



EUROPEAN CENTRAL BANK

EUROSYSTEM

The banking channel of monetary policy

Online seminar on “Monetary Policy and Banks' Business Strategies”, organised by the Florence School of Banking and Finance as part of the Bank Board Academy

15 February 2024



Philip R. Lane
Member of the Executive Board

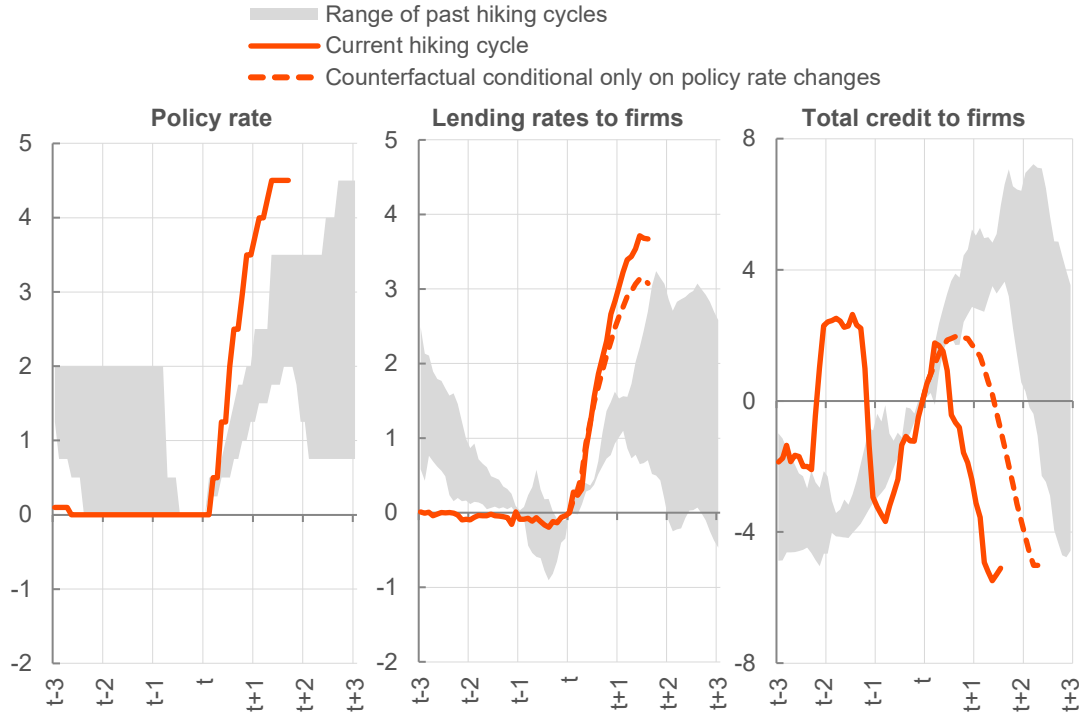
- ❑ Continued strong transmission of policy rate hikes to broader financing conditions

- ❑ Heterogeneous monetary policy transmission due to:
 - ✓ Bank funding, liquidity and asset quality
 - ✓ Firm size, liquidity and economic sector
 - ✓ Household income and exposure to interest rate changes

- ❑ Impact of policy tightening is still unfolding

Monetary policy transmission across hiking cycles

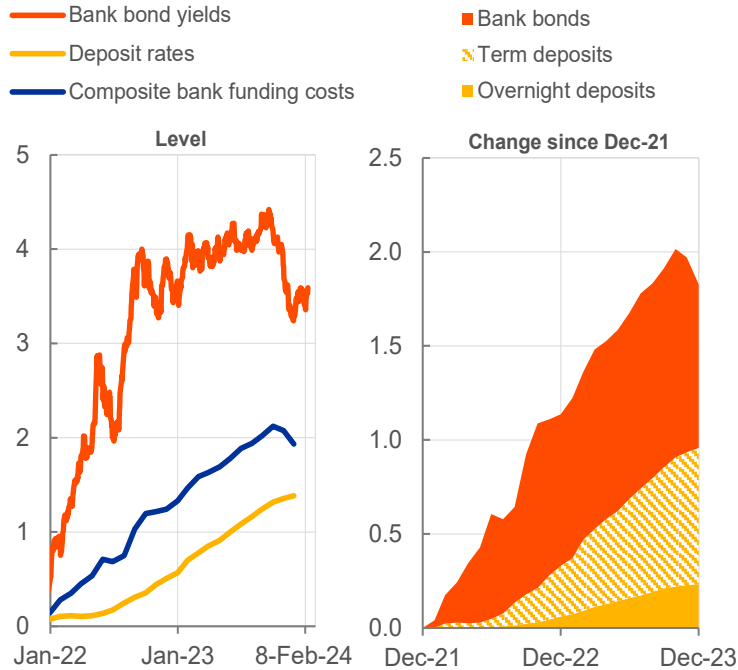
(horizontal axis: years; vertical axis: cumulative changes in p.p. for rates, credit growth in deviation from the start of the cycle (t) in p.p. for total credit to firms)



Sources: ECB (BSI, CSEC, MIR) and ECB calculations.

