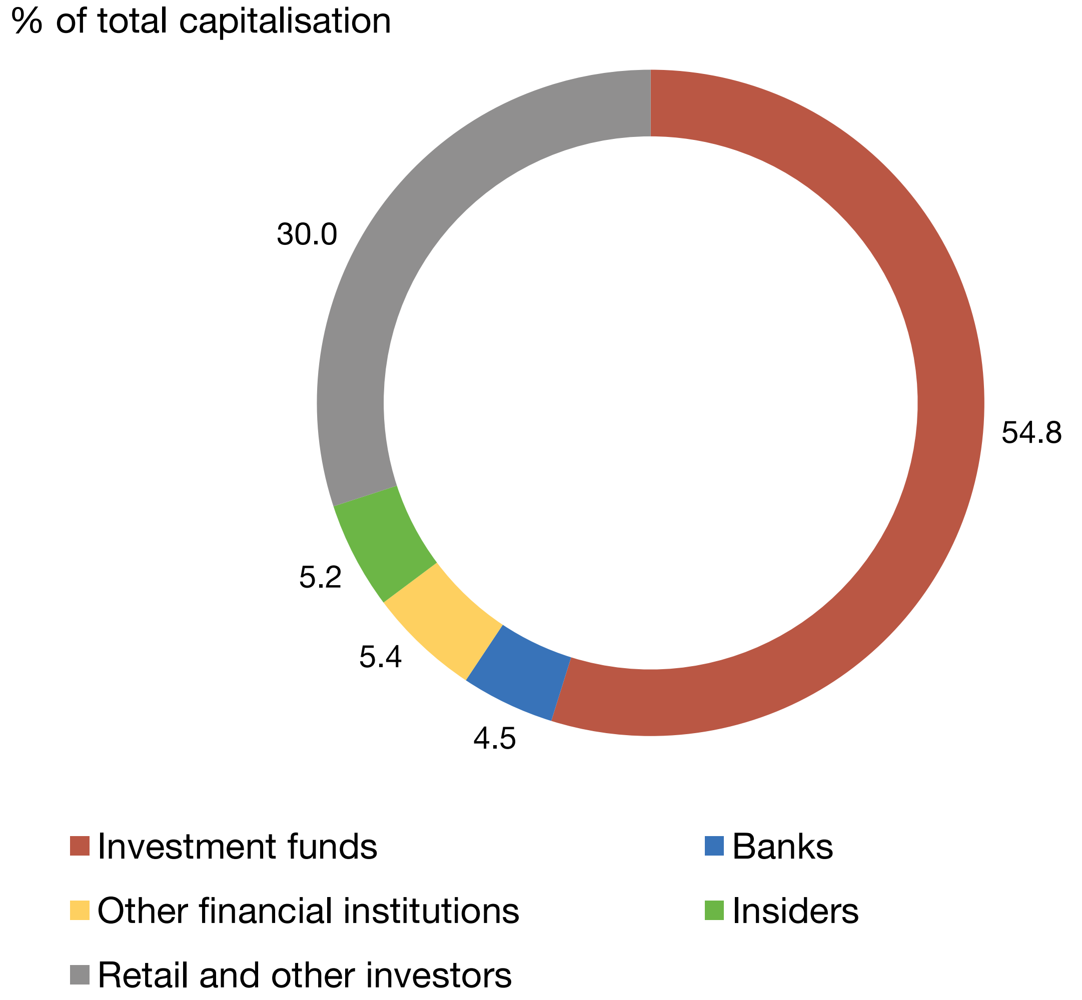


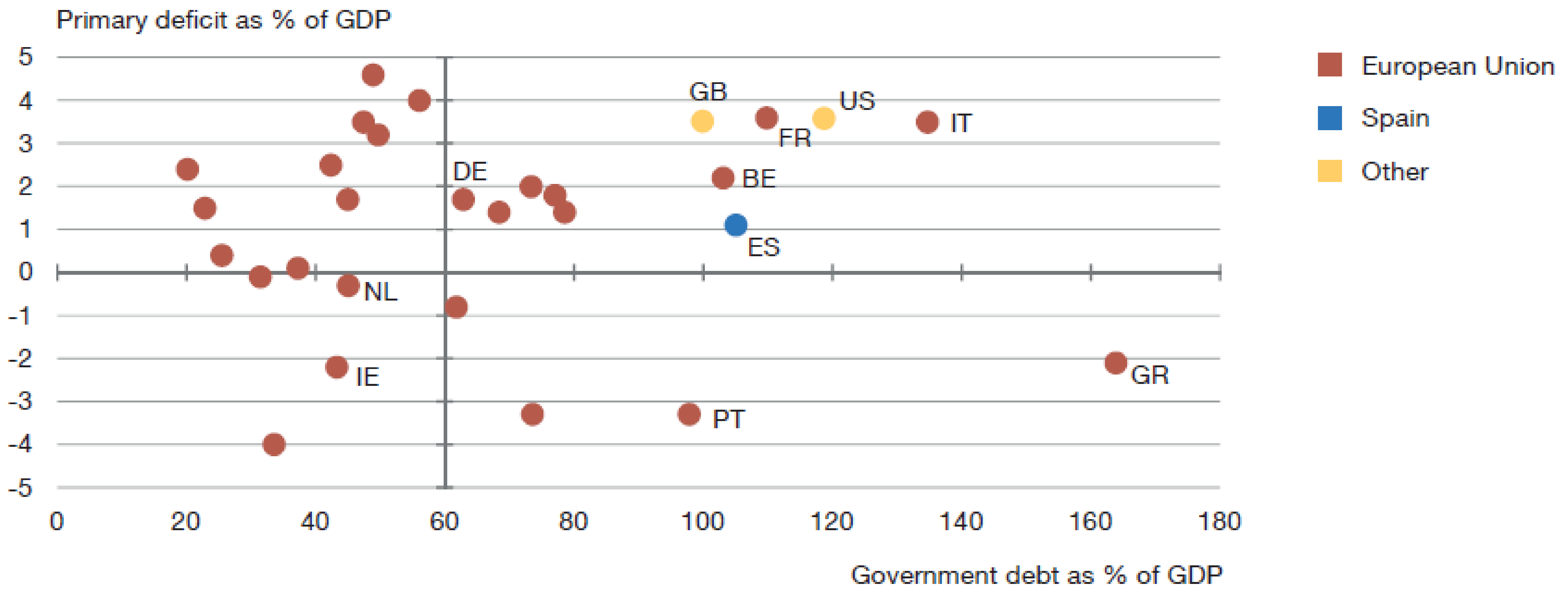
Chart 7
Ownership structure of main US tech firms by institutional sector (a)



SOURCES: Refinitiv Datastream, Banco de España and Capital IQ.
a S&P 500 IT, comprising 67 firms, including three of the Magnificent Seven (Microsoft, Apple and, since March 2000, Nvidia).
b S&P 500 IT + rest of the Magnificent Seven: includes Amazon and Alphabet since March 2000 and Meta and Tesla since September 2024.c S&P 500 IT + rest of the Magnificent Seven (see note b) + some of the most important tech firms during the dot-com period (ATT, Automatic Data Proc, Comcast, Ebay, Electronic Arts, Jack Henry & Associates, SBA Comms. and Verizon).
d Market capitalisation of the three, five and seven largest tech firms as a percentage of the broad aggregate shown in note c above.
e Month of 2000 in which, in average terms, the capitalisations of the S&P 500 and EURO STOXX technology indices as a percentage of the broad index peaked (March 2000 and February 2000, respectively).
f Monthly average up to 28/10/2024.
a Average weighted by market capitalisation for the top seven US tech firms: Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla.

PUBLIC FINANCES REMAIN A VULNERABILITY WHICH, MOREOVER, REDUCES THE GOVERNMENT'S ABILITY TO RESPOND TO SHOCKS

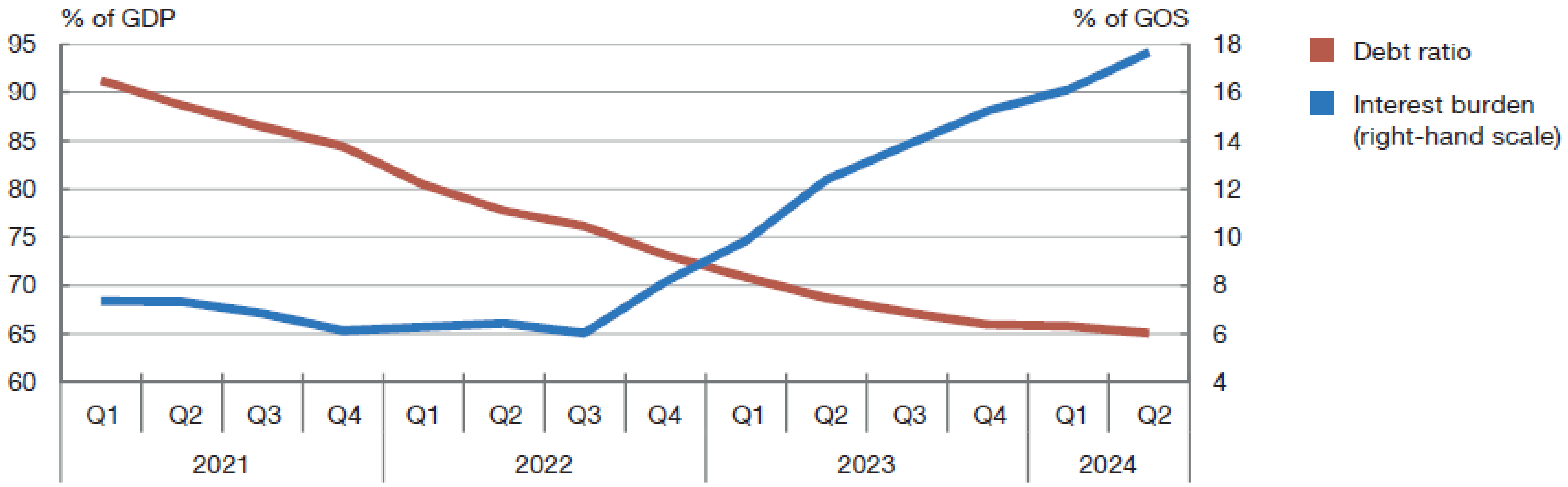
1.9.b International comparison (2023)



SOURCES: Eurostat and Banco de España.

