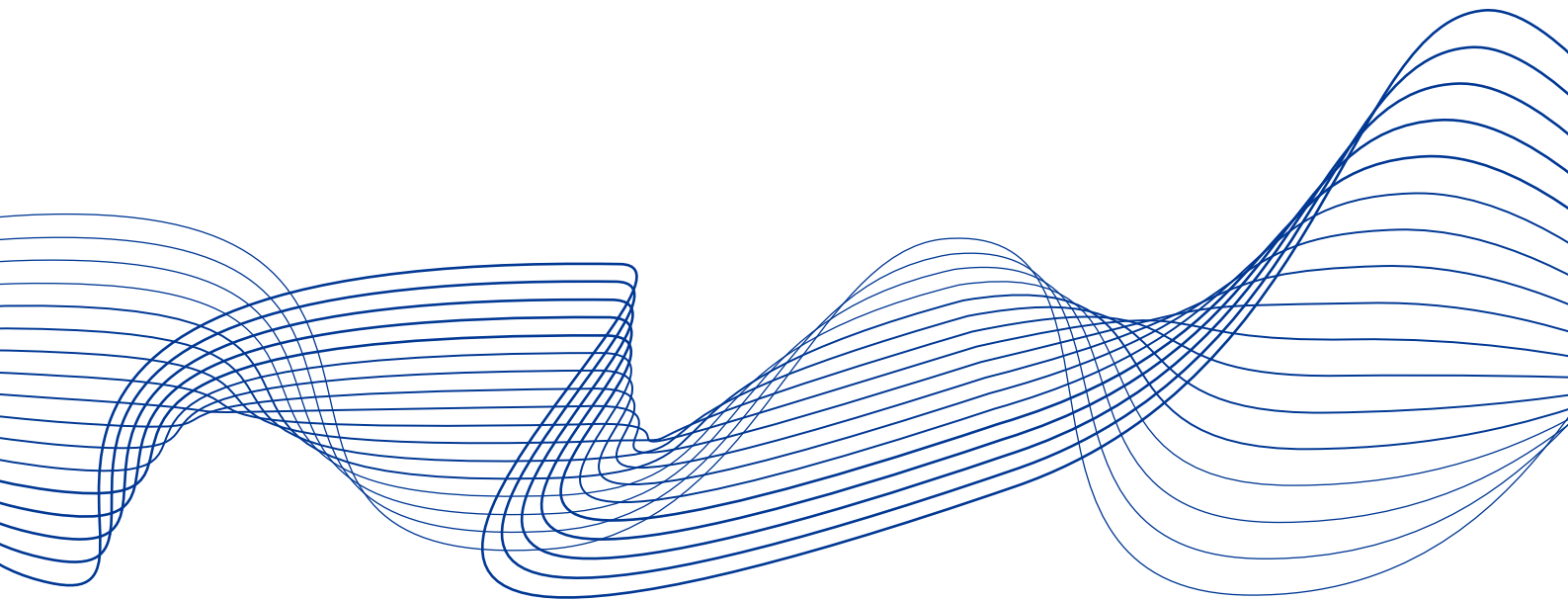


# ESRB risk dashboard

**Production date: 14 November 2024**

## **DISCLAIMER**

The risk dashboard is a set of quantitative indicators and not an early-warning system. Users may not rely on the indicators as a basis for any mechanical form of inference.



**ESRB**

European Systemic Risk Board

European System of Financial Supervision

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# General notes

The ESRB risk dashboard is a set of quantitative and qualitative indicators of systemic risk in the EU financial system. The composition and presentation of the ESRB risk dashboard were reviewed in the fourth quarter of 2019.

*Unless otherwise indicated, all data series including observations for 2023 relate to the group of 20 countries that are members of the euro area (the Euro 20) for the whole time series.*

For statistics based on the balance sheet of the monetary financial institution (MFI) sector, as well as statistics on financial markets and interest rates, the series relate to the composition of the EU/euro area in the period covered (changing composition).

Statistics based on the balance sheet of the MFI sector are unconsolidated.

Additional indicators to support the assessment of systemic risk in the EU financial system are available in the **Macprudential Database**.

## [Introductory note to the Section "8. Risk related to central counterparties"](#)

The following indicators on central counterparties are designed to provide a macroprudential, systemic perspective over time on CCPs' default resources, collateral, margins and haircuts, interoperability arrangements and concentration of clearing members. The indicators cover all 19 CCPs that are authorised in the EU and which are regulated under EMIR. Differences across CCPs may reflect differences in business models, membership structure and products cleared. An ESRB Occasional Paper provides further detail on the rationale, the computation of these indicators and open questions. The data from which these indicators were computed are published by CCPs according to the CPMI - IOSCO Public Quantitative Disclosure Framework (PQD) and have not been verified by the ESRB.

*The accuracy of the following indicators may be affected by data quality issues in the underlying Public Quantitative Disclosure data. Furthermore, the ESRB Secretariat cannot rule out the presence of errors owing to the non-standardised nature of the source data.*

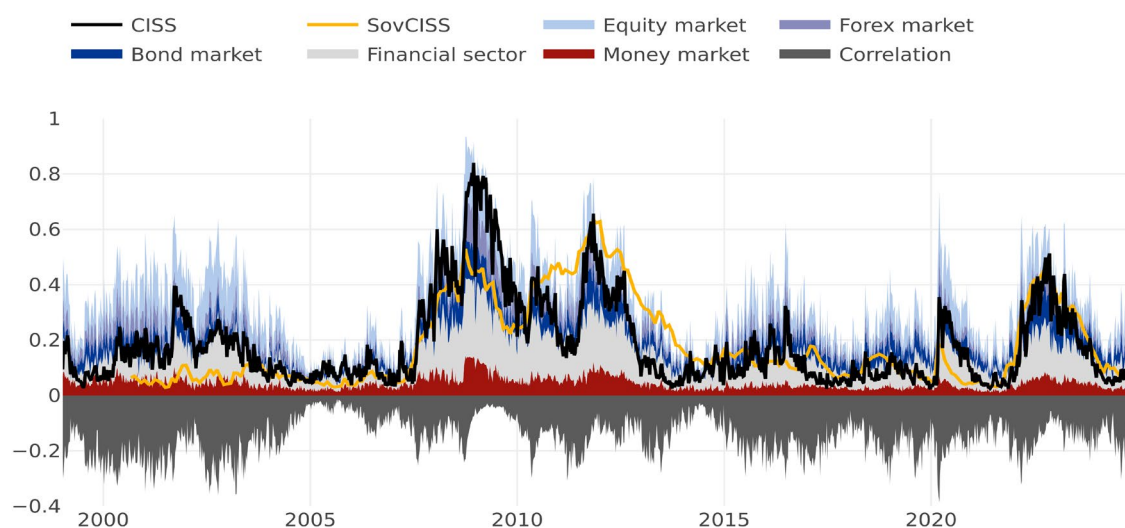
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# 1 Interlinkages and composite measures of systemic risk

## 1.1 Composite indicator of systemic stress

(Euro area; indicator)



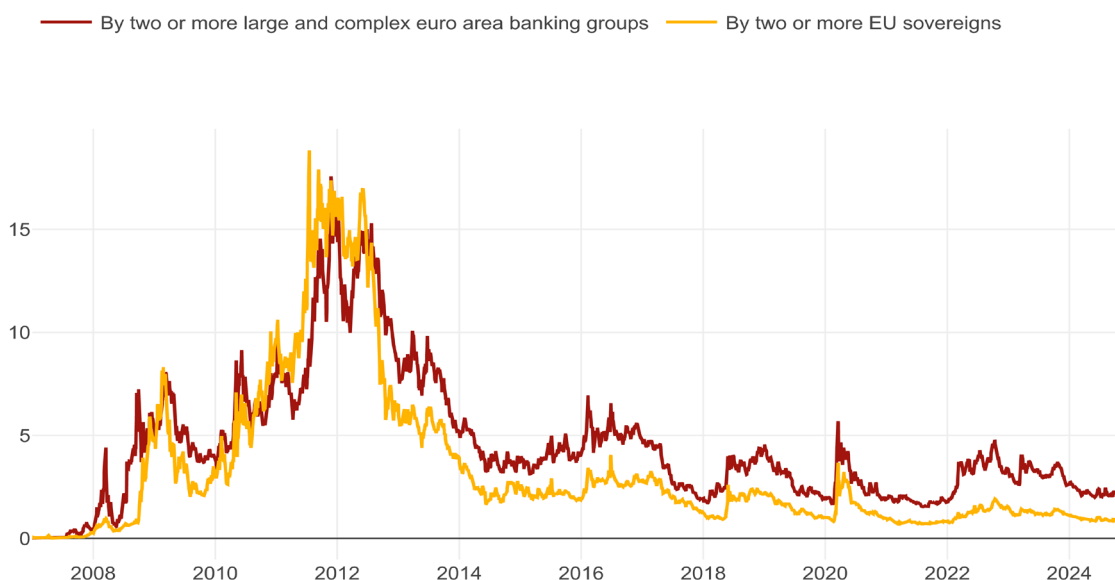
Last observation: 8 November 2024

Source: Thomson Reuters, ECB and ECB calculations.

Note: The CISS is unit-free and constrained to lie within the interval (0, 1). See Hollo, D., Kremer, M. and Lo Duca, M., "CISS - a composite indicator of systemic stress in the financial system", Working Paper Series, No 1426, ECB, March 2012. The Sovereign CISS applies the same methodological concept of the CISS. On aggregation of different measures of stress in different euro area sovereign bond markets see Garcia-de-Andoain, C. and Kremer, M., "Beyond spreads: measuring sovereign market stress in the euro area", Economics Letters, Vol. 159, 2017, pp. 153-156.

## 1.2 Probability of a simultaneous default

(EU; probability of default; percentage points)



Last observation: 12 November 2024

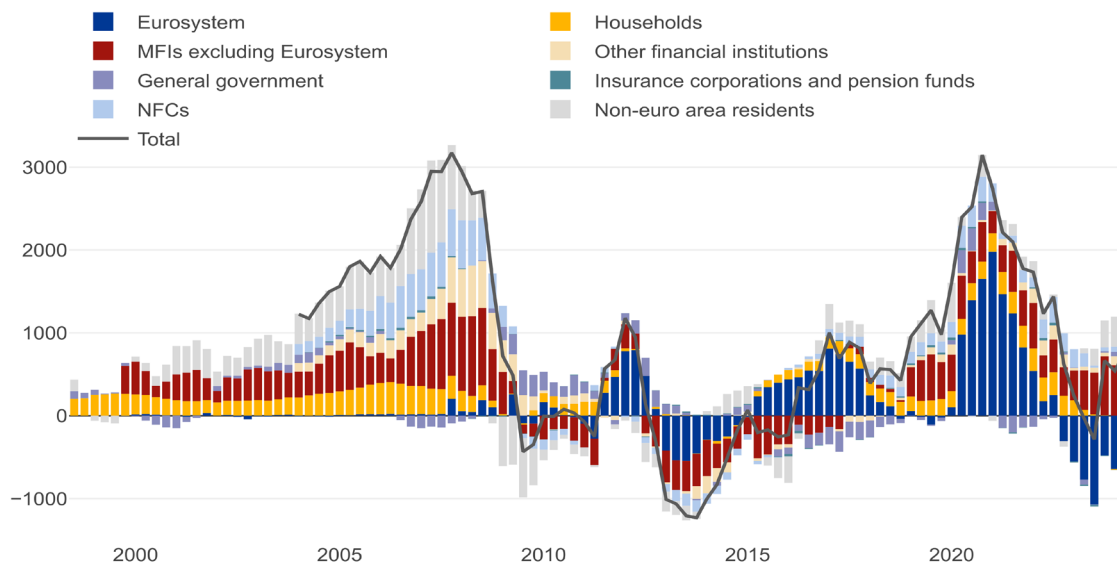
Source: ICE (former CMA) and ECB calculations.

Note: See Box 8, Financial Stability Review, ECB, June 2012.