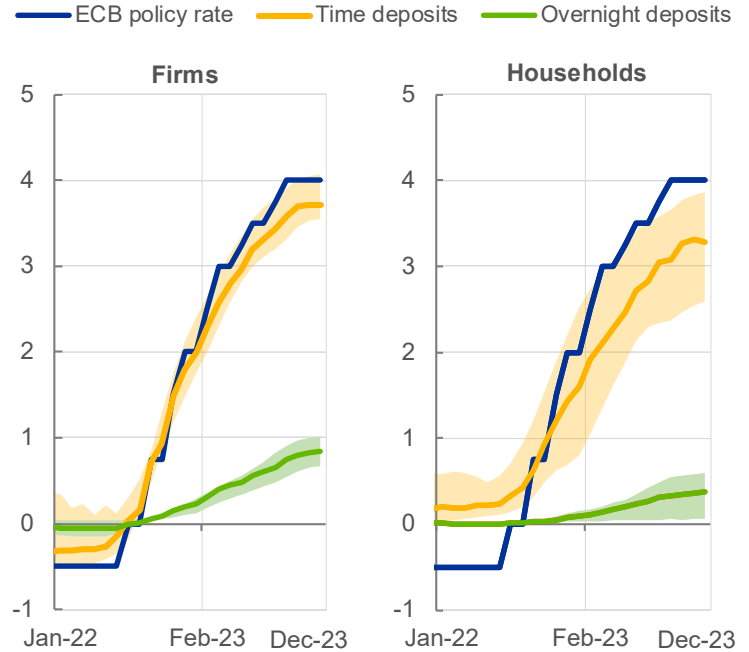
Notes: The relevant ECB policy rate is the Lombard rate of the Bundesbank up to December 1998, the ECB MRO up to May 2014 and the ECB DFR thereafter. Total credit are loans and debt securities. MFI loans are adjusted for sales and securitisation and cash pooling. Starting months correspond to the month immediately preceding the first hike or explicit announcement of the hike of the cycle. Hiking cycles considered starting in: June 1988, October 1999, November 2005 and May 2022. The dotted lines shows counterfactuals for lending rates and lending volumes, taking December 2021 as the last observation and projecting volumes conditional on the path of monetary policy rates. The exercise for lending rates is based on pass-through equations. The one for lending volumes is based on the BVAR model in Altavilla, Giannone, and Lenza (2016). Latest observations: December 2023, January 2024 for the policy rate.

Bank funding cost (percentages per annum)



Sources: ECB (BSI, MIR), IHS Markit iBoxx and ECB calculations.
 Notes: Daily bank bond yields. Monthly deposit rates on new business volumes weighted by outstanding amounts. Composite funding costs are a weighted average of deposit rates and average monthly bond yields, with outstanding amounts as weights. Right chart shows the contributions of the components to the change in the composite bank funding cost between December 2021 and November 2023.
 Latest observations: 8 February 2024 for bond yields; December 2023 for other series.

Policy and deposit rates (percentages per annum)

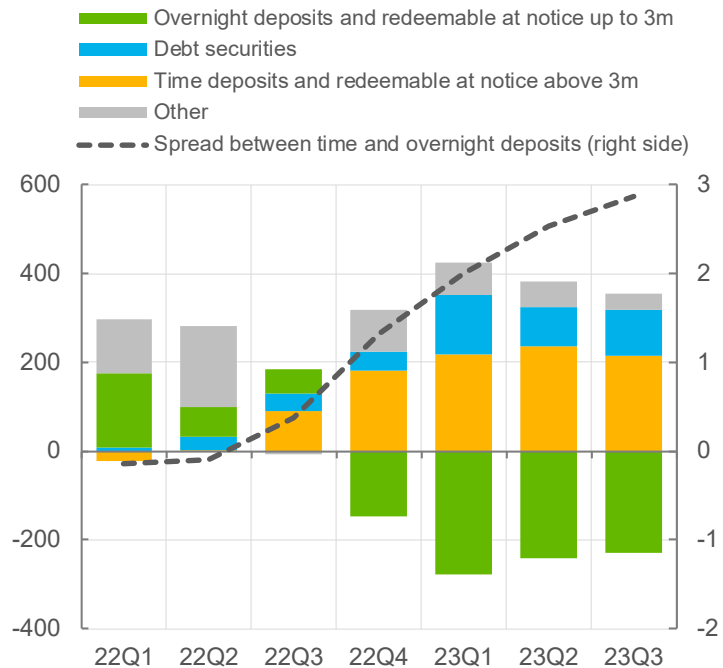


Sources: ECB (MIR, FM) and ECB calculations.
 Notes: Time deposits refer to deposits with agreed maturity of up to 2 years. Shaded areas show ranges across Germany, Spain, France and Italy.
 Latest observation: December 2023.