THE SOUND PERFORMANCE OF FIRMS' REVENUES AND INDEBTEDNESS REDUCES THE RISKS ASSOCIATED WITH THE NON-FINANCIAL CORPORATE SECTOR'S DEBT BURDEN, …

1.7.b Debt ratio and interest burden (e)

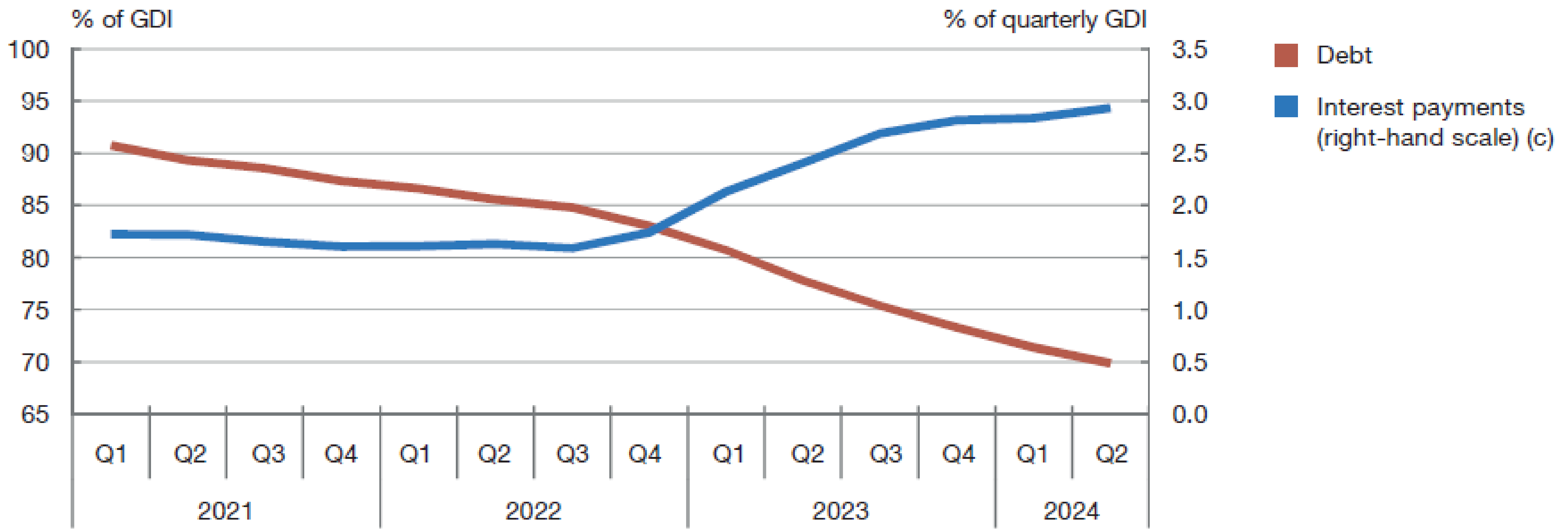


SOURCES: INE and Banco de España.

e Interest payments are quarterly data, before allocation of financial intermediation services indirectly measured (FISIM). GOS is quarterly and seasonally adjusted.

…AND THE SAME IS TRUE FOR HOUSEHOLDS

1.8.b Household debt and interest payments (b)



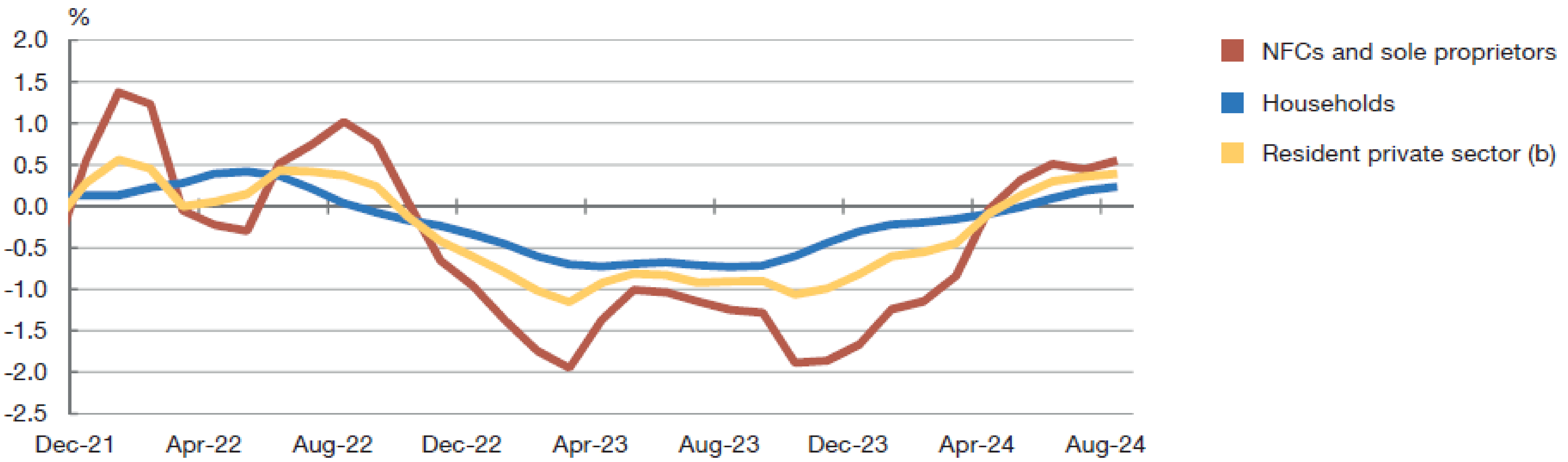
SOURCES: INE and Banco de España.

b Quarterly GDI, debt and interest payments are seasonally adjusted.

c Interest payments are quarterly data, before allocation of FISIM.

LENDING TO THE NON-FINANCIAL PRIVATE SECTOR HAS GROWN AGAIN IN RECENT QUARTERS

2.1.a Indicator of change in lending to the resident private sector (a). Business in Spain. ID



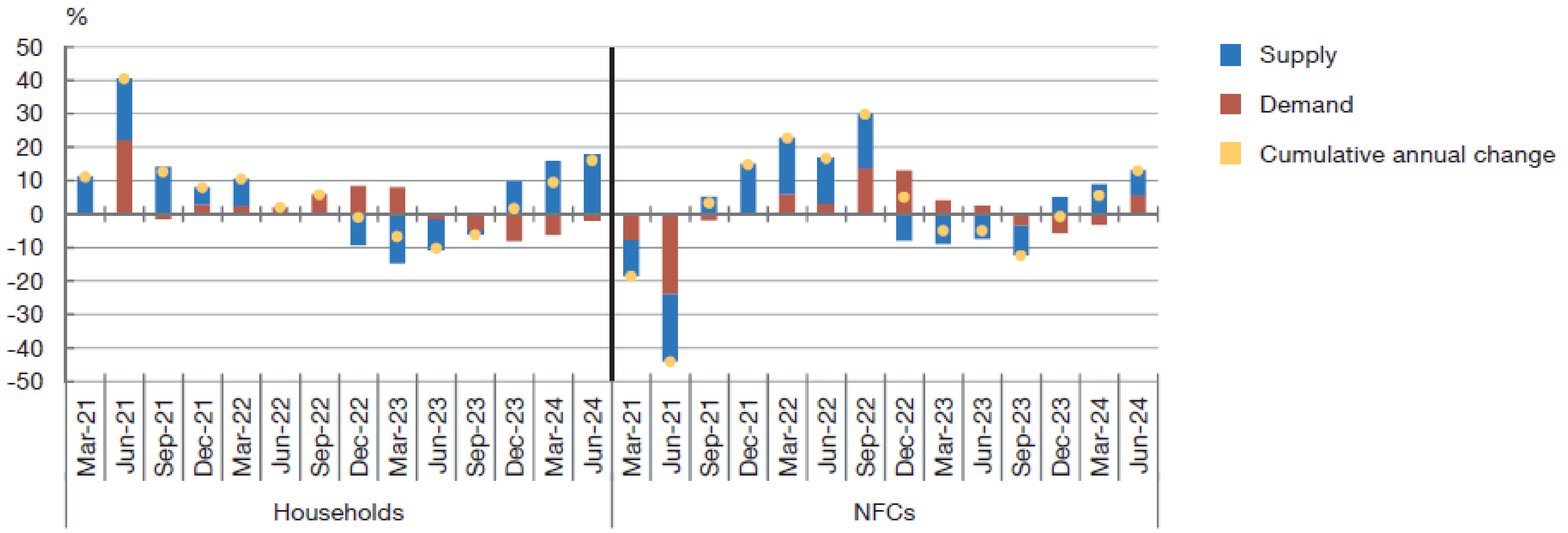
SOURCE: Banco de España.

a This monthly indicator shows the quarter-on-quarter rate of change of the three-month moving average of the seasonally adjusted lending.

b The resident private sector includes households, NFCs and sole proprietors, and financial corporations.