### 1.3.a MFI credits by counterpart sectors - Four-quarter cumulated flows

(Euro area; EUR billions)



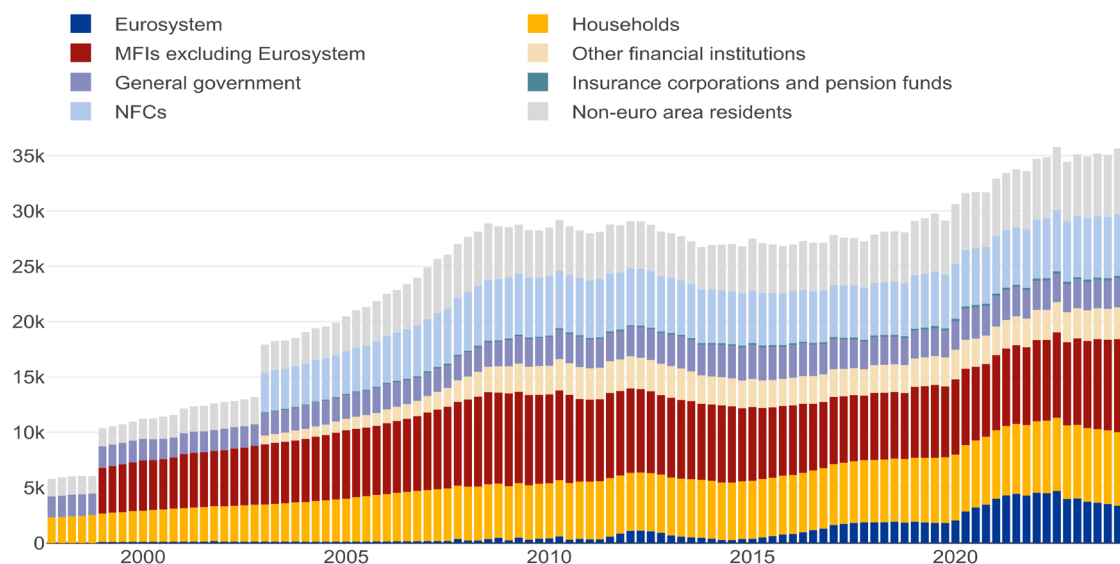
Last observation: Q2 2024

Source: ECB.

Note: MFIs excluding the Eurosystem. Credit comprises loans and holdings of securities. Eurosystem credit comprises only loans. Households include non-profit institutions serving households.

### 1.3.b MFI credits by counterpart sectors - Outstanding amounts

(Euro area; EUR billions)



Last observation: Q2 2024

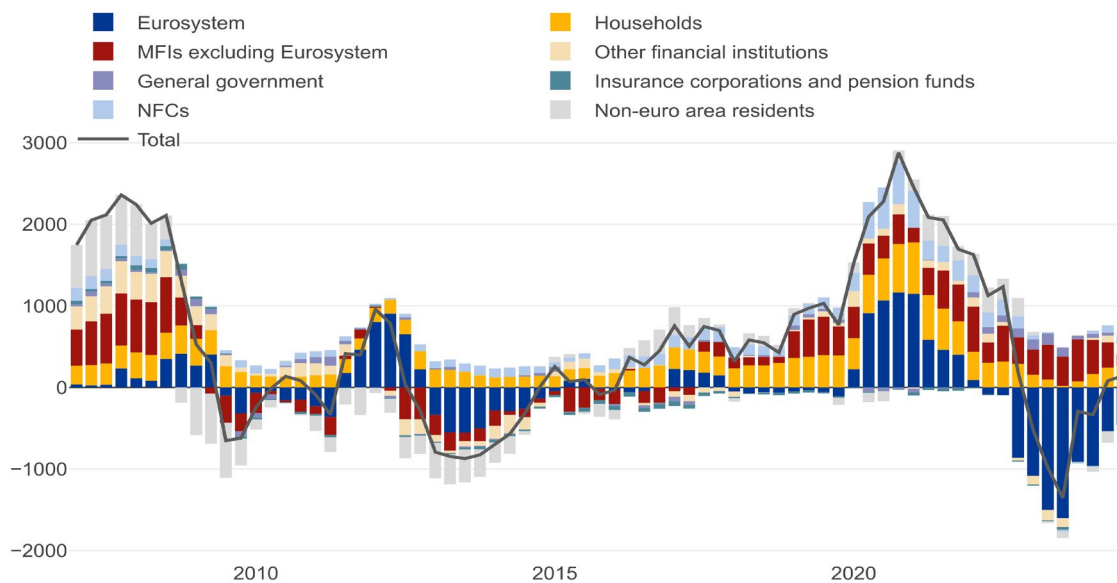
Source: ECB.

Note: MFIs excluding the Eurosystem. Credit comprises loans and holdings of securities. Eurosystem credit comprises only loans. Households include non-profit institutions serving households.



#### 1.4.a MFI deposits by counterpart sector - Four-quarter cumulated flows

(Euro area; EUR billions)



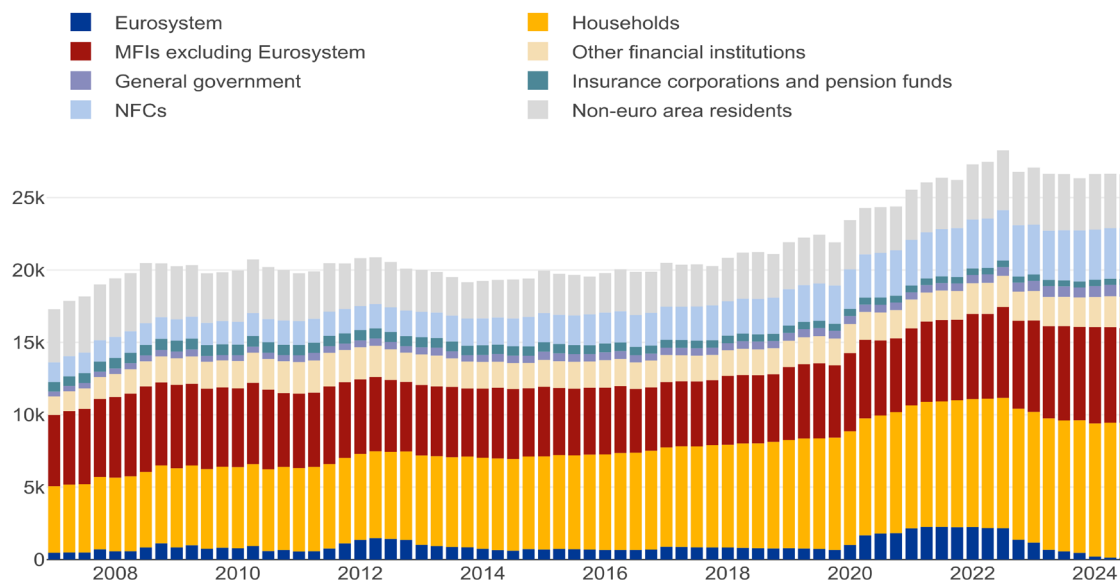
Last observation: Q3 2024

Source: ECB.

Note: MFIs excluding the Eurosystem. Households include non-profit institutions serving households.

#### 1.4.b MFI deposits by counterpart sector - Outstanding amounts

(Euro area; EUR billions)



Last observation: Q3 2024

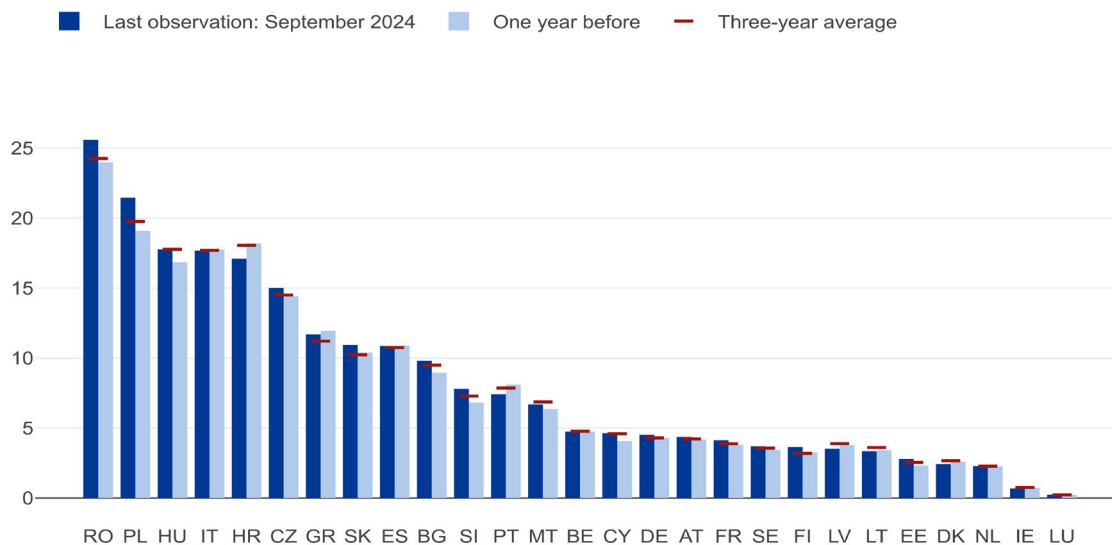
Source: ECB.

Note: MFIs excluding the Eurosystem. Households include non-profit institutions serving households.



## 1.5 MFI credits to general government

(EU; share of total assets; percentages)



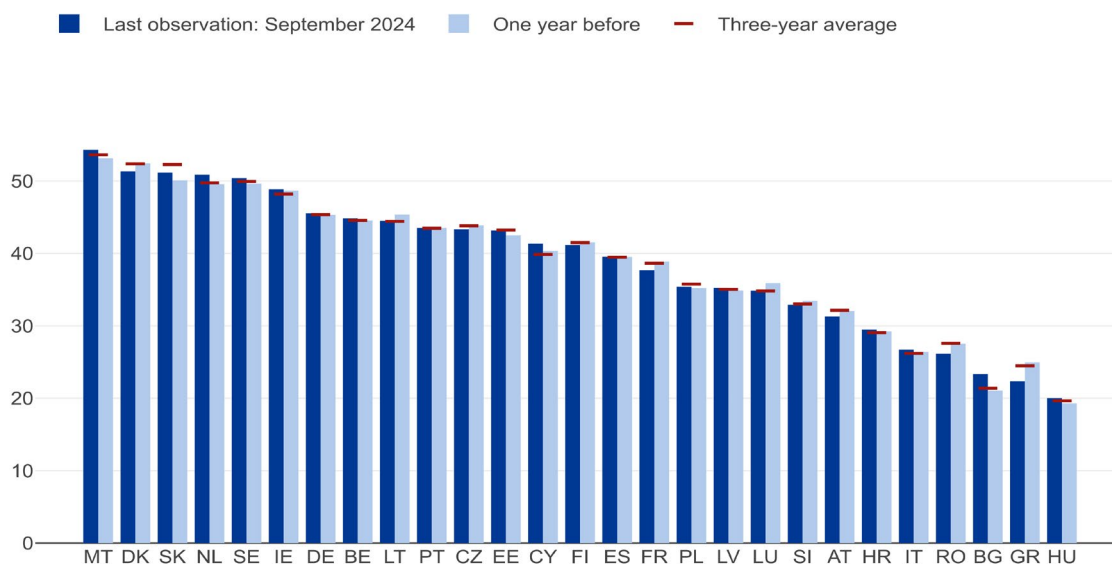
Last observation: September 2024

Source: ECB.

Note: Credit extended by MFIs excluding the ESCB to domestic general government. Credit comprises granted loans and holdings of debt securities issued. Total assets excludes remaining assets. For some countries, such as Italy and France, government-owned agencies mandated to finance primarily public administrations are listed as MFIs.

## 1.6 MFI loans for house purchase

(EU; share of credit to private sector; percentages)



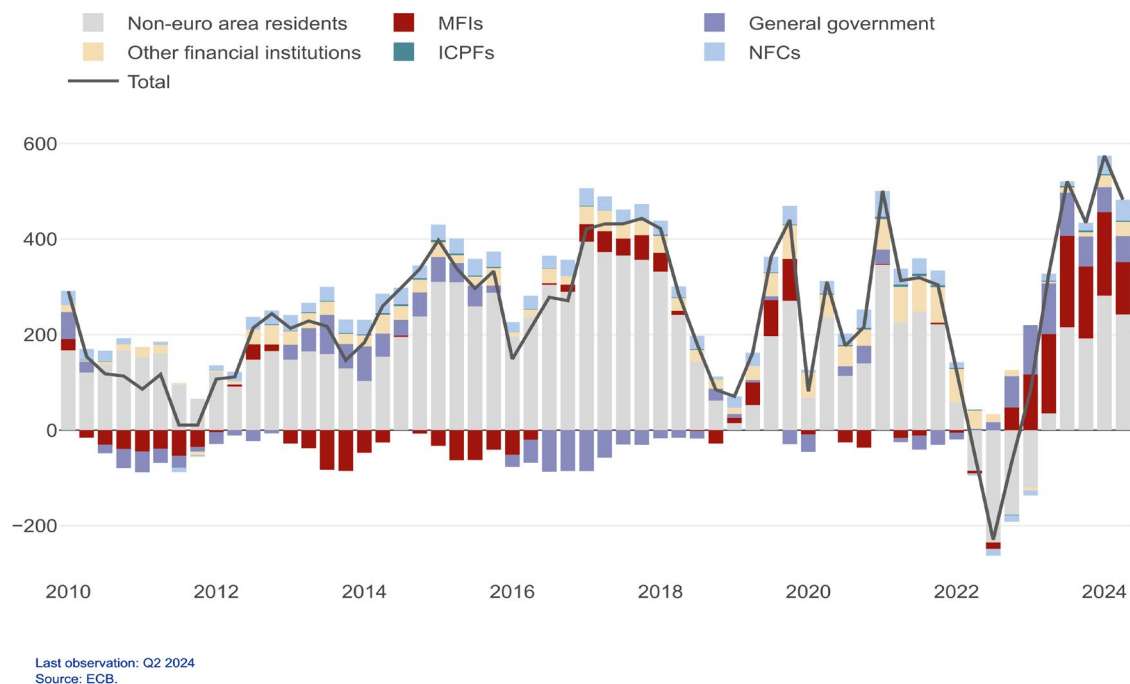
Last observation: September 2024

Source: ECB.