Deposit outflows across banks

Financial investments of households and firms

(left side: quarterly flows in EUR billions; right side: percentage points)



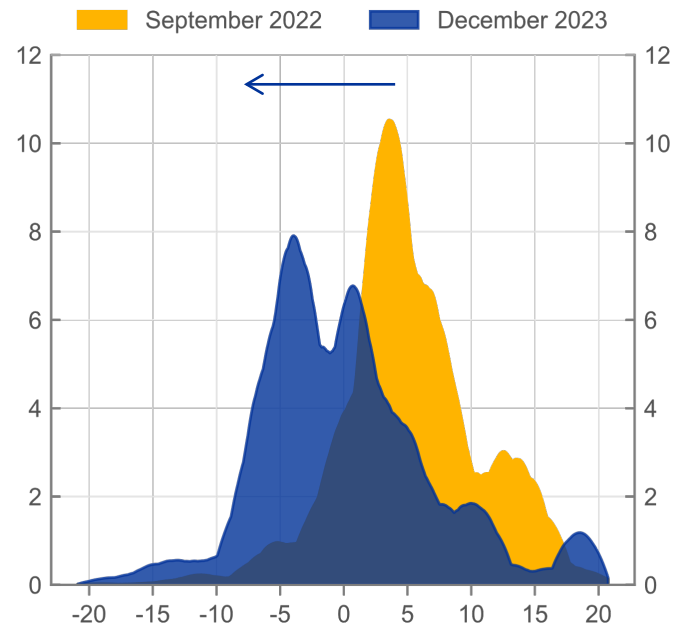
Sources: ECB (BSI, QSA, SHSS, MIR, FM) and ECB calculations.

Notes: "Others" include shares (listed and not listed as well as those issued by investment funds), and insurance and pension schemes. Government bonds for spread calculations are 10y GDP-weighted.

Latest observation: Q3 2023.

Deposit growth across banks

(x-axis: y-o-y growth in deposits; y-axis: density)



Sources: ECB (IBSI) and ECB calculations.

Note: The chart plots the kernel density of year-on-year growth of M3 deposits of NFPS at the bank level weighted by volumes for September 2022 and December 2023.

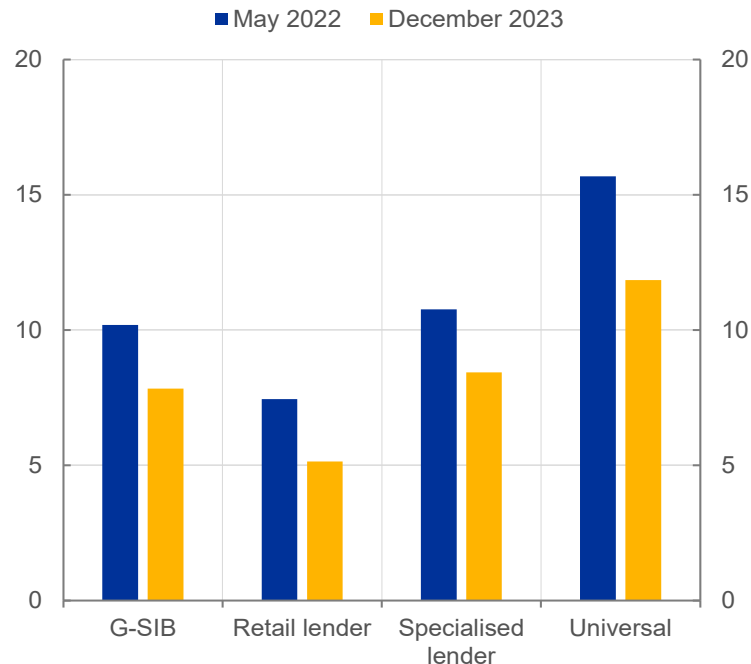
Latest observation: December 2023.

Gradual reabsorption of central bank liquidity

Excess liquidity (percentages of total assets)



Excess liquidity by business model (percentages of total assets)



Sources: ECB (BSI) and ECB calculations.

Notes: Excess liquidity is defined as the sum of banks' reserves deposited with the Eurosystem in the current account and deposit facility net of their minimum reserve requirements.

Latest observation: December 2023.

Sources: ECB (iBSI, ILM), BLS contact group and ECB calculations.

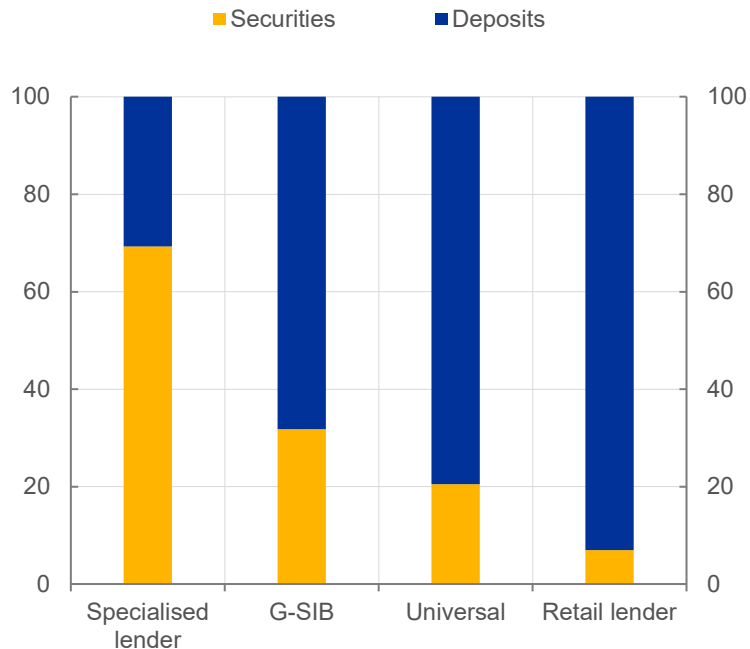
Notes: Excess liquidity is defined as the sum of banks' reserves deposited with the Eurosystem in the current account and deposit facility net of their minimum reserve requirements.