VOLUME AND INTEREST RATE SPREAD DATA FOR NEW LENDING POINT TO AN IMPROVEMENT IN BANK CREDIT SUPPLY CONDITIONS

3.5.a Macroeconomic decomposition of new lending to households and NFCs, by supply and demand-side factors (a)

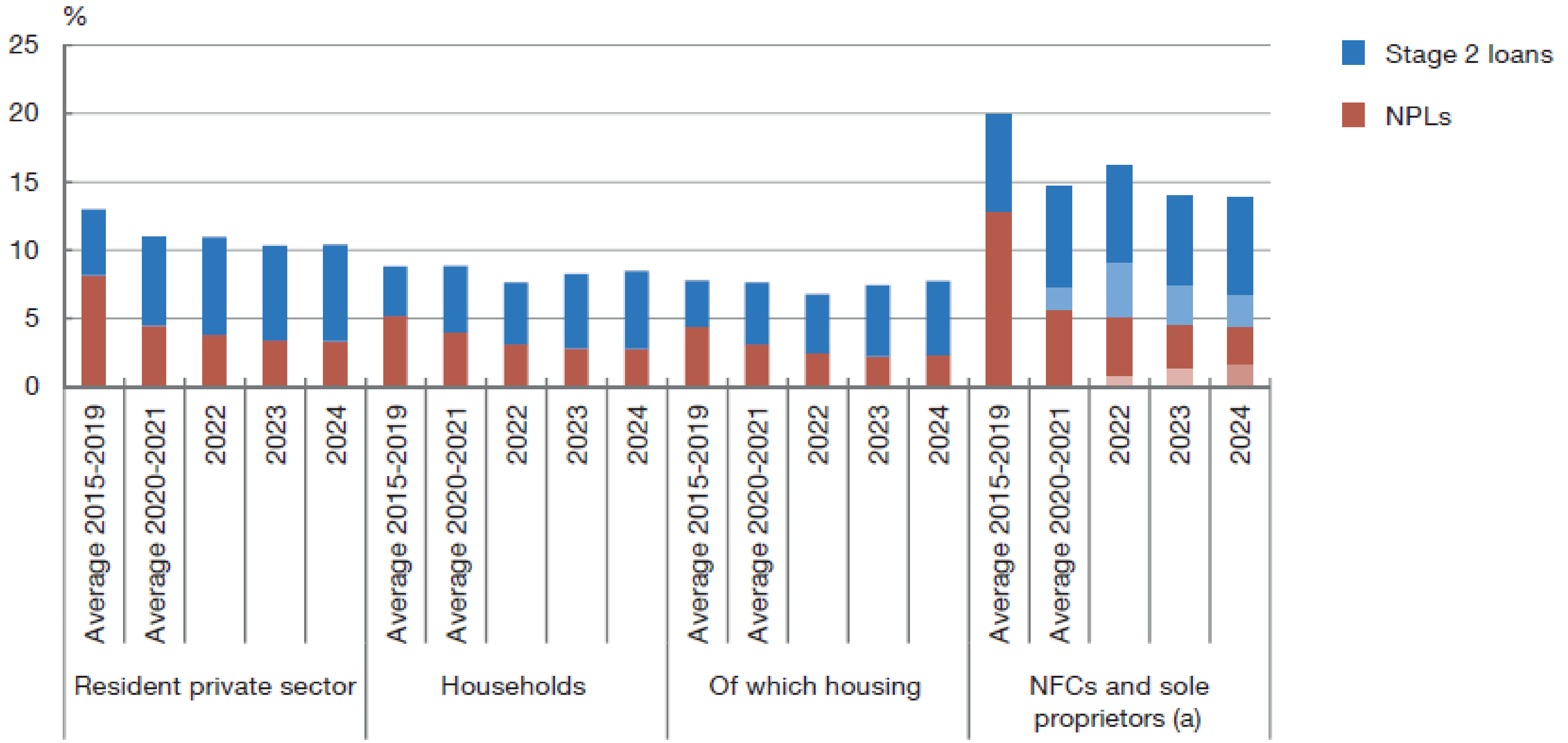


SOURCES: ECB and Banco de España.

a Cumulative year-on-year change. Supply and demand effects estimated with an S-VAR model, using data on volumes and loan-deposit interest rate spreads for new lending in euro area countries. The model is estimated by means of Bayesian inference, using a Gibbs sampling algorithm and Minnesota priors, drawing on 5,000 MCMC (Monte Carlo Markov Chain) samples out of a total of 50,000 iterations.

CREDIT QUALITY HAS REMAINED STABLE DESPITE THE SLIGHT INCREASE IN STAGE 2 LOANS, CONCENTRATED IN THE HOUSEHOLD SEGMENT

2.3.a Share of NPLs and Stage 2 loans. At June of each year. Business in Spain. ID

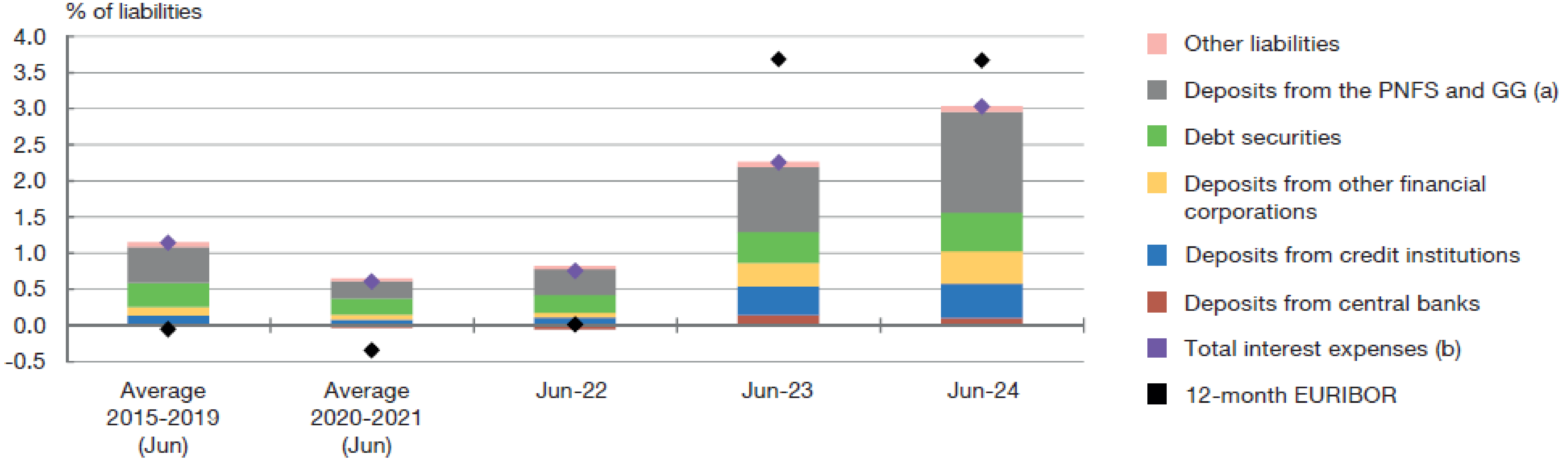


SOURCE: Banco de España.

a Lighter colours show the contribution to the ratio of ICO-backed loans to NFCs and sole proprietors.

DATA TO JUNE 2024 INDICATE THAT THE AVERAGE RATE ON BANK LIABILITIES CONTINUED TO RISE SUBSTANTIALLY IN YEAR-ON-YEAR TERMS

2.9.a Interest expenses on funding. Data at consolidated level



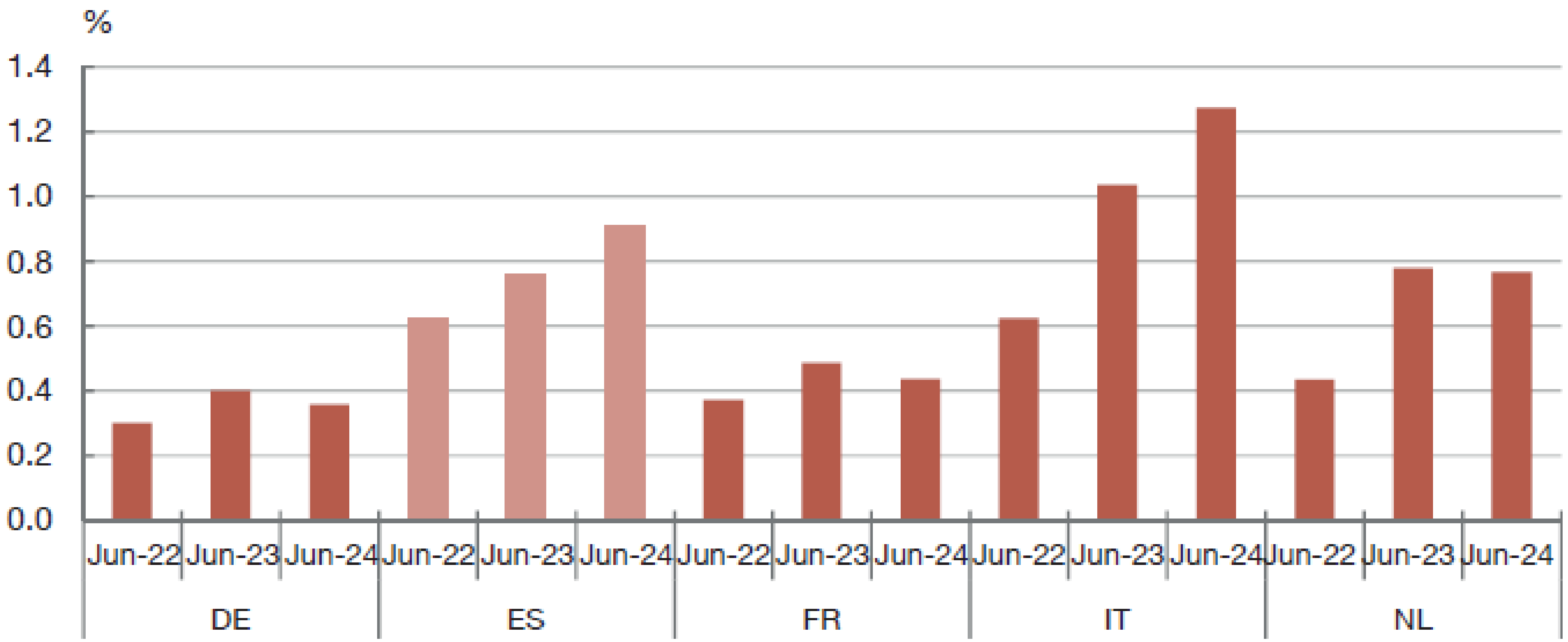
SOURCE: Banco de España.

a PNFS = private non-financial sector; GG = general government.

b Excludes expenses associated with interest rate hedge derivatives.