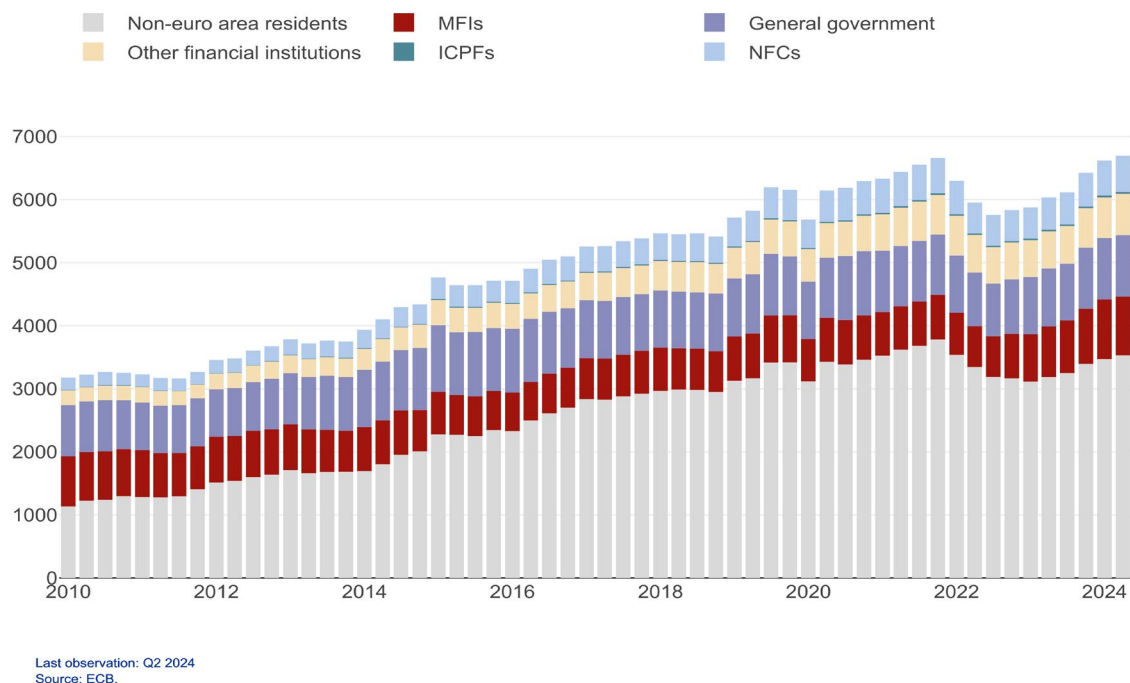
Note: MFIs excluding the ESCB. Data refer to loans granted to domestic households for house purchase purpose. Credit comprises loans and holdings of debt securities.



1.7.a Investment funds' holdings of debt securities by counterpart sector - Four-quarter cumulated flows  
(Euro area; EUR billions)

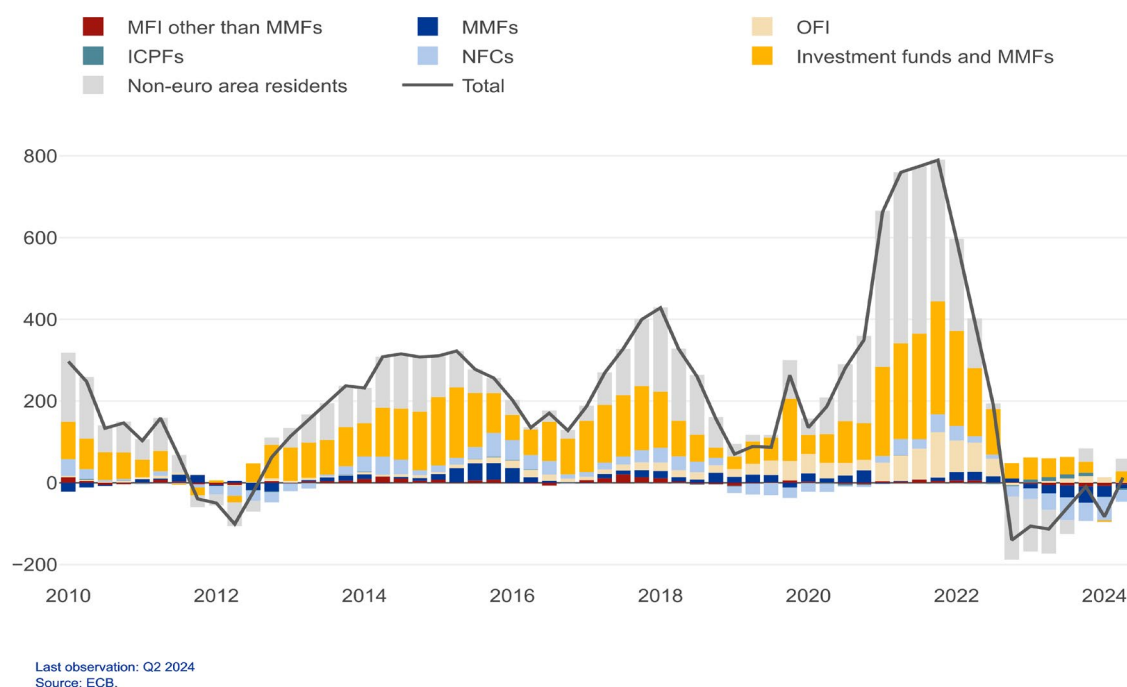


1.7.b Investment funds' holdings of debt securities by counterpart sector - Outstanding amounts  
(Euro area; EUR billions)



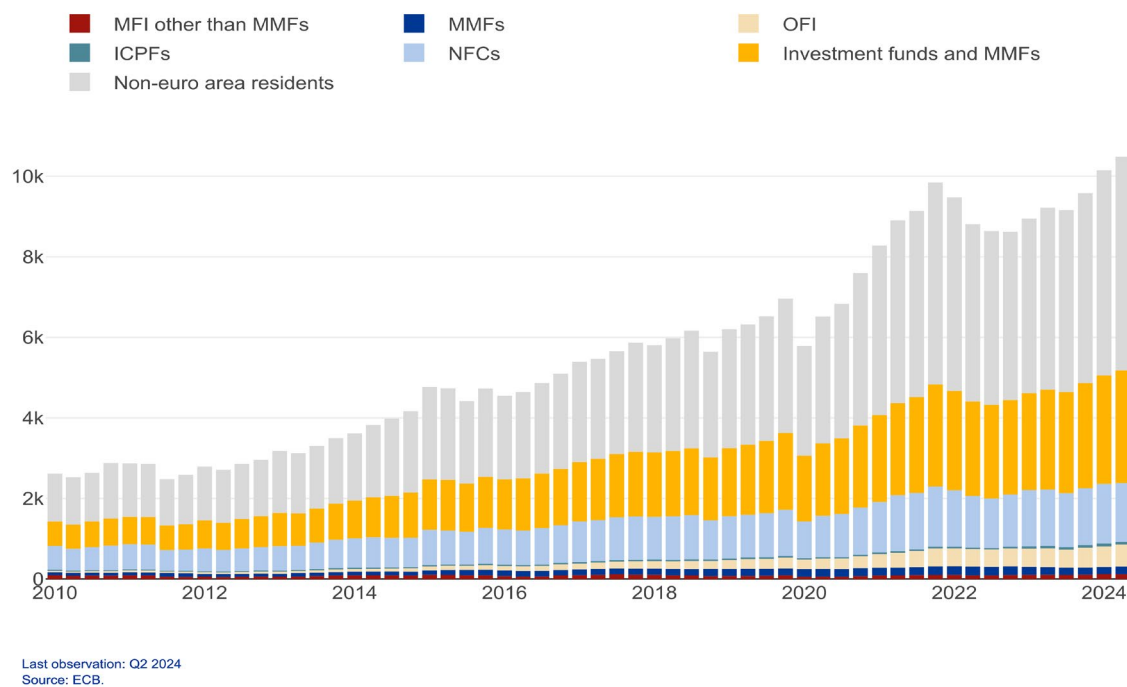
### 1.8.a Investment funds' holdings of equity and investment fund shares by counterpart sector - Four-quarter cumulated flows

(Euro area; EUR billions)



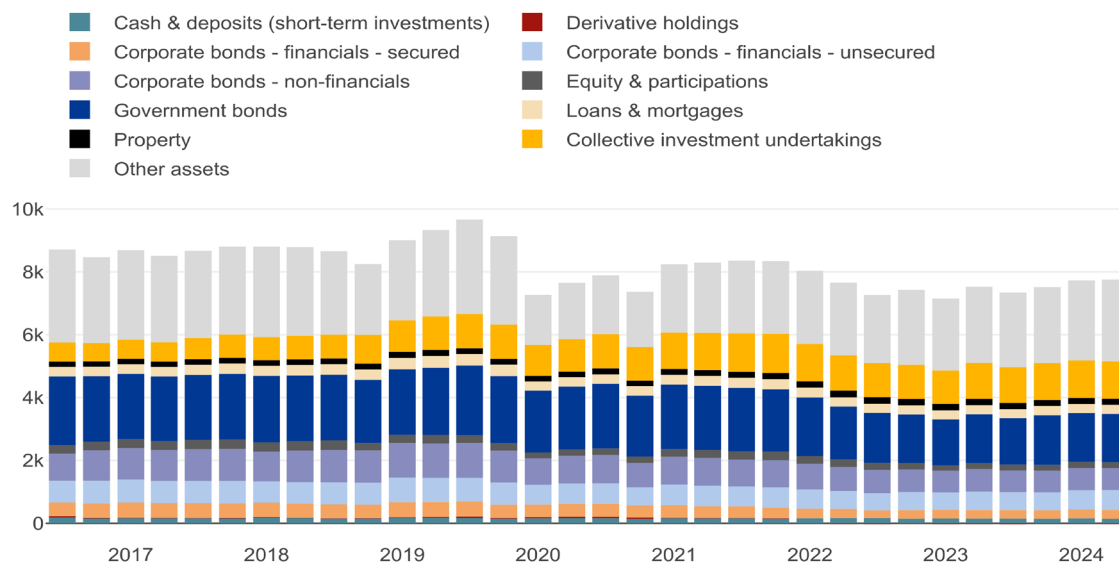
### 1.8.b Investment funds' holdings of equity and investment fund shares by counterpart sector - Outstanding amounts

(Euro area; EUR billions)



## 1.9 Insurance corporations' assets allocation (including derivative holdings)

(EU; outstanding amounts; EUR billions)



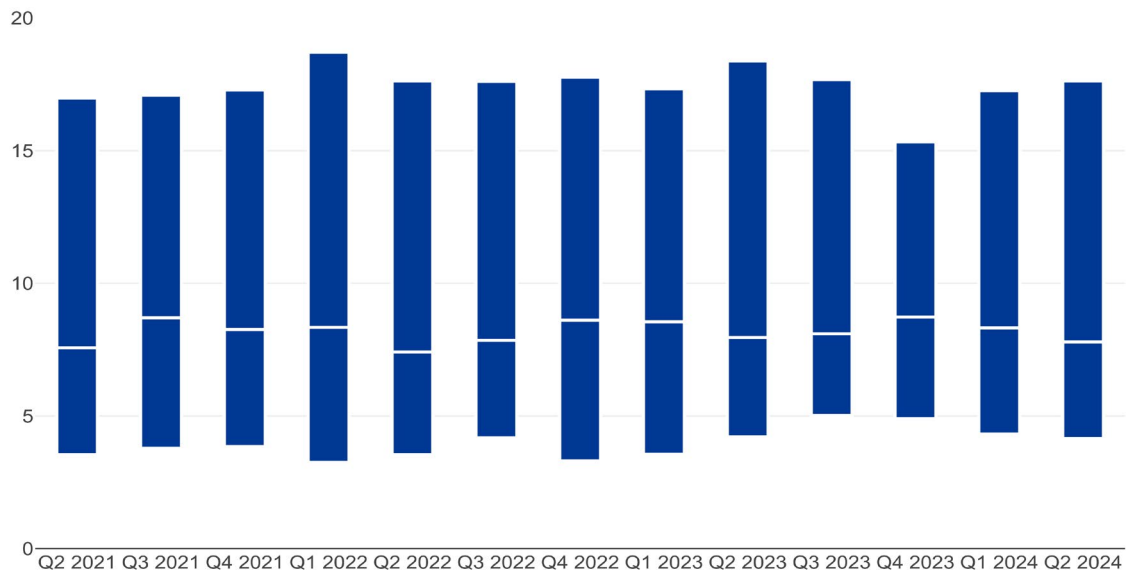
Last observation: Q2 2024

Source: EIOPA, based on Solvency II Reporting.

Note: For more details on the Solvency II reporting please see Annex I to the risk dashboard. The other assets category comprises assets for unit- and index-linked insurance.