Latest observation: December 2023.

Heterogeneity in bank funding and lending across bank business models

Bank funding sources

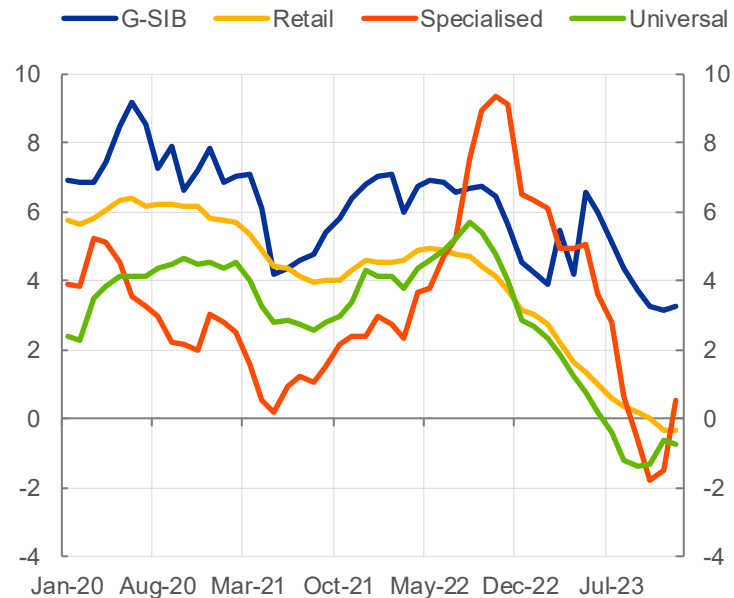
(percentages of securities and deposits)



Sources: ECB (IBSI, iMIR) MPC Task Force on Banking Analysis and ECB calculations.
 Note: The chart represents the relative share of NFPS deposits and securities in liabilities by bank business model.
 Latest observation: December 2023.

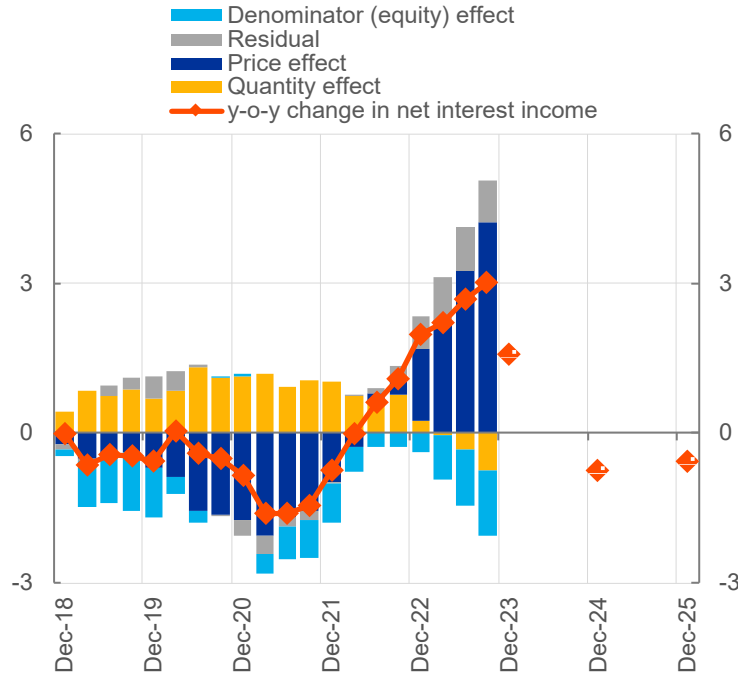
Bank lending to NFPS

(annual percentage change)

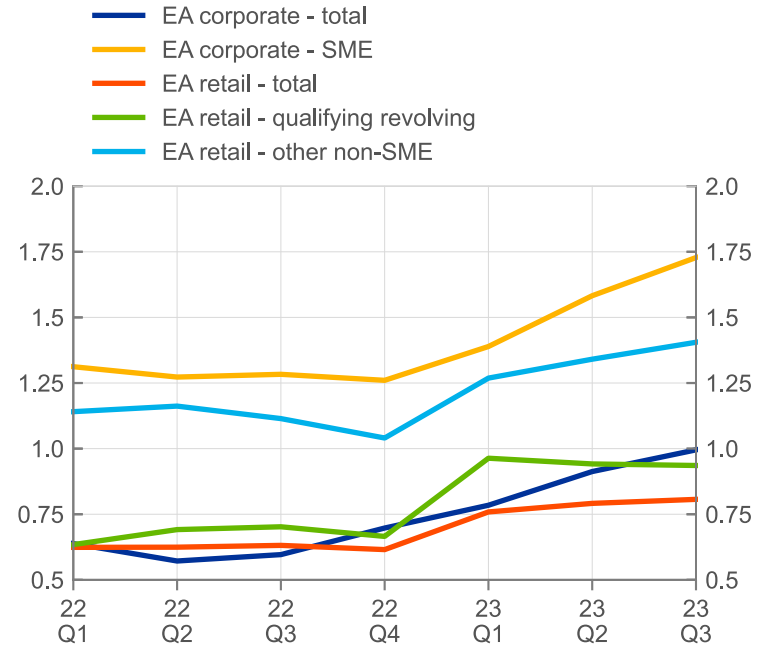


Sources: ECB (IBSI, iMIR) MPC Task Force on Banking Analysis and ECB calculations.
 Note: The chart represents the yearly growth rate of loans to the NFPS by business model.
 Latest observation: December 2023.