SPANISH BANKS' PROFITABILITY IS ONE OF THE HIGHEST AMONG THE MAIN EUROPEAN COUNTRIES

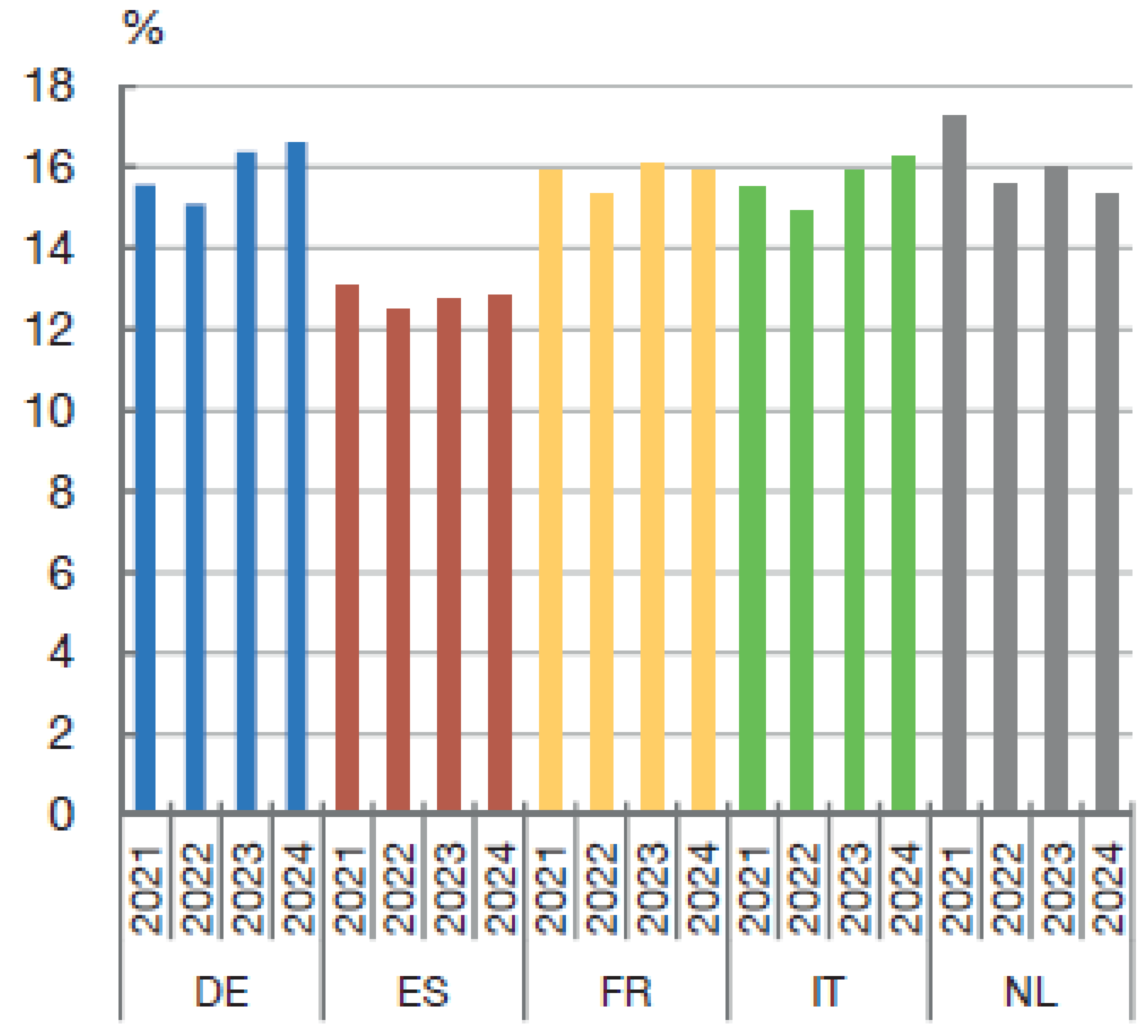
2.15.b European comparison of ROA. Consolidated data. June 2022-2024



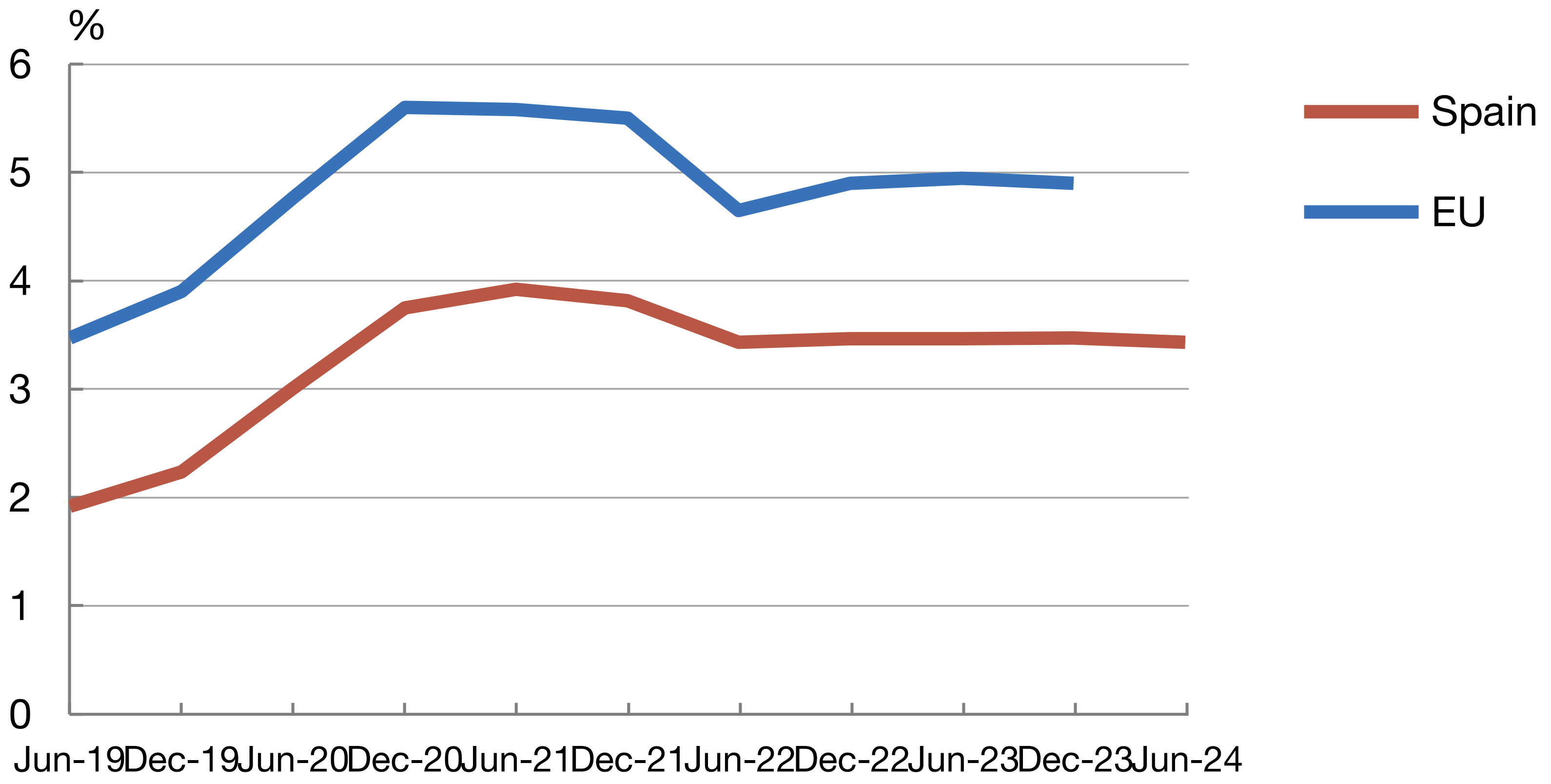
SOURCE: EBA.

THE SPANISH BANKING SYSTEM'S CET1 RATIO AND VOLUNTARY CAPITAL BUFFER HAVE HELD STEADY SINCE JUNE 2022, BELOW THOSE OF OTHER EUROPEAN BANKS

2.16.b European comparison of the CET1 ratio. Consolidated data as at June each year



2.16.c Voluntary capital component of the CET1 ratio (b). Consolidated data



SOURCES: EBA and Banco de España.

b Voluntary capital is calculated as the CET1 ratio minus the minimum CET1 requirements, the combined buffer requirements and the Pillar 2 guidance. The figures for Spain are calculated for all deposit institutions at the consolidated level. The figures for the EU refer to a sample of banks reporting to the EBA.