## 1.10 Reinsurance part of premiums

(EU; interquartile range and median; percentages)



Last observation: Q2 2024

Source: EIOPA, based on Solvency II Reporting.

Note: The reinsurance part of premiums is defined as the share of the premiums that is ceded to reinsurers. It is calculated as the complement to 1 of the retention ratio which, in turn is defined as the net premiums written divided by gross premiums written. For more details on the Solvency II reporting please see Annex I to the risk dashboard.

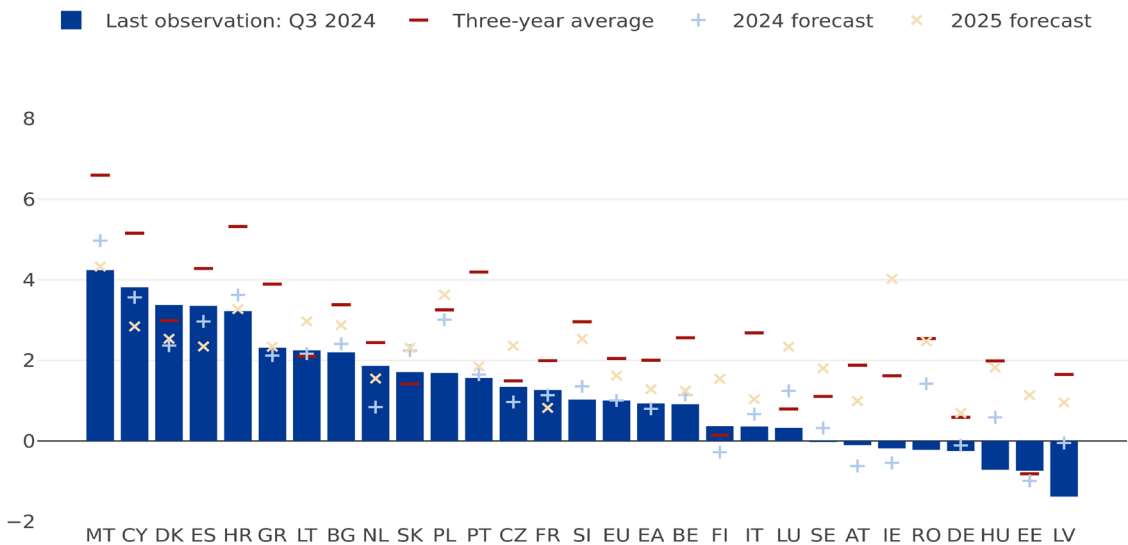




## 2 Macro risk

### 2.1 Current and forecast real GDP growth

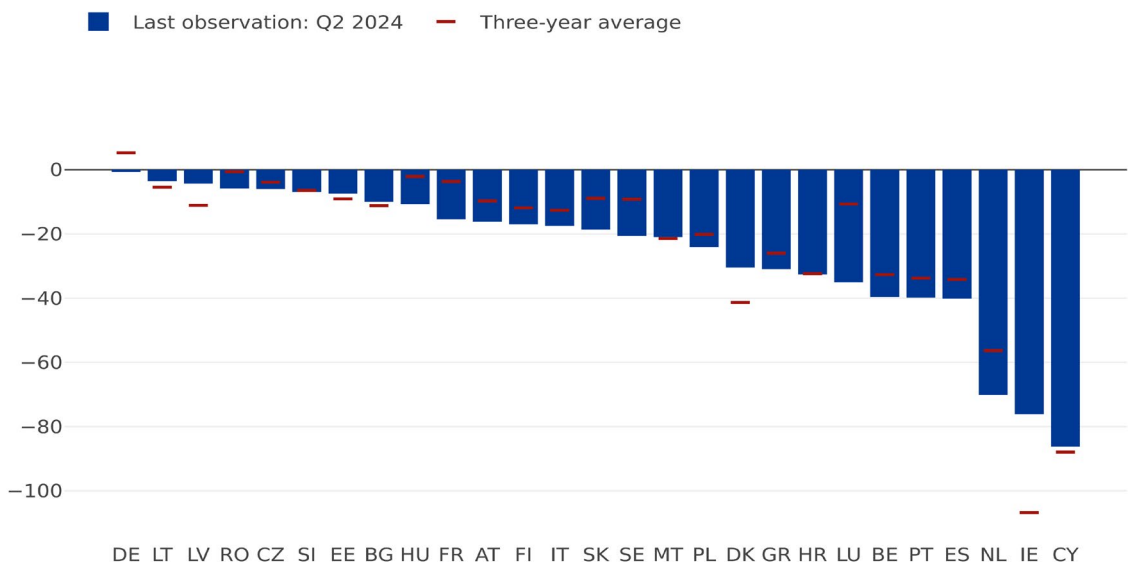
(EU; year-on-year growth; percentage changes)



Last observation: Q3 2024  
The following datapoints are based on older data:  
(BE, Q2 2024), (HR, Q2 2024), (DK, Q2 2024), (GR, Q2 2024), (LU, Q2 2024), (MT, Q2 2024), (PT, Q2 2024)  
Source: European Commission and the European Commission Autumn 2024 forecast.  
Note: The three-year historical average is the average of the year-on-year growth rates over the last 12 quarters.

### 2.2 Domestic credit-to-GDP gap

(EU; percentage points)

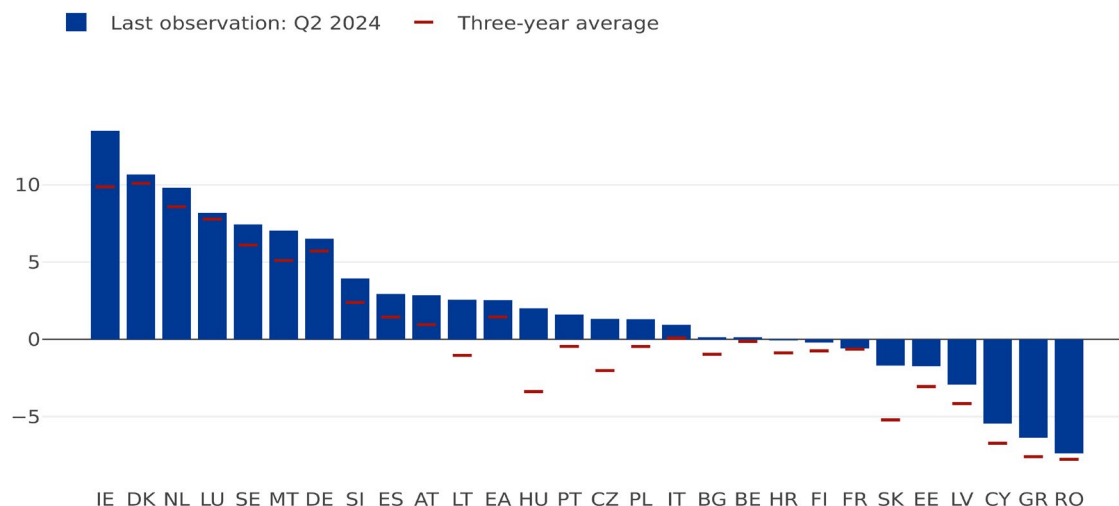


Last observation: Q2 2024  
Source: European Commission, BIS, ECB and ECB calculations.  
Note: See ESRB recommendation of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1). ECB calculations and national calculations may differ.



## 2.3 Current account balance-to-GDP ratio

(EU; percentage points)



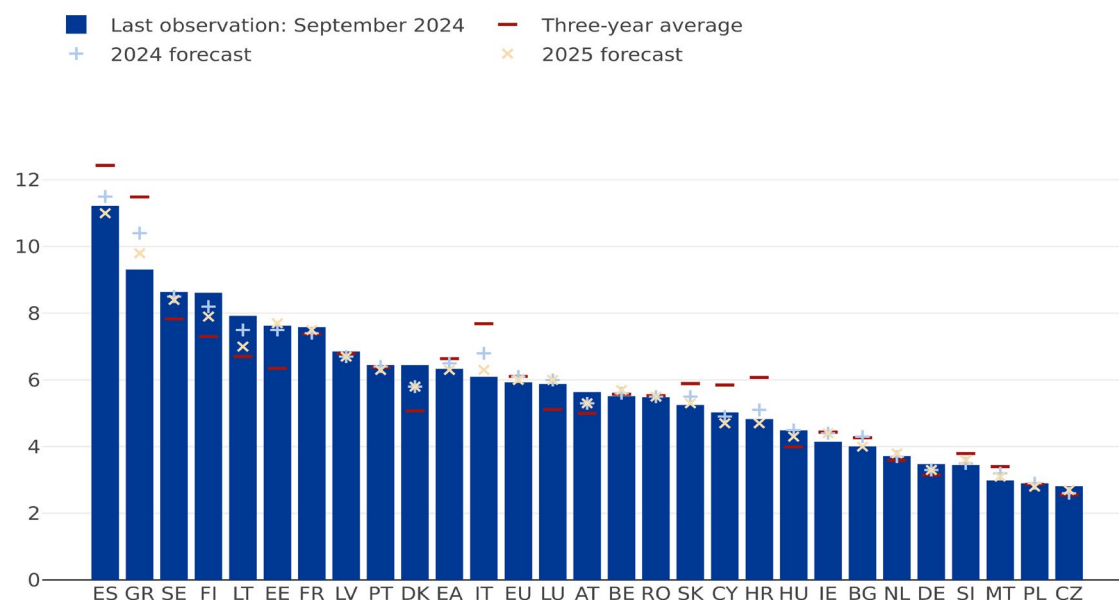
Last observation: Q2 2024

Source: ECB and European Commission.

Note: Quarterly data represent the sum of the four quarters up to and including the quarter of reference. The three-year average is compiled on the basis of the annualised ratio of the last 12 quarters. The indicator includes amounts relating to special purpose entities (SPEs). Large proportions of their activities and their lending and indebtedness practices are not related to the domestic market. For countries with a relevant presence of resident SPEs (in particular CY, HU, IE, LU, MT and NL), the impact on this indicator and its changes can be very significant. Additional information on the effect of SPEs may be obtained from the relevant national compilers.

## 2.4 Unemployment rate

(EU; seasonally adjusted; percentage of labour force)



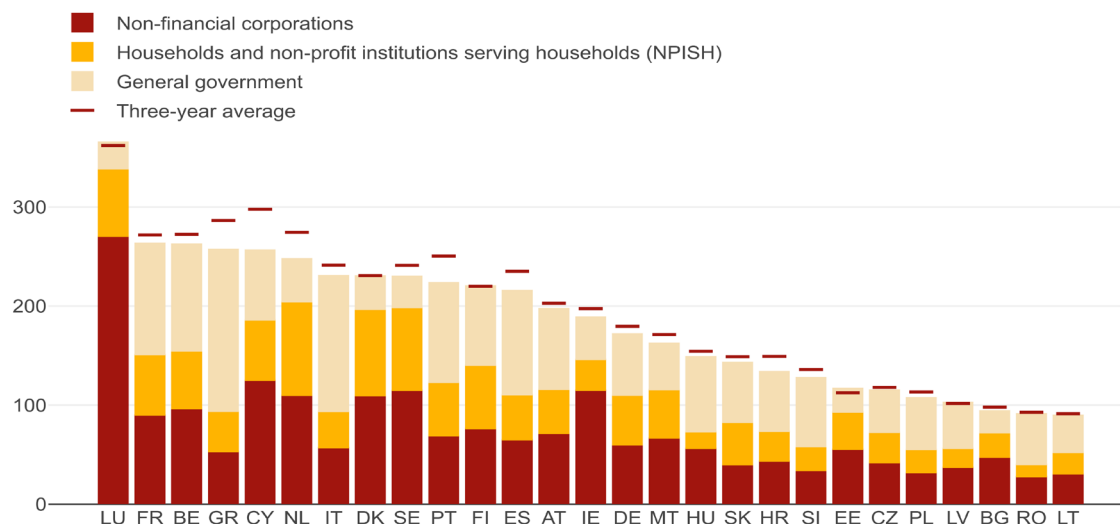
Last observation: September 2024

Source: European Commission and the European Commission forecast.