Changes in net interest income (percentages of total equity)



Default rates for euro area corporate and retail exposures (percentages)



Sources: ECB (supervisory reporting), Refinitiv (I/B/E/S) and ECB calculations.

Notes: Prices represent average net interest margins, calculated by dividing the y-o-y changes in trailing four-quarter NII flows by total interest-earning assets as of each reference quarter, in gross carrying amounts. The residual includes the net income generated from trading assets and liabilities, as well as the net income generated from derivatives. Red diamonds are based on analysts' forecasts.

Latest observation: Q3 2023.

Sources: ECB (Supervisory Reporting) and ECB calculations.

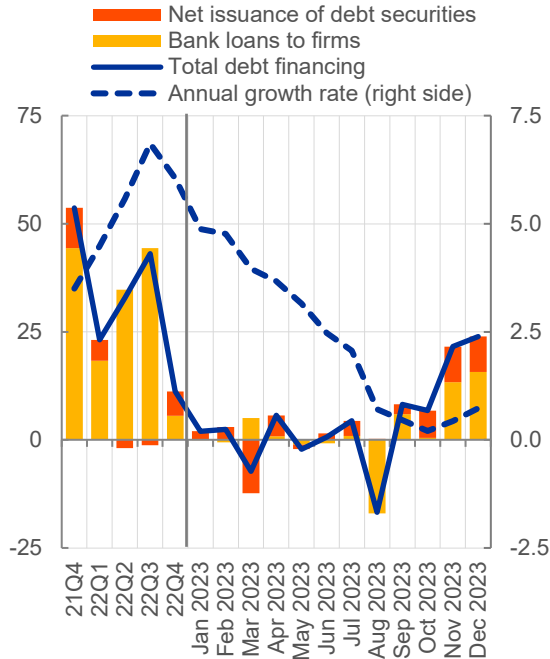
Notes: Based on a balanced panel of significant institutions reporting IRB. Sample adjusted for major M&As.

Latest observation: 2023 Q3.

Firm debt financing, credit standards and loan demand

Net debt financing flows of euro area firms

(average monthly flows over the respective period in EUR billions, annual percentage change)



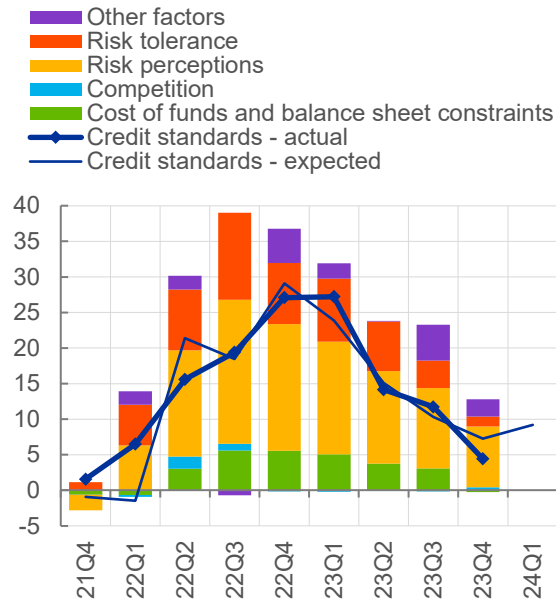
Sources: ECB (BSI, CSEC) and ECB calculations.

Notes: The seasonal adjustment for the net issuance of debt securities is not official. Bank loans are adjusted for sales, securitisation and cash pooling.

Latest observation: December 2023.

Changes in credit standards for loans to firms, and contributing factors

(net percentage)



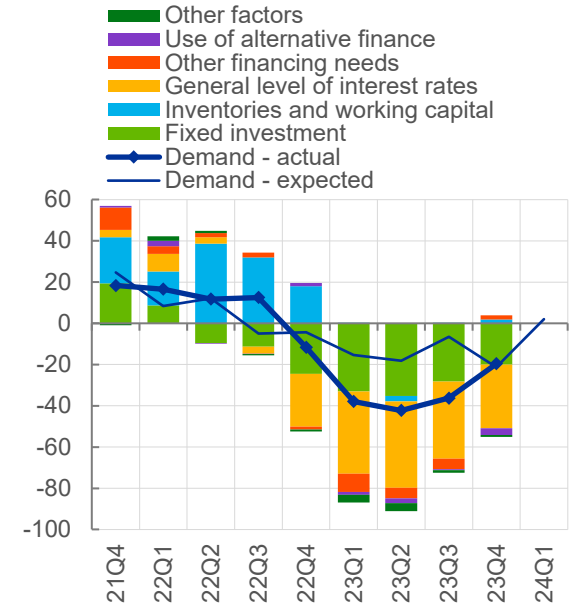
Source: ECB (BLS).

Notes: "Other factors" refer to further factors which were mentioned by banks as having contributed to changes in credit standards.