THE FORWARD-LOOKING EXERCISE ON SPANISH BANKS (FLESB) ENVISAGES TWO ALTERNATIVE SCENARIOS TO THE BASELINE SCENARIO WITH WORSE MACROECONOMIC AND FINANCIAL CONDITIONS

SET BY THE ECB (SREP)		SET BY THE BANCO DE ESPAÑA
BASELINE SCENARIO	ADVERSE SCENARIO	INTERMEDIATE SCENARIO
Aligned with the December 2023 Eurosystem staff Broad Macroeconomic Projection Exercise (BMPE).	Greater geopolitical tensions and value chain disruptions ➔ GDP decline, higher inflation and tightening of financial conditions	Pick-up in inflationary pressures, leading to a tightening of monetary policy

Chart 1
Macroeconomic impact. Spain (a)

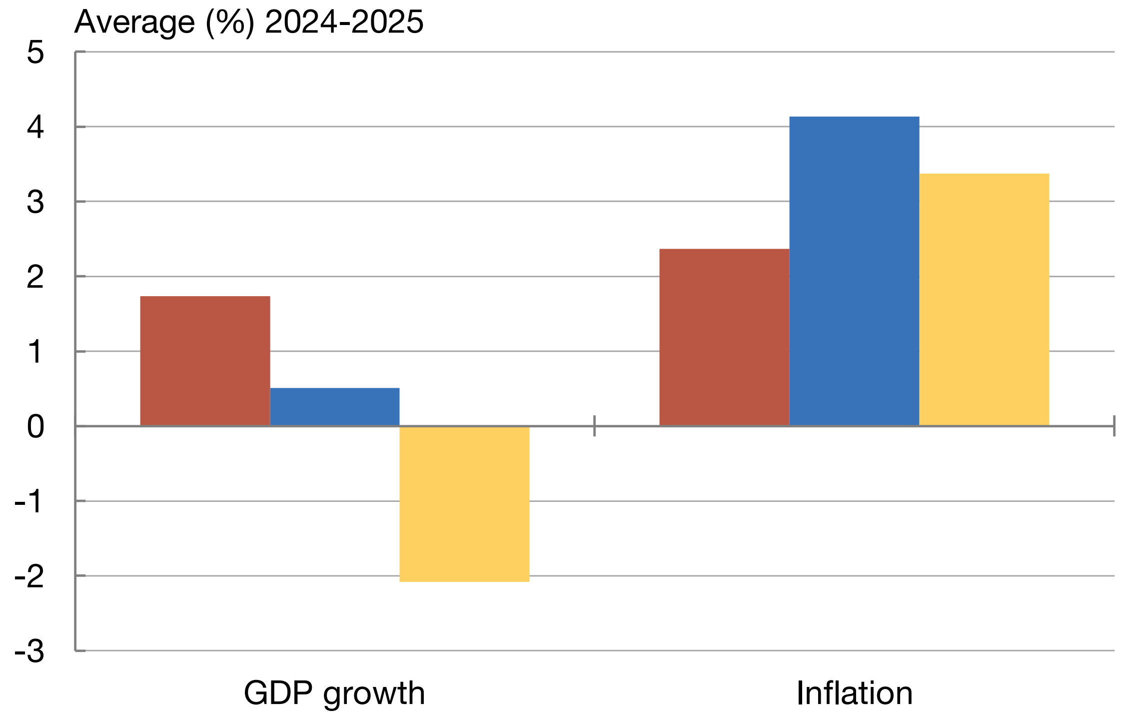
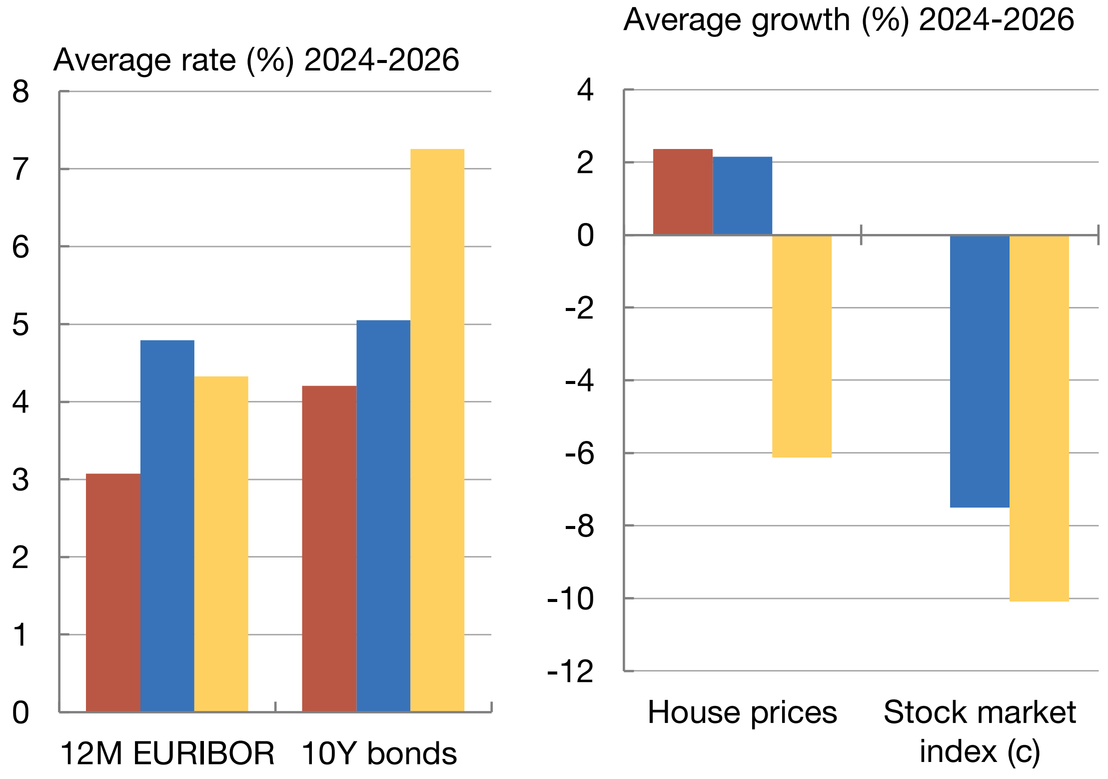


Chart 2
Impact on markets in Spain (b)



Baseline   Intermediate   Adverse

SOURCE: Banco de España.

a Inflation is calculated using the harmonised index of consumer prices (HICP).

b Changes in the valuations of equities are calculated drawing on the Madrid Stock Market General Index.

c Average stock market index growth under the baseline scenario is zero.

OVERALL, THE RESULTS INDICATE THAT THE SPANISH BANKING SYSTEM HAS AN ADEQUATE LEVEL OF RESILIENCE TO THE IDENTIFIED RISKS, WITH THE IMPACT VARYING ACROSS GROUPS

Chart 6
Impact of risk materialisation scenarios on bank solvency (a)