## 2.5.a Aggregate debt-to-GDP ratio - Level

(EU; percentage points)



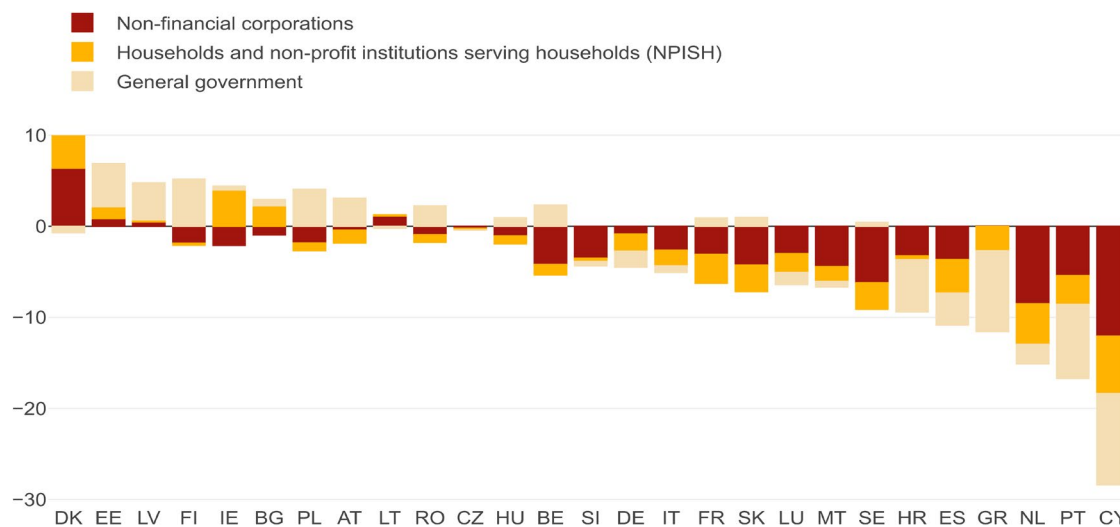
Last observation: Q2 2024

Source: ECB and European Commission.

Note: Debt-to-GDP ratios for NFCs and general government are based on consolidated debt figures. The indicator includes amounts relating to special purpose entities (SPEs). Large proportions of their activities and their lending and indebtedness practices are not related to the domestic market. For countries with a relevant presence of resident SPEs (in particular CY, HU, IE, LU, MT and NL) the impact on this indicator and its changes can be very significant. Additional information on the effect of SPEs may be obtained from the relevant national compilers.

## 2.5.b Aggregate debt-to-GDP ratio - Year-on-Year change

(EU; percentage points)



Last observation: Q2 2024

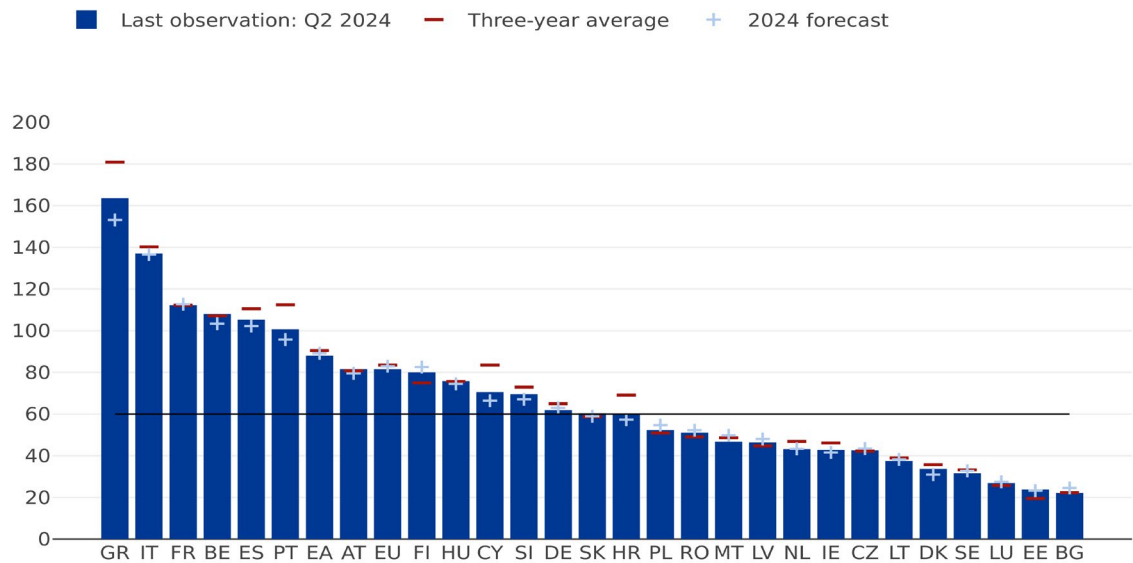
Source: ECB and European Commission.

Note: Debt-to-GDP ratios for NFCs and general government are based on consolidated debt figures. The indicator includes amounts relating to special purpose entities (SPEs). Large proportions of their activities and their lending and indebtedness practices are not related to the domestic market. For countries with a relevant presence of resident SPEs (in particular CY, HU, IE, LU, MT and NL) the impact on this indicator and its changes can be very significant. Additional information on the effect of SPEs may be obtained from the relevant national compilers.



## 2.6 General government debt-to-GDP ratio

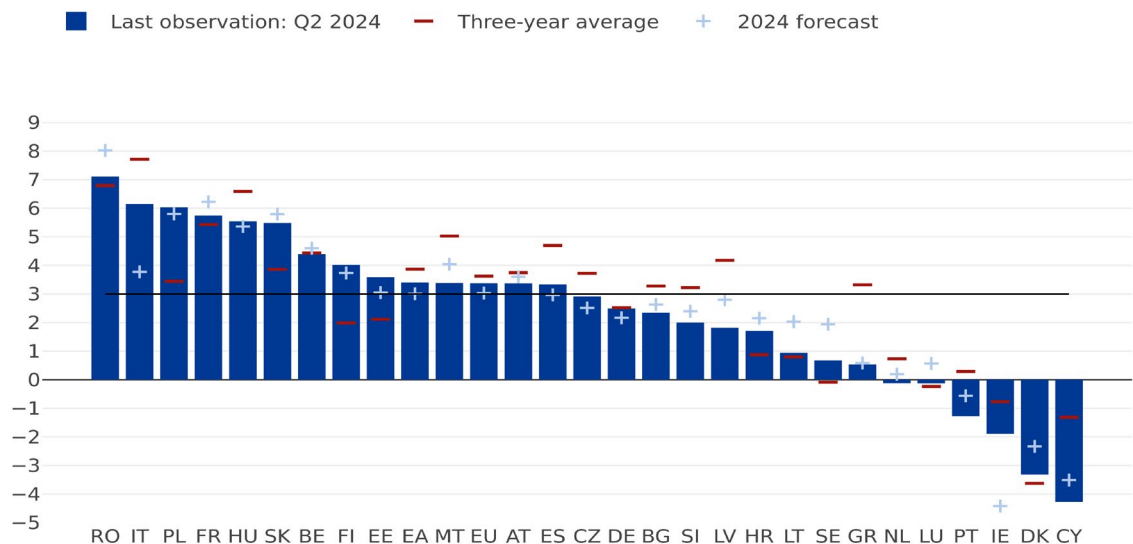
(EU; percentages)



Last observation: Q2 2024  
Source: European Commission and the European Commission Autumn 2024 forecast.  
Note: Intra-general government transactions are consolidated. The black line represents the threshold of 60% for the government debt-to-GDP ratio under the Stability and Growth Pact.

## 2.7 General government deficit-to-GDP ratio

(EU; four-quarter moving sum; percentages)

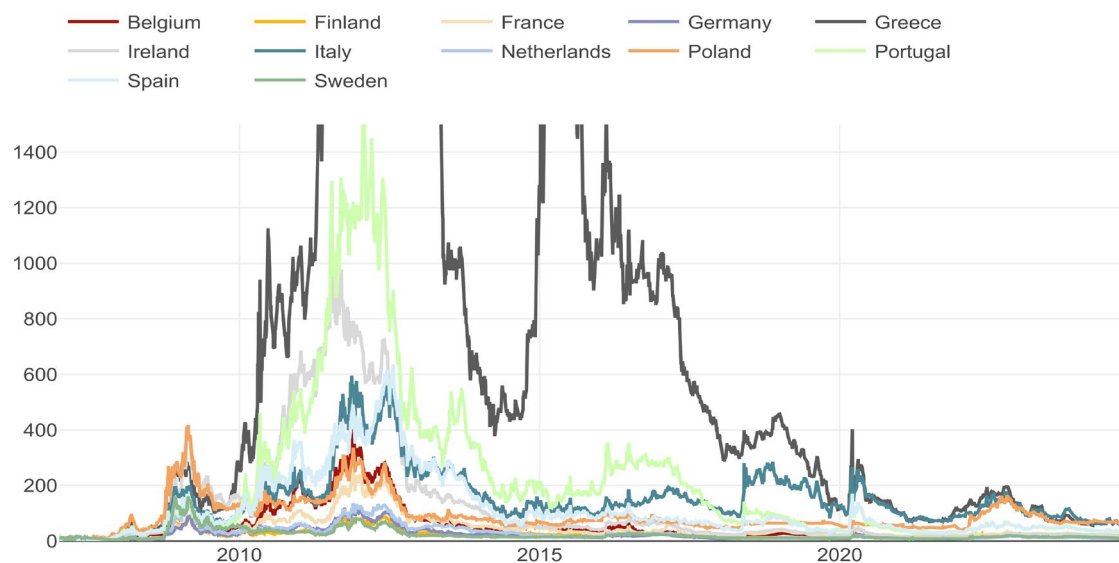


Last observation: Q2 2024  
The following datapoints are based on older data:  
(GR, Q1 2024), (SE, Q1 2024)  
Source: European Commission and the European Commission Autumn 2024 forecast.  
Note: The black line represents the threshold of 3% for the budget deficit under the Stability and Growth Pact.



## 2.8 CDS premia on sovereign debt

(Sample of EU countries; five-year maturities; basis points)



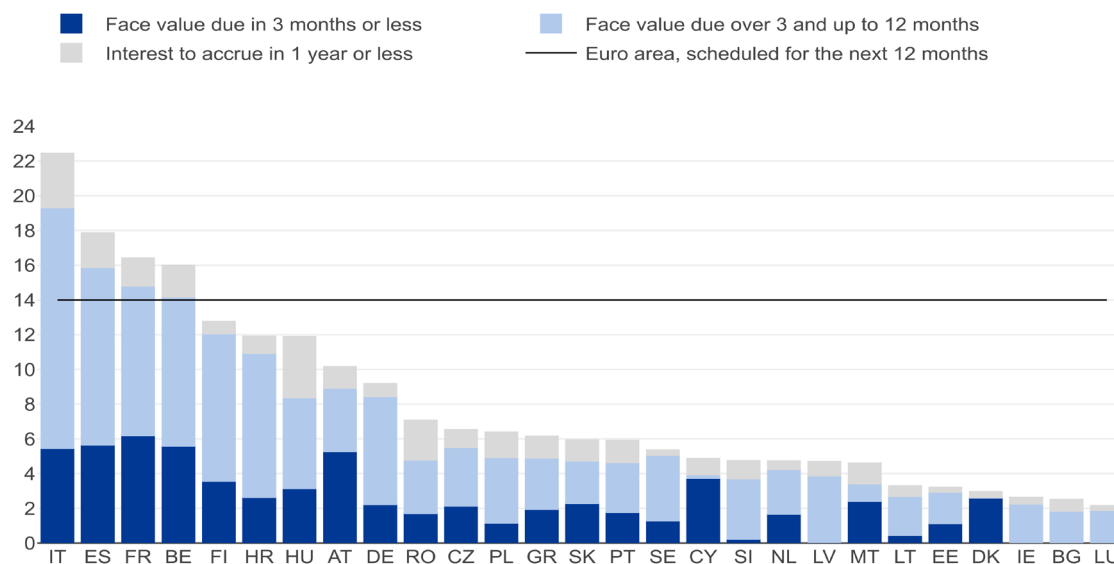
Last observation: 13 November 2024

Source: LSEG and CMA.

Note: Greek sovereign CDS were not traded between 9 March 2012 and 11 April 2012 following the decision by the ISDA that a credit event had occurred. Due to the lack of contributors, data were also not available between 1 March and 21 May 2013. For presentational reasons, this chart has been truncated.

## 2.9 Government debt service

(EU; percentage of GDP)



Last observation: September 2024

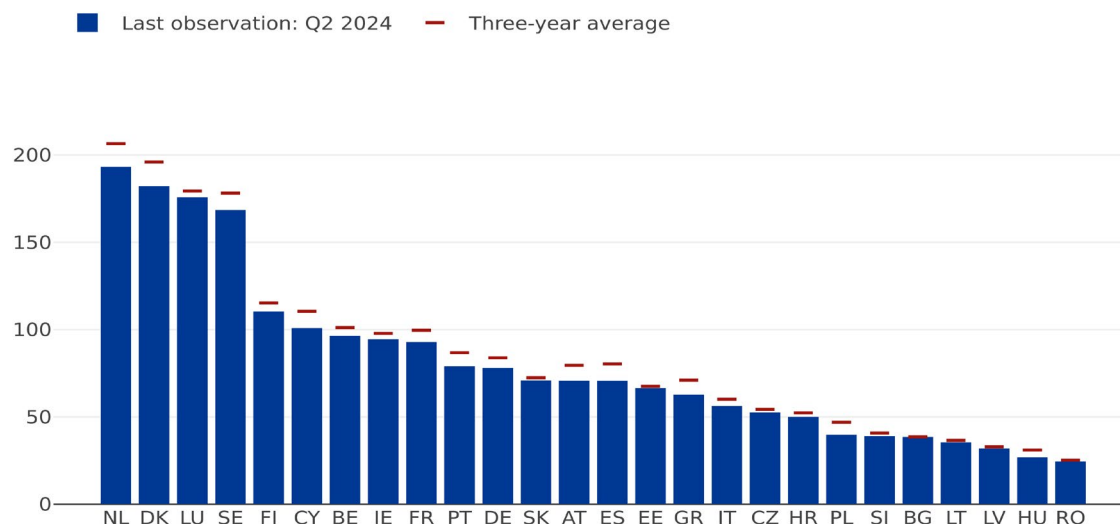
Source: ECB.