Latest observation: Q4 2023.

Changes in demand for loans to firms, and contributing factors

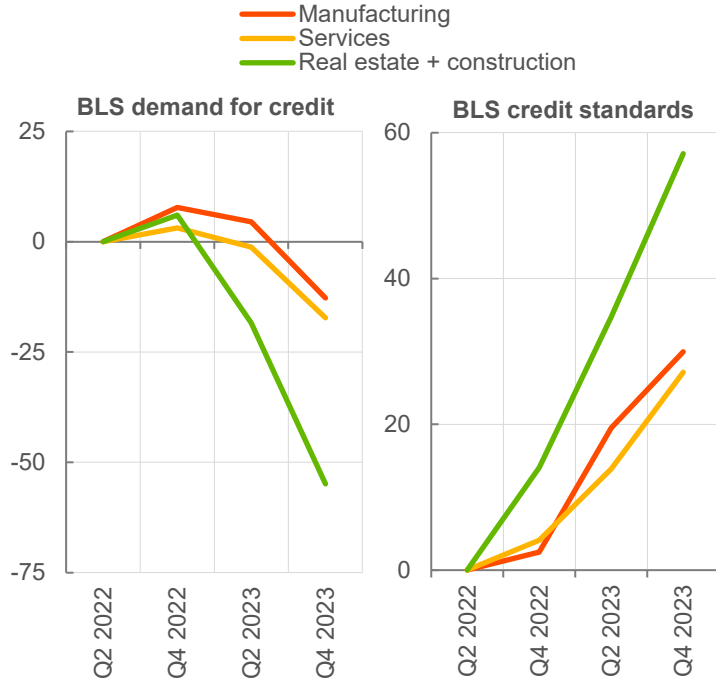
(net percentage)



Source: ECB (BLS). Notes: "Other financing needs" as unweighted average of "M&A and corporate restructuring" and "debt refinancing/restructuring and renegotiation"; "Use of alternative finance" as unweighted average of "internal financing", "loans from other banks", "loans from non-banks", "issuance/redemption of debt securities" and "issuance/redemption of equity". Latest observation: Q4 2023.

Credit demand and credit standards

(cumulated net percentages)

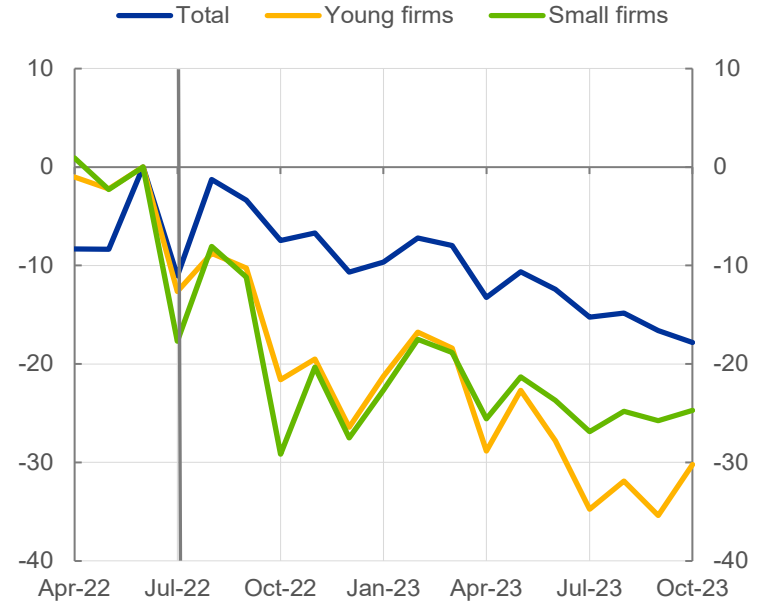


Sources: Bank lending survey (BLS) and ECB calculations.

Notes: The chart shows the survey responses for manufacturing and the following averages of cumulated responses for the two other sectors: real estate + construction: construction, residential real estate and commercial real estate; services: services, and wholesale and retail trade.
Last observation: Q4 2023.

Changes in new business loan volumes since the policy rate hike

(percentages)



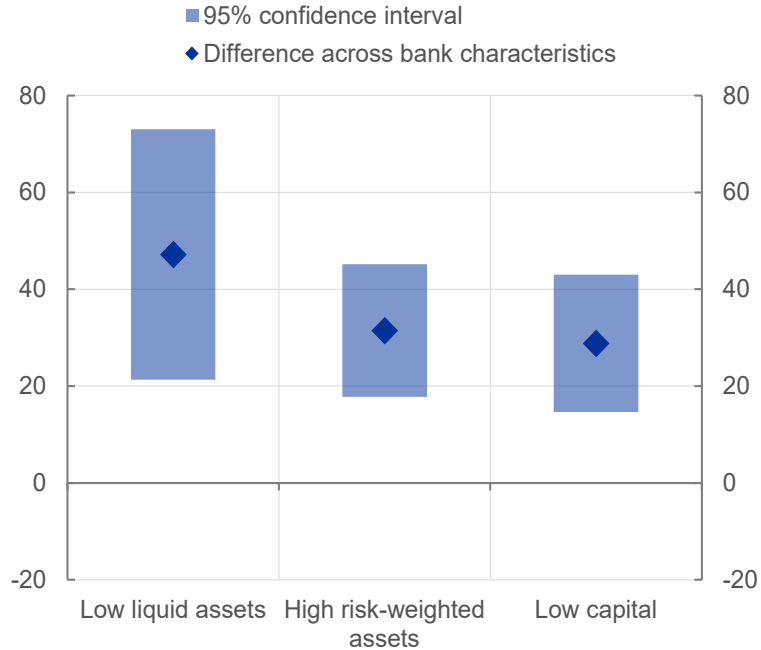
Sources: ECB (CSEC, AnaCredit, RIAD, MIR), Orbis and ECB calculations.