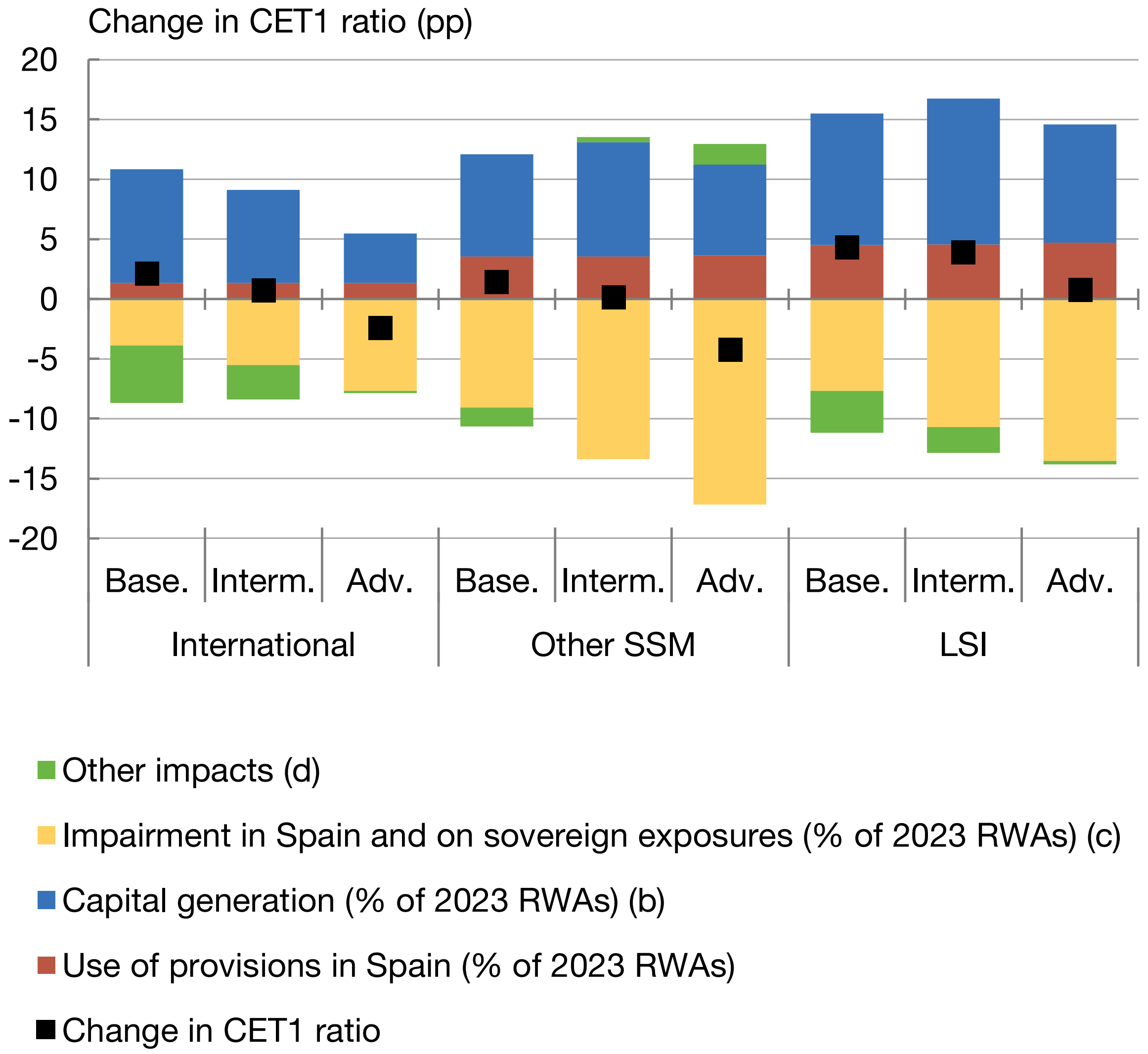
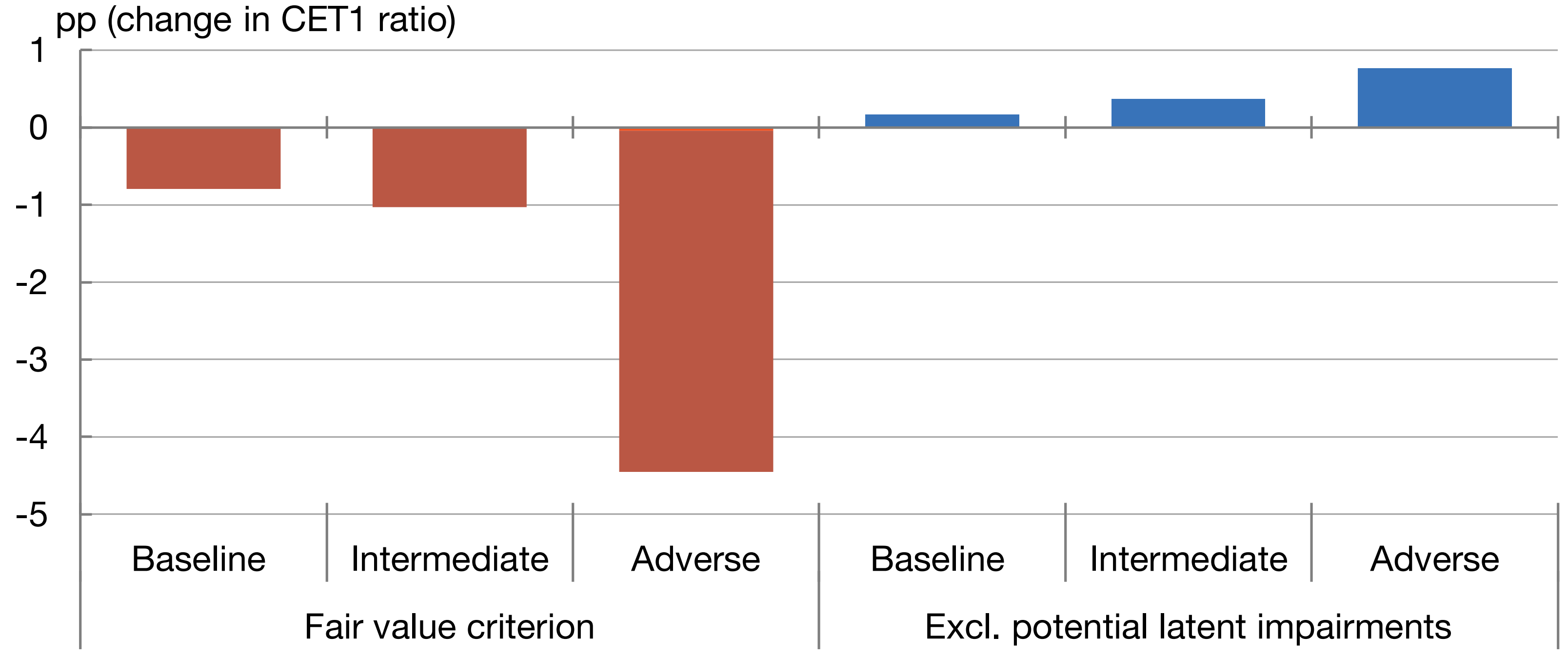


Chart 9
Sensitivities to other modelling assumptions (d)

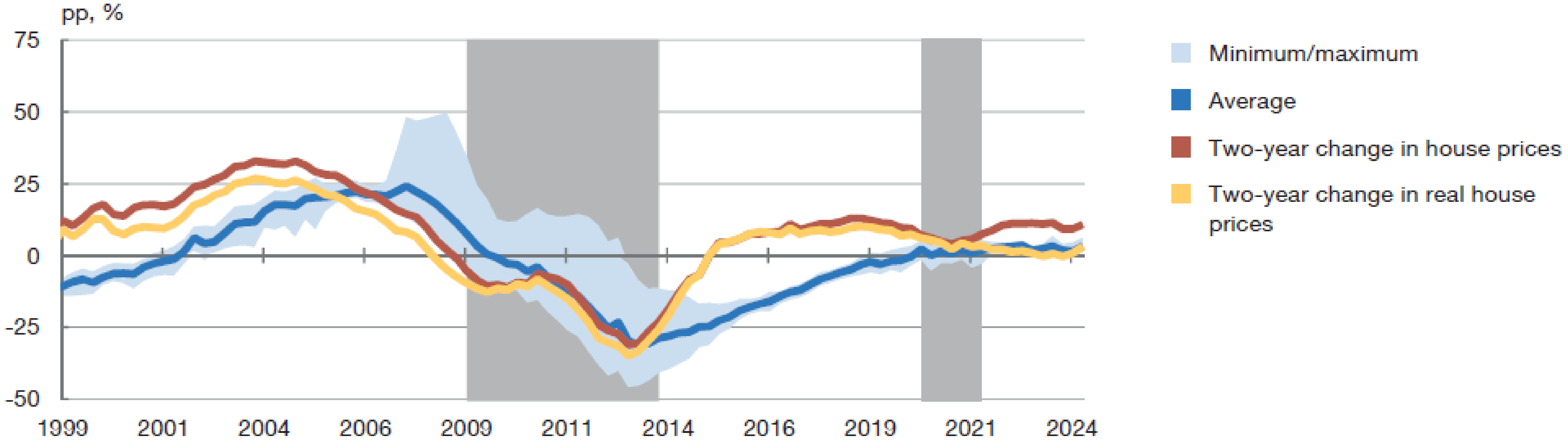


SOURCE: Banco de España.

a The impacts are defined as the expected changes in the CET1 ratio in 2026 and in different financial flows in 2024-2026 (e.g. capital generation) stemming from the materialisation of adverse changes in the macro-financial conditions envisaged in the scenarios in this box.
b The generation of loss-absorbing capital is determined by net operating income in Spain and by the net profit/loss generated abroad for banks with significant international activity.
c Impairment losses on loans and foreclosed assets in operations in Spain and impact on capital of the potential impairment of sovereign exposures at consolidated level.
d Other consolidated gains and losses, tax effects, exchange rate effects, distribution of profit, coverage of losses on ICO-backed loans by the Government and changes in RWAs.
d Shown are the differences in the average CET1 capital ratios of SIs and LSIs projected for 2026 in the sensitivity exercises compared with those projected in the main solvency exercise. The sensitivity exercises consider the following impacts: i) the effect of reclassifying all sovereign bond exposures at fair value, and ii) the effect of excluding from the exercise the impact of potential latent losses accumulated during the period 2020-2023 in the corporate credit portfolio as a result of the extraordinary crises that arose in this period.

THE SOUND PERFORMANCE OF HOUSEHOLD INCOME HAS PREVENTED THE EMERGENCE OF SIGNS OF UPWARD HOUSE PRICE IMBALANCES

3.4.a Indicators of house price imbalances (a) (b)



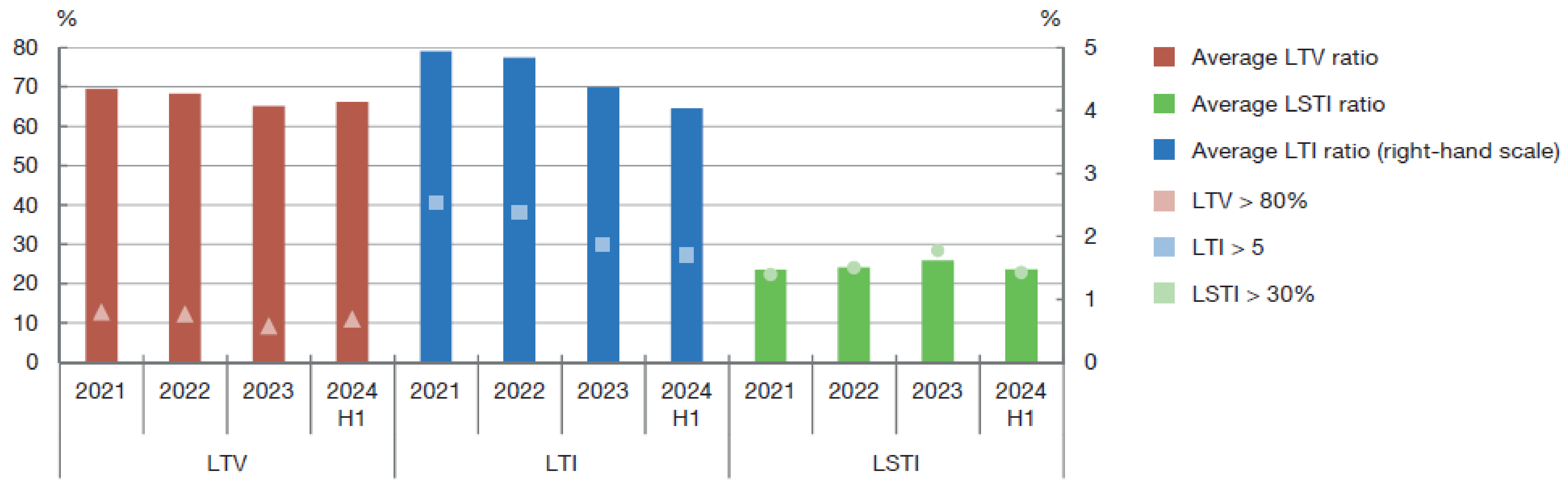
SOURCES: Banco de España and INE.