Note: Debt service is a set of payments, including the principal amount and interest, to be made by the debtor over the life of a debt. It is calculated on government debt securities and measured for the coming 12 months.



## 2.10 Household debt-to-gross disposable income ratio

(EU; percentage points)



Last observation: Q2 2024

The following datapoints are based on older data:

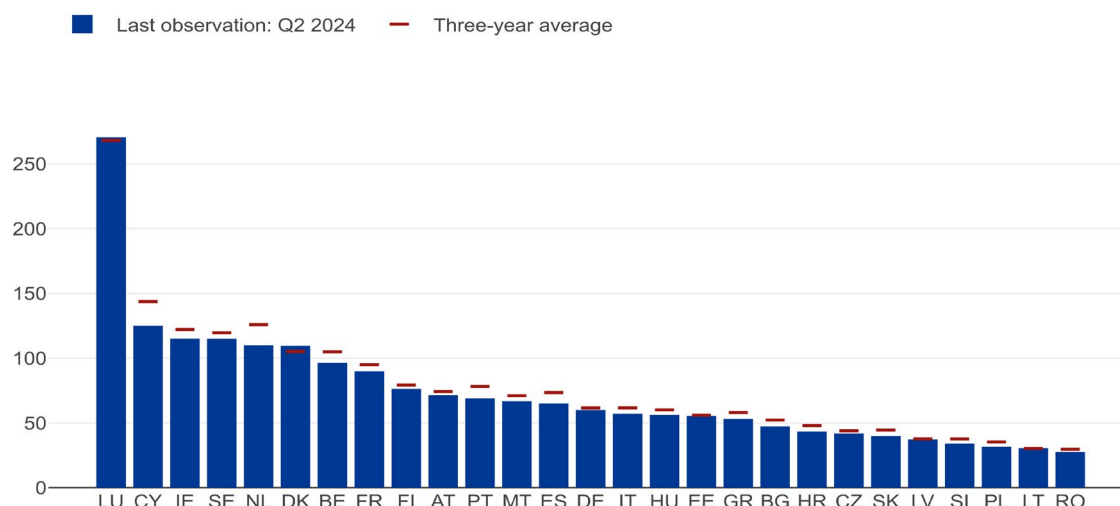
(BG, Q4 2017), (HR, Q4 2023), (CY, Q4 2022), (CZ, Q1 2024), (EE, Q4 2023), (GR, Q1 2024), (LV, Q4 2022), (LT, Q4 2023), (LU, Q4 2023), (PL, Q1 2024), (RO, Q4 2019), (SK, Q4 2023), (SI, Q1 2024)

Source: ECB and European Commission.

Note: Data for MT are not available.

## 2.11 NFC debt-to-GDP ratio

(EU; percentage points)



Last observation: Q2 2024

Source: ECB and European Commission.

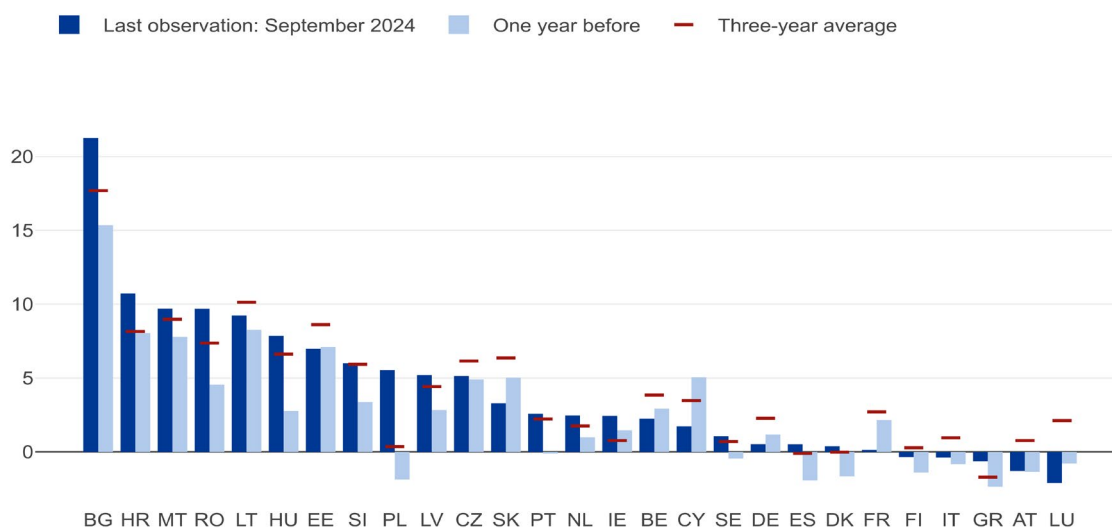
Note: Debt-to-GDP ratios for NFCs and general government are based on consolidated debt figures. NL data are consolidated at the level of the resident enterprise group. The indicator includes amounts relating to special purpose entities (SPEs). Large proportions of their activities and their lending and indebtedness practices are not related to the domestic market. For countries with a relevant presence of resident SPEs (in particular CY, HU, IE, LU, MT and NL), the impact on this indicator and its changes can be very significant. Additional information on the effect of SPEs may be obtained from the relevant national compilers.



## 3 Credit risk

### 3.1 Annual growth rates of MFIs loans to households

(EU; percentages)



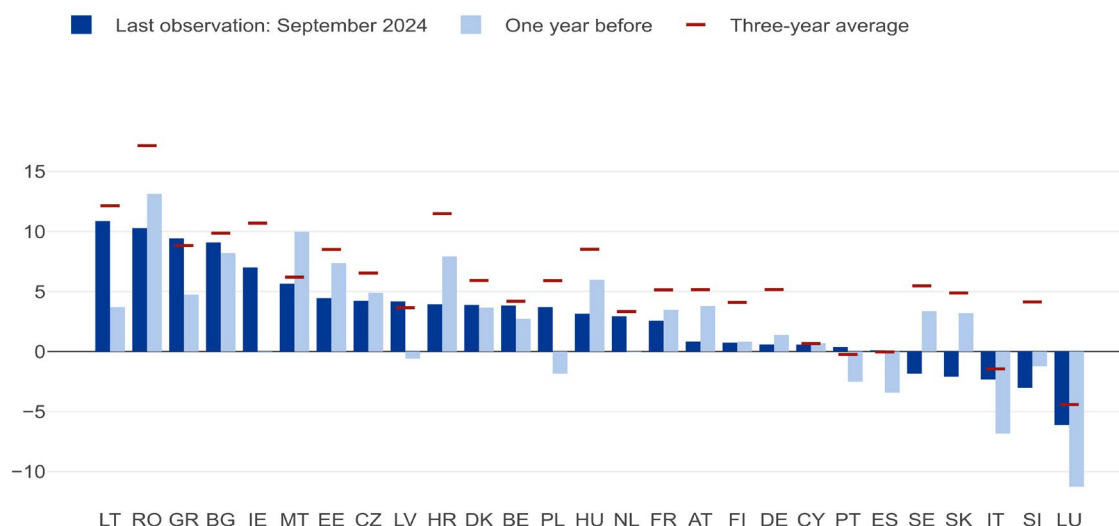
Last observation: September 2024

Source: ECB.

Note: Loans extended by MFIs excluding the ESCB. Data for euro area Member States refer to loans granted to euro area households, while for non-euro area Member States to loans to domestic households. Euro area Member States data are adjusted for loan sales and securitisation (resulting in derecognition from the MFI statistical balance sheet) as well as for positions arising from notional cash pooling services provided by MFIs. The figure is based on growth in the index of notional stocks.

### 3.2 Annual growth rates of MFI loans to NFCs

(EU; percentages)



Last observation: September 2024

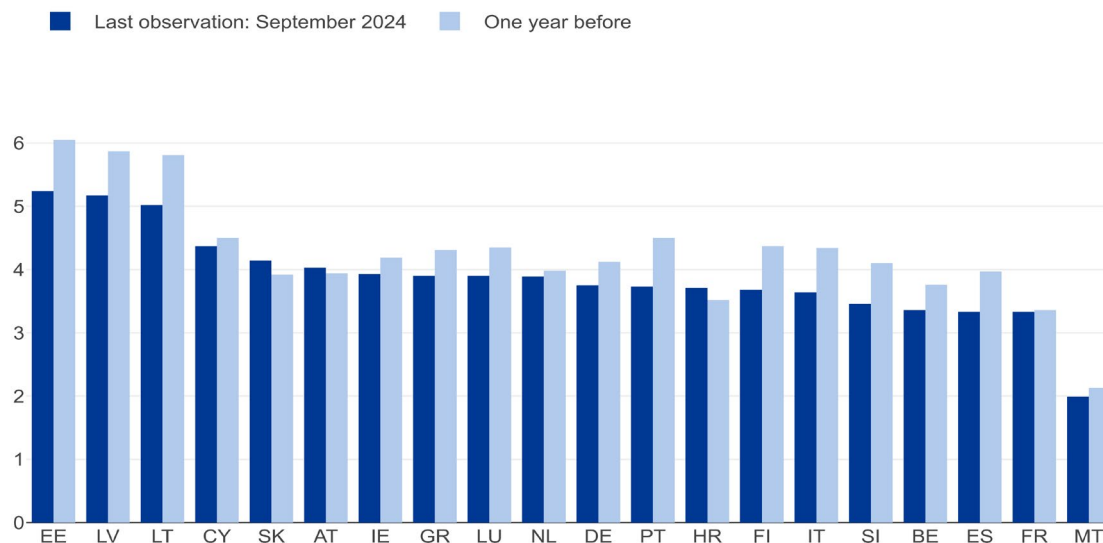
Source: ECB.

Note: Loans extended by MFIs excluding the ESCB. Data for euro area Member States refer to loans granted to euro area NFCs, while for non-euro area Member States to loans to domestic NFCs. Euro area Member States data are adjusted for loan sales and securitisation (resulting in derecognition from the MFI statistical balance sheet) as well as for positions arising from notional cash pooling services provided by MFIs. The figure is based on growth in the index of notional stocks.



### 3.3 Cost of borrowing from MFIs for households (for house purchase)

(Euro area; percentage points)



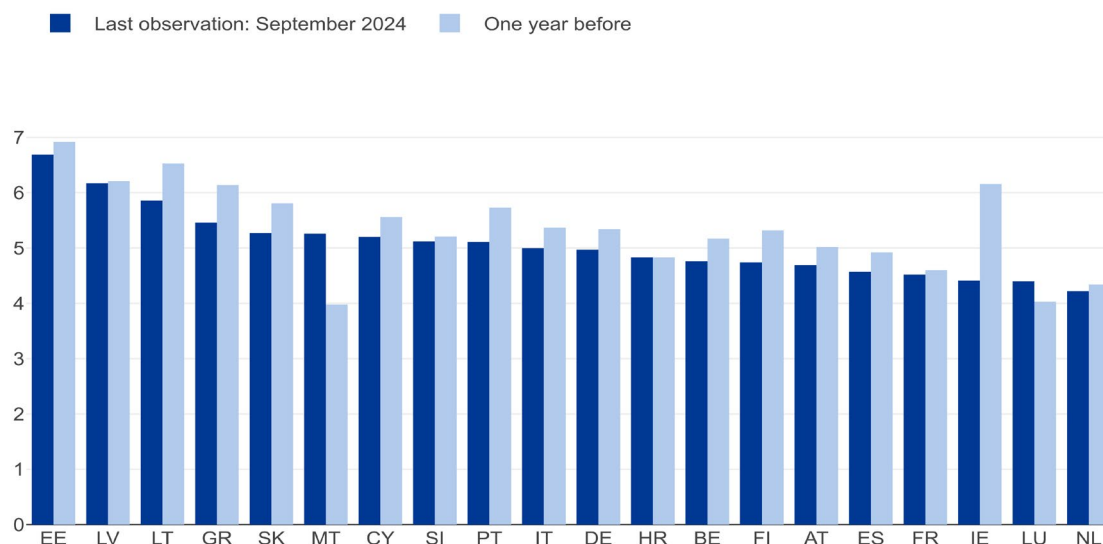
Last observation: September 2024

Source: ECB.

Note: MFIs excluding ESCB. The cost of borrowing from MFIs is calculated as the weighted average of rates on short-term (i.e. initial period of interest rate fixation up to one year) and long-term (i.e. initial period of interest rate fixation over one year) MFI loans, weighted by the volumes of new business (smoothed by the moving average of the previous two years).

### 3.4 Cost of borrowing from MFIs for NFCs

(Euro area; percentage points)



Last observation: September 2024

Source: ECB.