Notes: The chart compares loan volume dynamics of small and young firms relative to general market movements around the start of the hiking cycle in July 2022 based on merged AnaCredit and Orbis data. The grey line denotes the start of the hiking cycle. The series are standardised to represent percentage changes in new business volumes since June 2022.
Last observation: October 2023.

Outlook for transmission to firms

External finance premium and bank characteristics

(basis points)

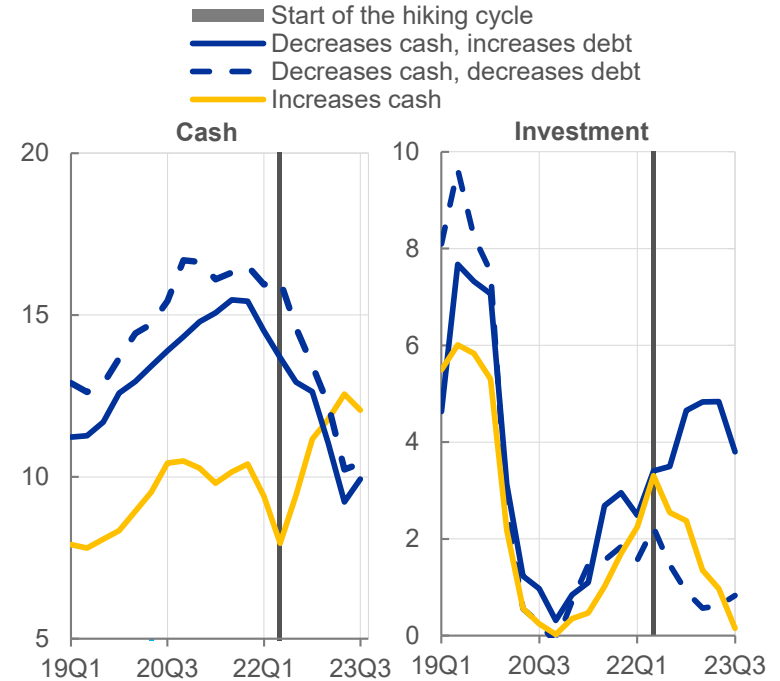


Sources: ECB and ECB calculations.

Notes: The chart shows the difference in the 3-month ahead impact on the external finance premium of euro area firms of policy rate tightening surprises (retrieved from the [Euro Area Monetary Policy Event-Study Database - EA-MPD](#)) between fragile and less fragile banks as proxied by the variables on the x-axis. Results are based on Altavilla, C., Gurkaynak, R. and Quaedvlieg, R. (2024), *Macro and Micro of External Finance Premium and Monetary Policy Transmission*, mimeo.

Investment across firms

(percentages of assets)



Sources: Refinitiv and ECB calculations.

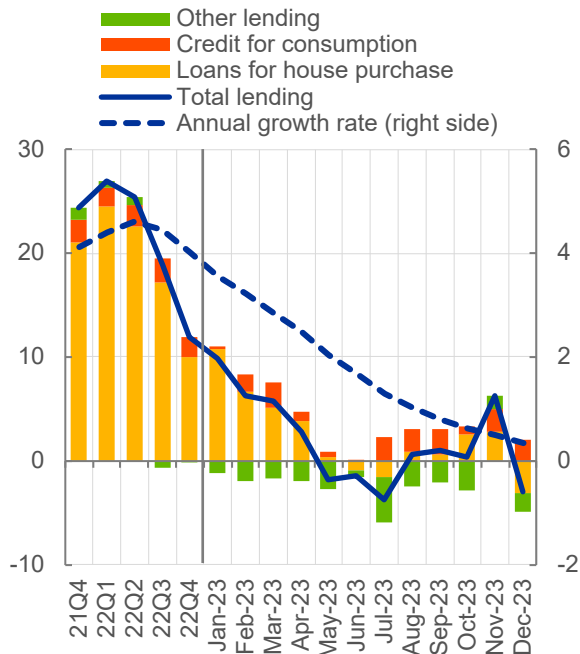
Notes: The grey line denotes the start of the hiking cycle. The chart describes three groups of listed firms and whether they increased or decreased cash and debt over assets since the beginning of the hike (i.e. over Q2 2022-Q2 2023). Investment refers to the net change in property plant and equipment over assets; cash refers to cash and cash equivalents over assets.

Latest observation: Q3 2023.