a The vertical grey shaded areas denote the periods of the two financial crises in Spain since 2009: the last systemic banking crisis (2009 Q1-2013 Q4) and the economic crisis triggered by the COVID-19 pandemic (2020 Q1-2021 Q4). Data updated as at June 2024.

b The blue shaded area denotes the minimum and maximum values of four indicators of house price imbalances: (i) the real house price gap; (ii) the house price-to-household disposable income ratio gap; (iii) the ordinary least squares (OLS) model, which estimates house prices based on long-term trends in household disposable income and mortgage rates; and (iv) the error correction model that estimates house prices based on household disposable income, mortgage rates and fiscal effects. The long-term trends for indicators (i) to (iii) are calculated using a statistical one-sided Hodrick-Prescott filter with a smoothing parameter equal to 400,000. All four indicators have an equilibrium value of zero. The cumulative two-year growth in nominal and real house prices is also depicted.

CREDIT STANDARDS TIGHTENED MODERATELY IN RELATION TO INCOME, WHILE THEY EASED SLIGHTLY IN RELATION TO COLLATERAL

3.7.a Credit standards for new mortgage lending to households (a) (b) (c)



SOURCE: Banco de España.

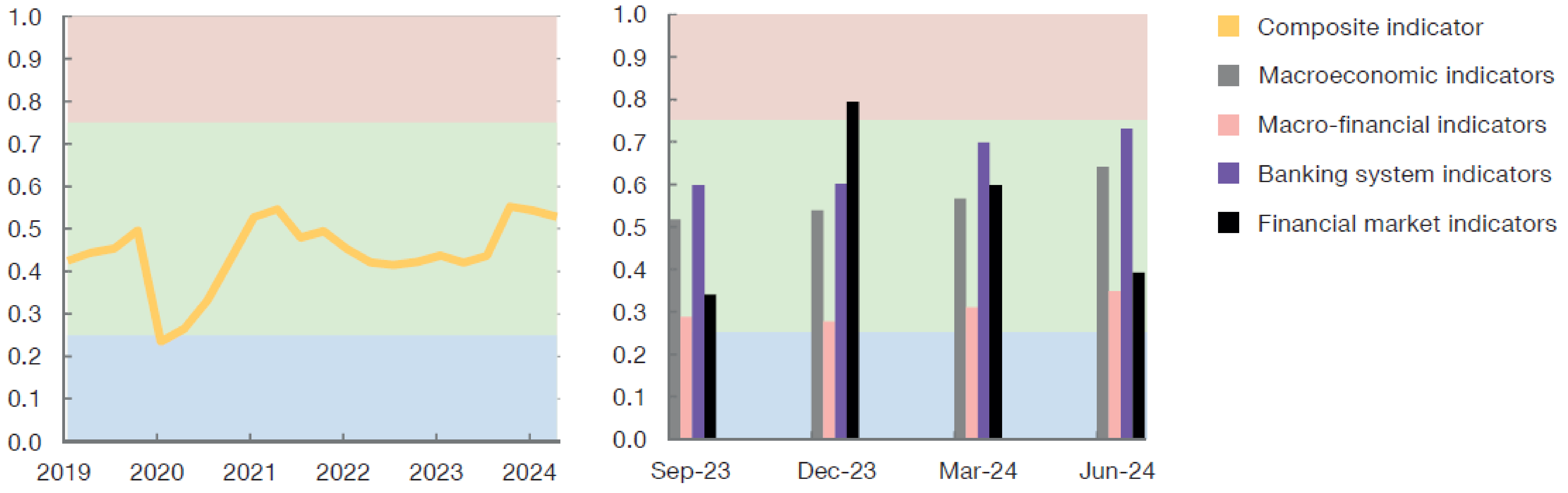
a The LTV ratio is the amount of the mortgage principal relative to the appraisal value of the property. The average LTV ratios are weighted by the principal of each mortgage and calculated for new mortgages.

b The LTI ratio is estimated for each mortgage as the ratio of the initial mortgage amount to the household's net income. The definition of income used in this report has been revised to align it with Recommendation ESRB 2016/14. This entails using net household income rather than gross income as had previously been the case. Specifically, up to 2021 average net income by postcode, available in the Household income distribution map for Spain provided by the INE, was used. Given that this information is only available with a two-year lag (as it is based on tax data), to infer household income for the period 2021-2023 we extrapolate the income data for 2020 using aggregate information for the entire country on the course of net household income, which is also provided by the INE. Since 2024, banks have started to report to the Central Credit Register (CCR) more detailed information on the income declared in order to grant each new mortgage. This definition of income is aligned with the guidelines established in Recommendation ESRB 2016/14, as stipulated in Banco de España Circular 2/2023 on the CCR. A value for income based on the information available by postcode is imputed to those loans in the CCR with empty or ineligible values for 2024 for the required income data.

c The average LTI and LSTI ratios are calculated as the averages of those ratios in each mortgage weighted by their relative share (in terms of the principal) in the total mortgage portfolio for which the information needed to calculate the ratio is available.

CYCLICAL SYSTEMIC RISKS ARE AT A STANDARD LEVEL; IF THIS SITUATION CONTINUES, THE CCyB WILL BE RAISED BY A FURTHER 0.5 PP AT THE END OF NEXT YEAR

3.1.a Composite indicators (a)



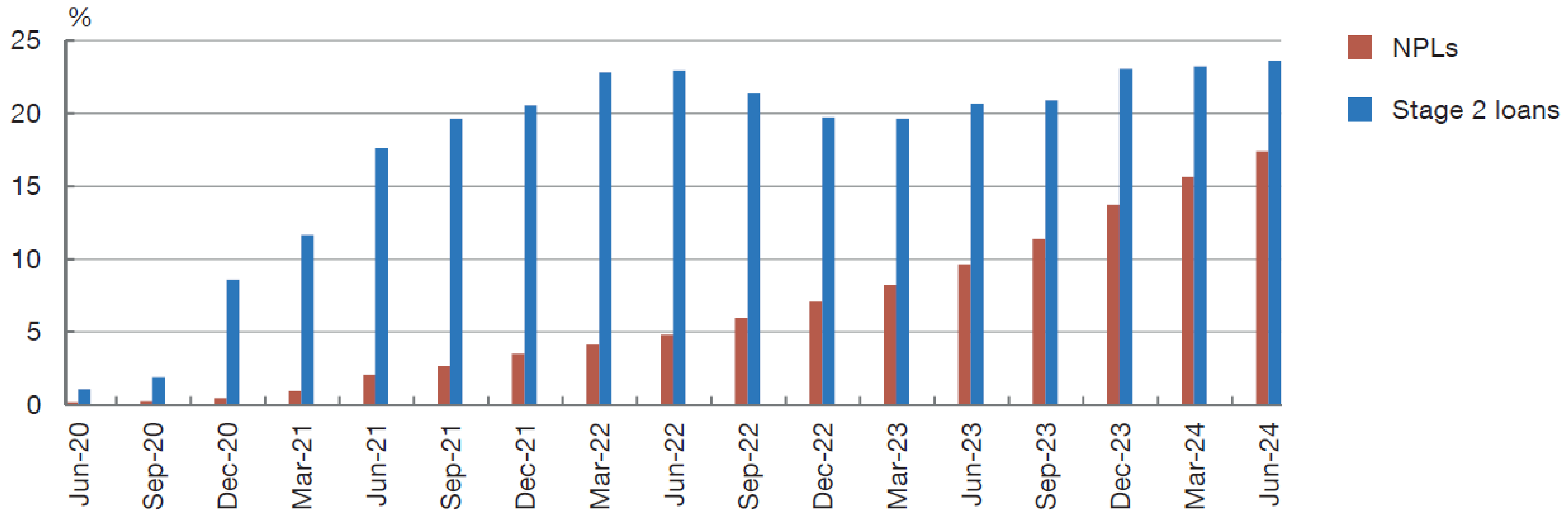
SOURCES: Banco de España, INE and Datastream.

a Data updated as at June 2024. The indicators are defined between 0 and 1 on the basis of the percentile relative to their historical distribution. The blue (green) [red] shaded areas correspond to a signal of a low (standard) [high] level of cyclical systemic risk.

Thank you very much.