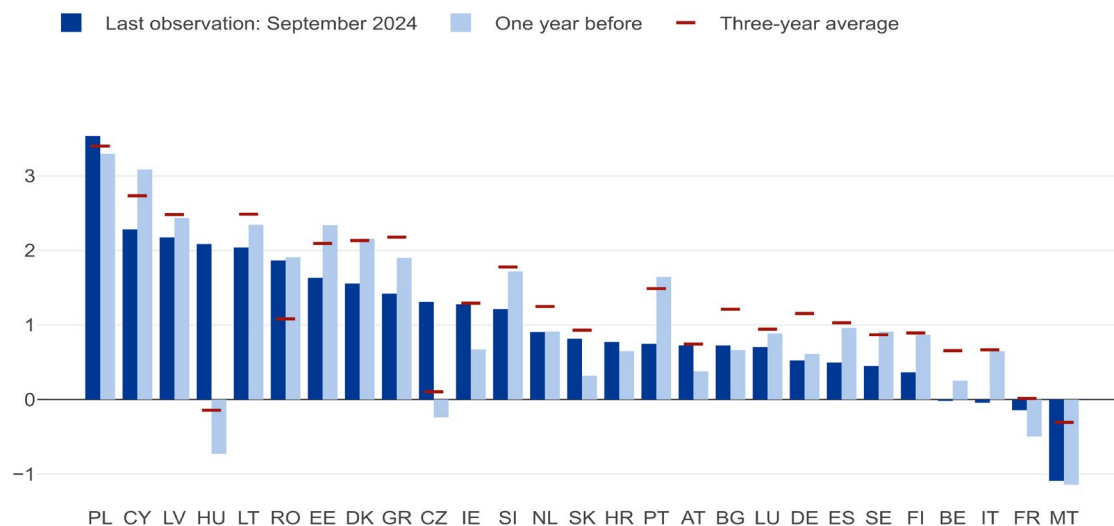
Note: MFIs excluding ESCB. The cost of borrowing from MFIs is calculated as the weighted average of rates on short-term (i.e. initial period of interest rate fixation up to one year) and long-term (i.e. initial period of interest rate fixation over one year) MFI loans, weighted by the volumes of new business (smoothed by the moving average of the previous two years).





### 3.5 Lending margins of MFIs - loans to households (for house purchase)

(EU; percentage points)



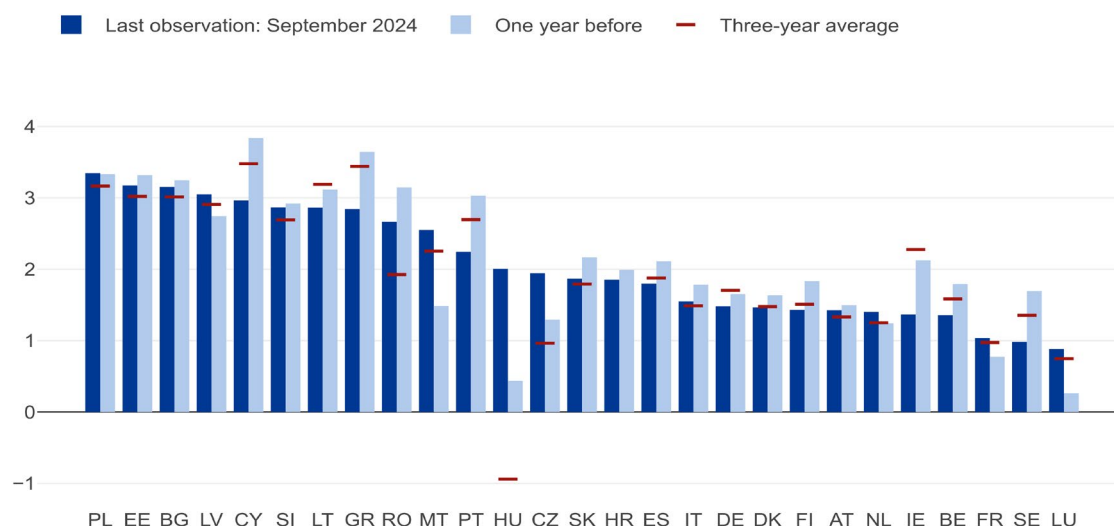
Last observation: September 2024

Source: ECB.

Note: Lending margins are measured as the difference between MFIs' interest rates for new business loans and a weighted average rate of new deposits from households and NFCs. In this chart, new deposits refer to deposits with agreed maturity. For non-euro area countries, rates for loans and deposits in both euro and the national currency are taken into account. For euro area countries, rates refer to loans granted to euro area residents, whereas for non-euro area countries rates refer to loans granted to domestic residents.

### 3.6 Lending margins of MFIs - loans to NFCs

(EU; percentage points)



Last observation: September 2024

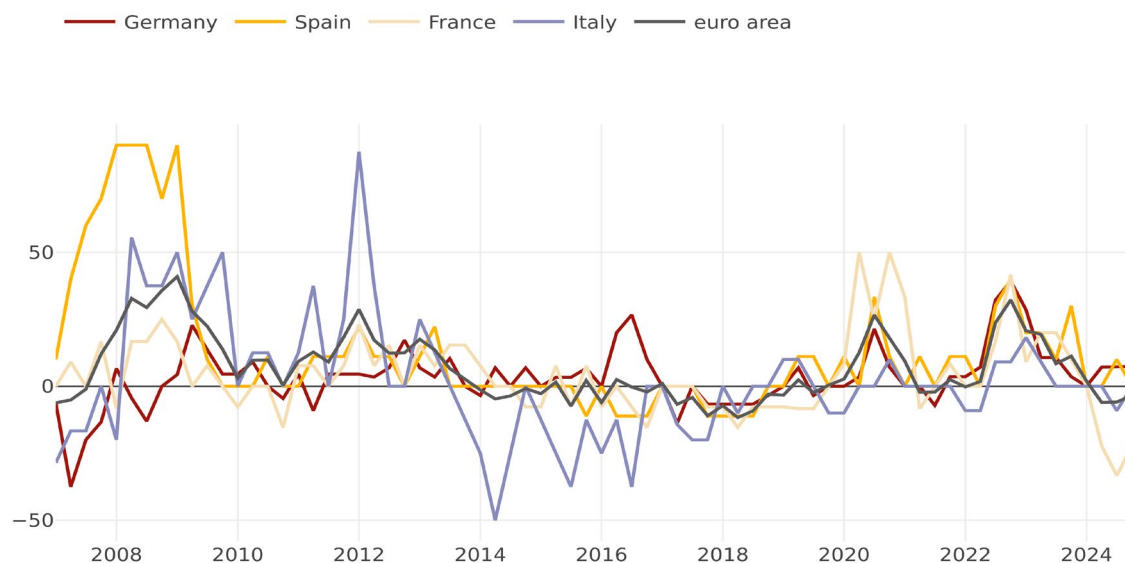
Source: ECB.

Note: Lending margins are measured as the difference between MFIs' interest rates for new business loans and a weighted average rate of new deposits from households and NFCs. In this chart, new deposits refer to deposits with agreed maturity. For non-euro area countries, rates for loans and deposits in both euro and the national currency are taken into account. For euro area countries, rates refer to loans granted to euro area residents, whereas for non-euro area countries rates refer to loans granted to domestic residents.



### 3.7 Changes in credit standards for loans to households (for house purchase)

(Euro area and four largest euro area countries; net percentage of banks)



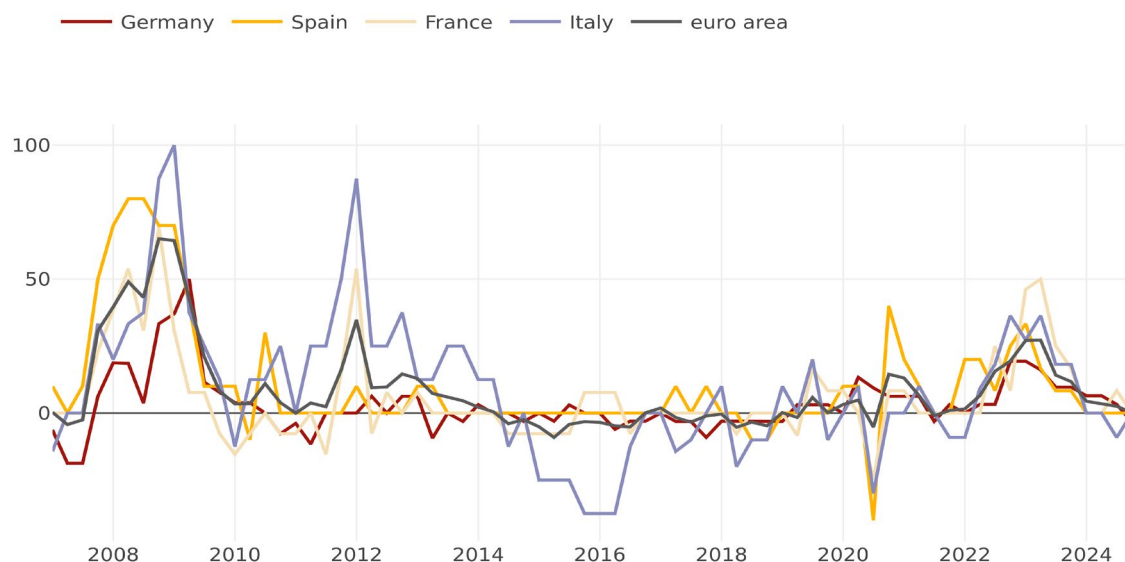
Last observation: Q4 2024

Source: ECB.

Note: Net percentages of banks contributing to the tightening of standards over the previous three months. The last observation refers to the quarter in which the most recent BLS was published.

### 3.8 Changes in credit standards for loans to NFCs

(Euro area and four largest euro area countries; net percentage of banks)



Last observation: Q4 2024

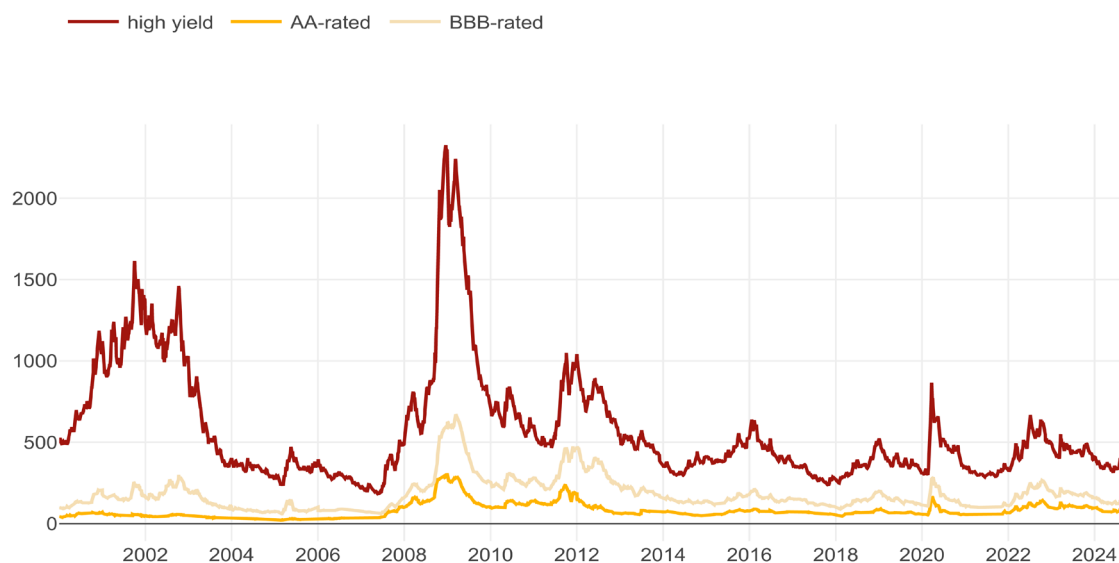
Source: ECB.

Note: Net percentages of banks contributing to the tightening of standards over the previous three months. The last observation refers to the quarter in which the most recent BLS was published.



### 3.9 Option-adjusted spreads on euro area corporate bonds

(Euro area; percentage points)



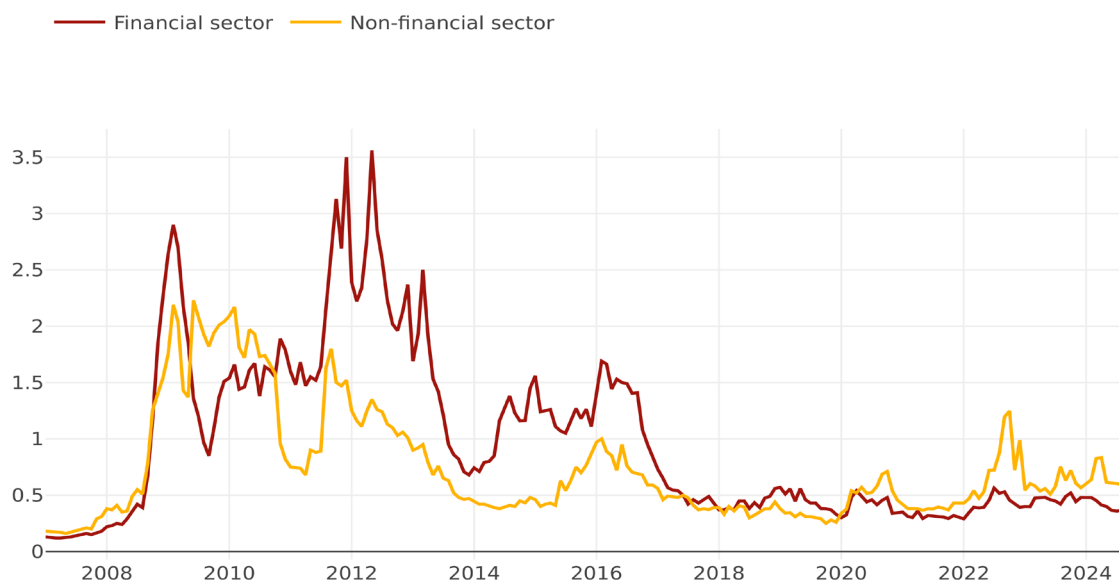
Last observation: 13 November 2024

Source: Bank of America Merrill Lynch.