Households loans, credit standards and loan demand

Bank loans to households

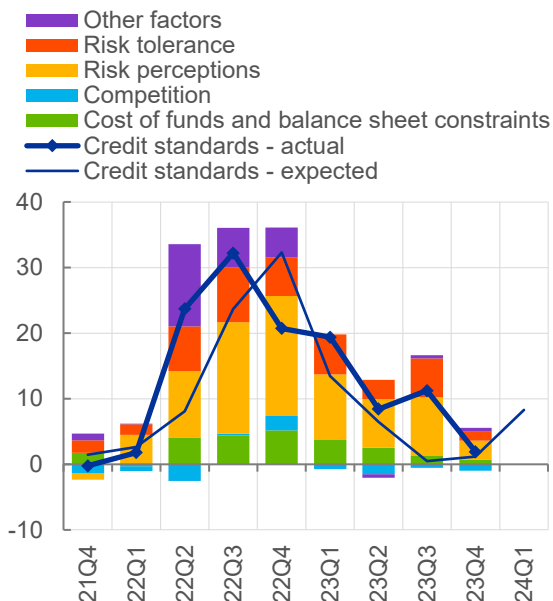
(average monthly flows in EUR billions, annual percentage change)



Sources: ECB (BSI) and ECB calculations.
 Note: Bank loans are adjusted for sales and securitisation.
 Last observation: December 2023.

Changes in credit standards for loans to households, and contributing factors

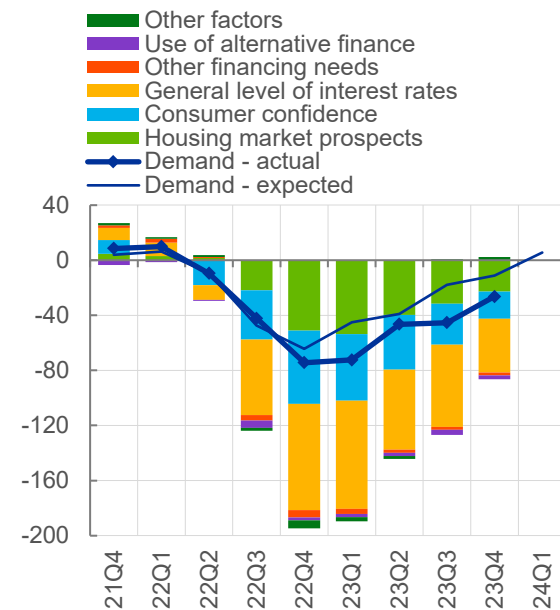
(net percentage)



Source: ECB (BLS).
 Note: "Other factors" refer to further factors which were mentioned by banks as having contributed to changes in credit standards.
 Latest observation: Q4 2023.

Changes in demand for loans to households, and contributing factors

(net percentage)

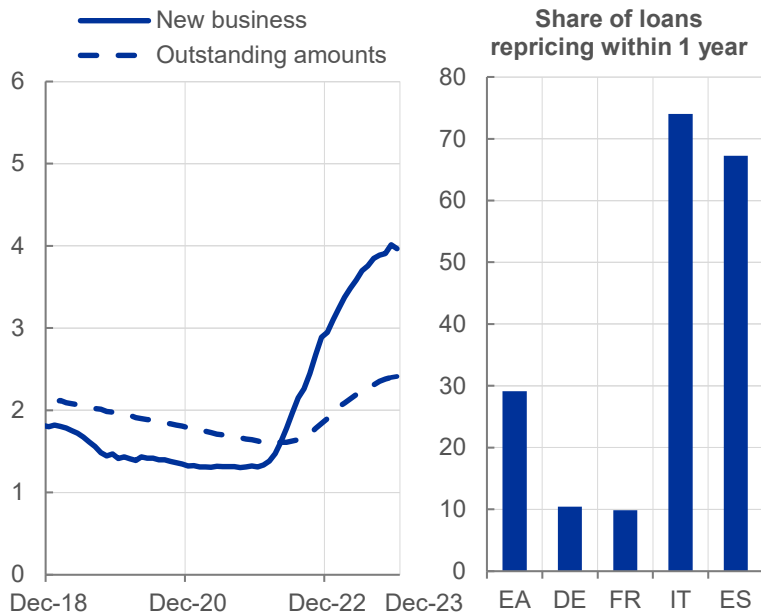


Source: ECB (BLS). Notes: "Other financing needs" as unweighted average of "M&A and corporate restructuring" and "debt refinancing/restructuring and renegotiation"; "Use of alternative finance" as unweighted average of "internal financing", "loans from other banks", "loans from non-banks", "issuance/redemption of debt securities" and "issuance/redemption of equity".
 Latest observation: Q4 2023.

Outlook for transmission to households

Lending rates to households

(left panel: percentages per annum, right panel: share of outstanding amount loans)



Sources: ECB (BSI, MIR) and ECB calculations.

Notes: Lending rates refer to housing loans. The share of loans repricing within one year includes short-term loans, long-term loans expiring within a year and long-term loans with residual time to next interest rate fixation lower than a year.

Latest observations: December 2023.

Change in perceived credit access

(net percentages, higher is tighter)



Sources: ECB (CES) and ECB calculations.

Notes: The chart plots the differences between the percentage of respondents who reported that credit access has become harder in the last 12 months and the percentage of those who reported that it has become easier. Low-income households are those in the bottom 20 per cent of the income distribution; high-income households are those in the top 20 per cent. Diamonds represent averages over the relevant period. Ranges are computed over the full history of the survey. Latest observation: December 2023.