THE QUALITY OF THE ICO PORTFOLIO IS WORSE THAN THAT OF OVERALL CORPORATE LENDING, BUT IT ACCOUNTS FOR A LIMITED PROPORTION OF SUCH LENDING AND CONTINUES TO DIMINISH

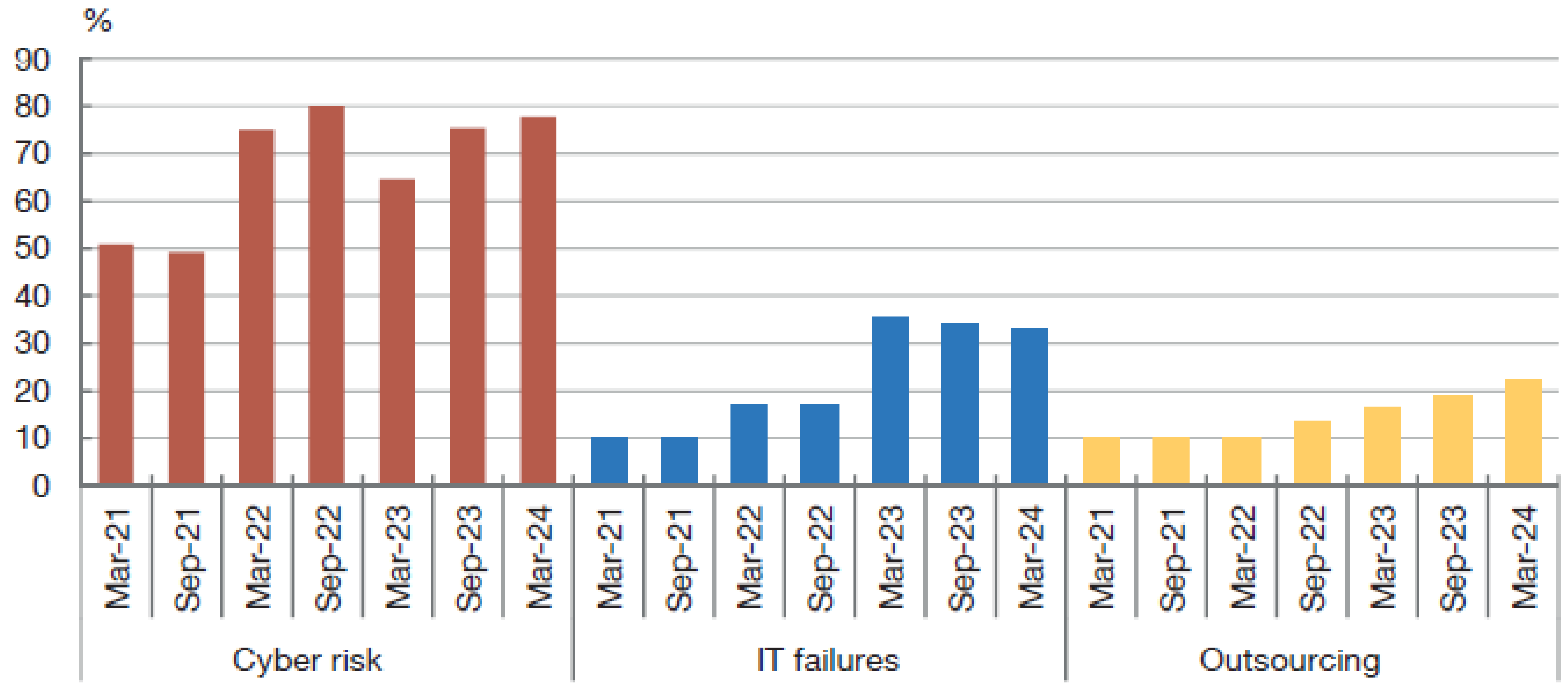
2.3.c NPL and Stage 2 ratios of ICO-backed loans. Business in Spain. ID



SOURCE: Banco de España.

CYBER RISKS ARE A POTENTIALLY SIGNIFICANT SOURCE OF OPERATIONAL COSTS

2.14.a Technological drivers of operational risk perceived by banks in Europe (a)

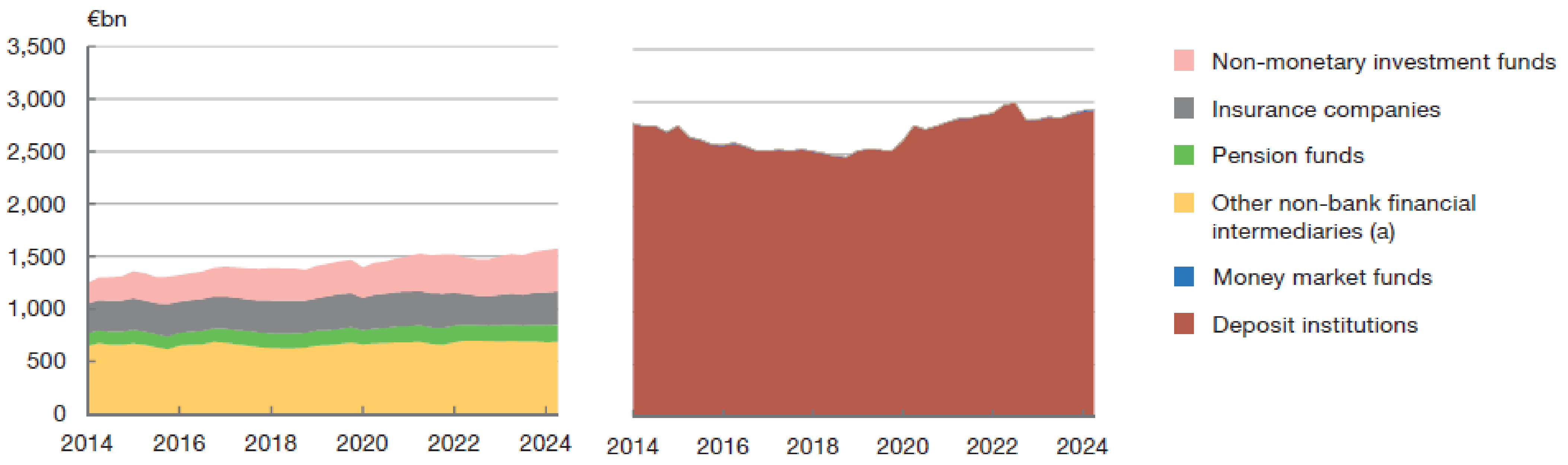


SOURCE: EBA.

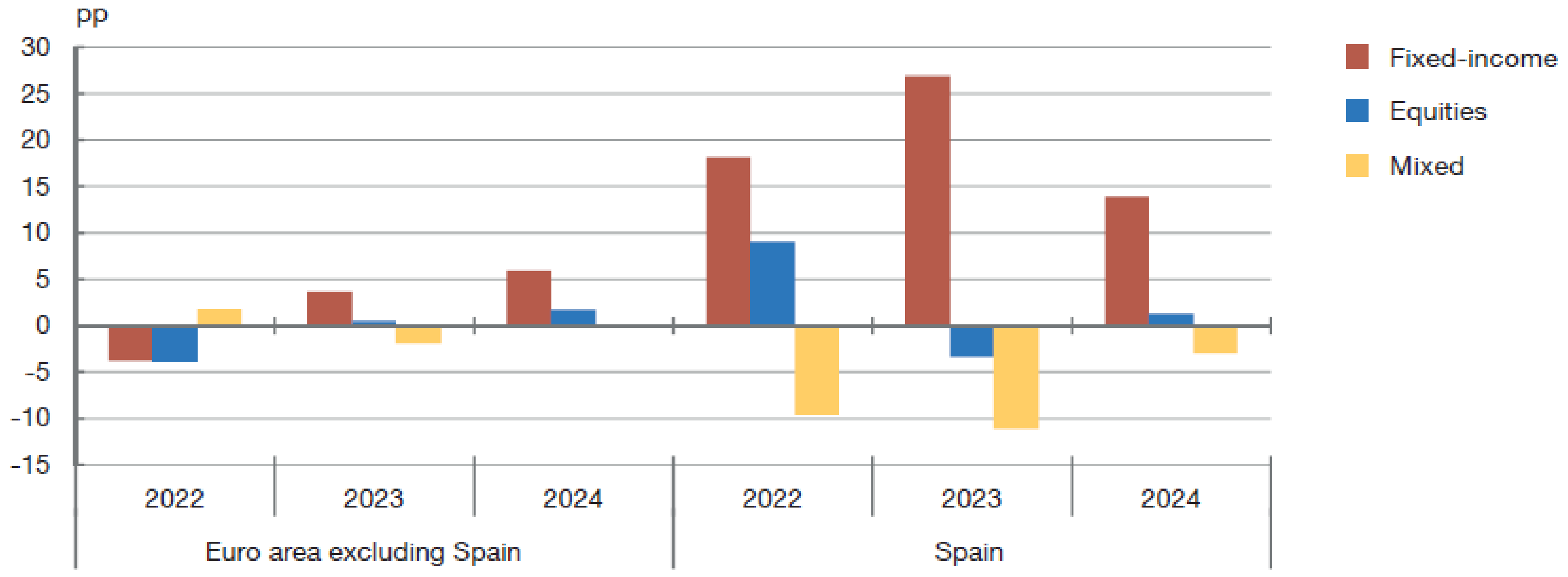
a The data reflect the frequency of various technological factors in banks' responses to a survey about the three main drivers of operational risk as seen by banks. The responses relating to non-technological drivers have been omitted in this chart.

THE NON-BANK FINANCIAL SECTOR REMAINS ON A MODERATE GROWTH PATH, DRIVEN PARTICULARLY BY INVESTMENT FUNDS

2.17.b Total assets of the different financial sectors in Spain. Non-consolidated data



2.18.a Investment fund flows (a)



SOURCES: Banco de España and ECB.

a Other non-bank financial intermediaries include SLIs, venture capital companies, securities dealer companies, special-purpose vehicles, central counterparty clearing houses, real estate investment trusts, securities agencies, collective investment institution management companies, mutual guarantee societies, financial group head offices, appraisal companies, payment institutions, holding companies, special-purpose entities that issue securities and other specialised financial institutions. In Spain holding companies and special-purpose vehicles accounted for 52% and 24%, respectively, of the sector's total assets in 2023 Q4 (€638 billion).

a Accumulated change in net capital inflows or outflows of investment funds in each area and year (data is available up to August 2024). This change is expressed as a percentage of the value of the funds' outstanding shares at a start date (January 2020). This value is similar to that of funds' assets excluding leverage. Capital inflows and outflows are proxied by the transactions of shares or units issued by the funds.