Note: Spreads over German government bonds for both plain vanilla bonds and bonds with embedded options (for which the value of the option is stripped using proprietary models).

### 3.10 Expected default frequency of the corporate sector

(EU; average weighted by liabilities; percentage points)



Last observation: October 2024

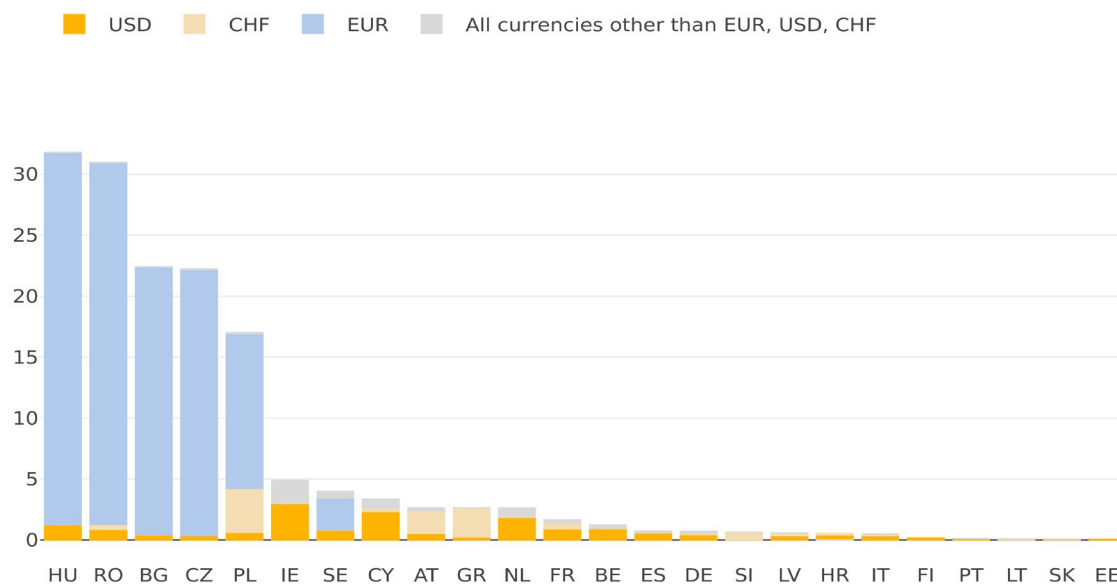
Source: Moody's Analytics and ECB calculations.

Note: The figures refer to listed companies. The weighted average is based on the amounts of non-equity liabilities.



### 3.11.a Foreign currency loans - By currency

(EU; percentages)



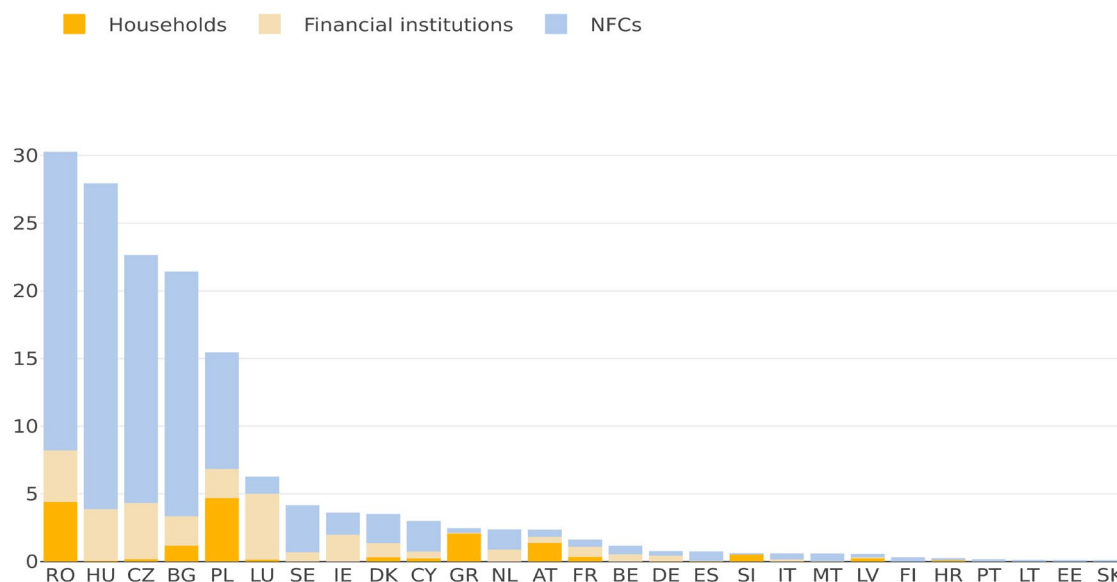
Last observation: Q2 2024

Source: ECB.

Note: BG (currency board arrangement) and DK have a regime of fixed exchange rates vis-à-vis the euro.

### 3.11.b Foreign currency loans - By sector

(EU; percentages)



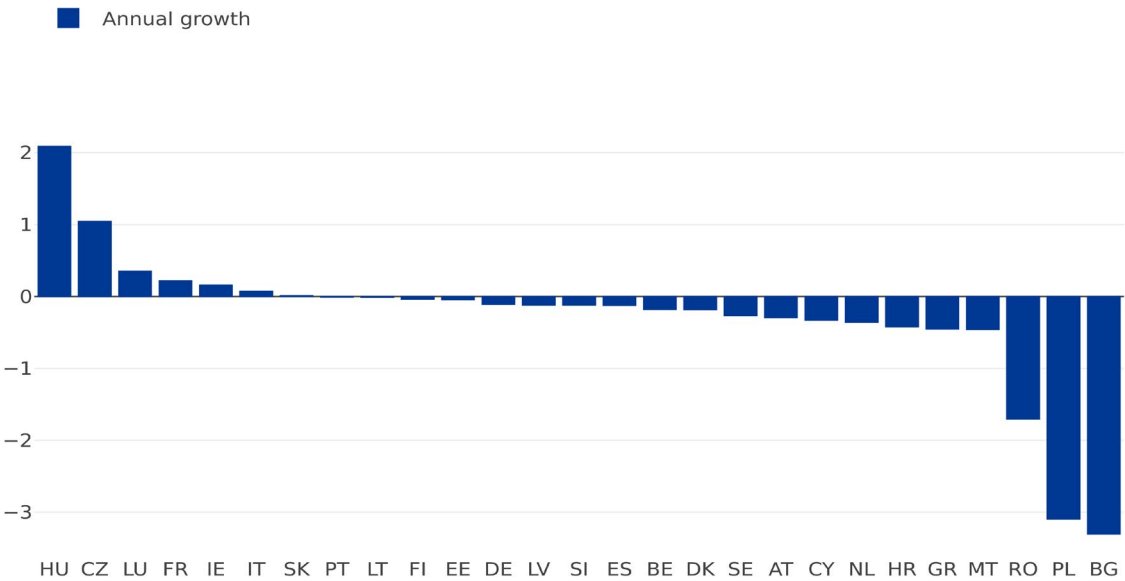
Last observation: September 2024

Source: ECB.

Note: BG (currency board arrangement) and DK have a regime of fixed exchange rates vis-à-vis the euro.

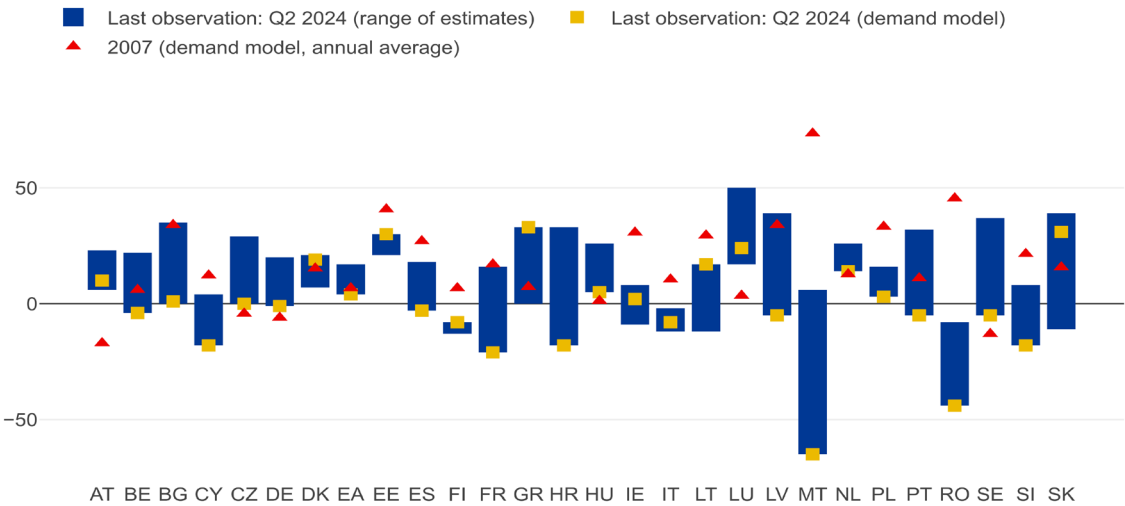


3.11.c Foreign currency loans - Annual changes  
(EU; percentage points)



Last observation: September 2024  
Source: ECB.  
Note: BG (currency board arrangement) and DK have a regime of fixed exchange rates vis-à-vis the euro.

3.12 Over/undervaluation of residential property prices  
(EU; percentage points)

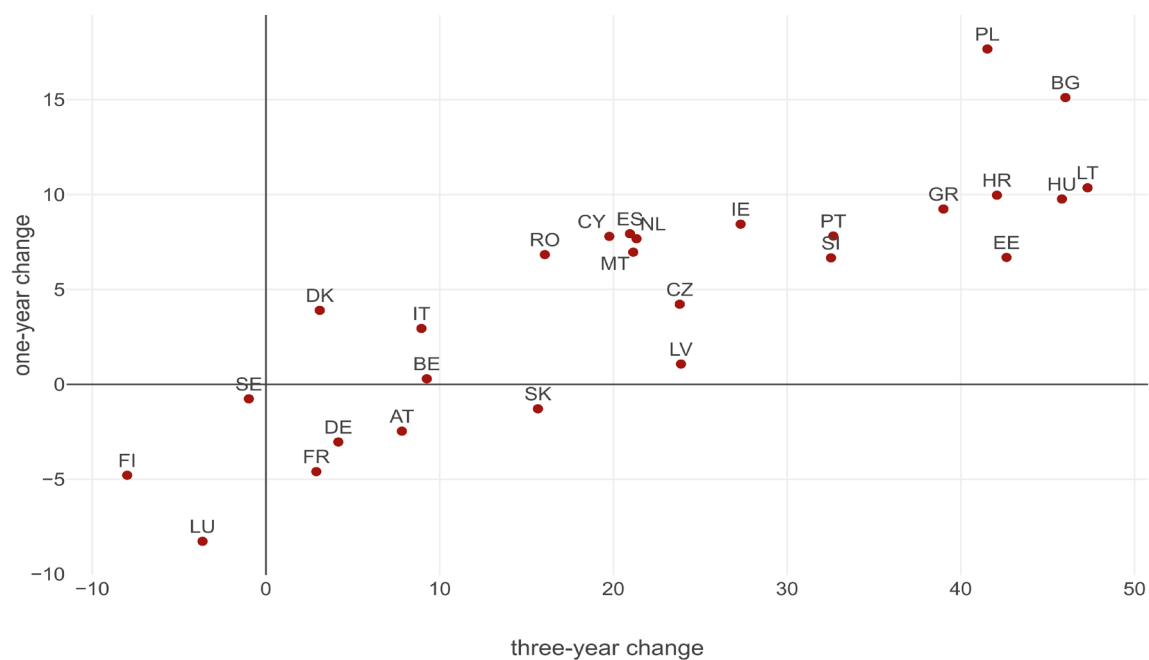


Last observation: Q2 2024  
The following datapoints are based on older data:  
(CY, Q1 2024)  
Source: Eurostat, national sources, ECB and ECB calculations.  
Note: Estimates based on four different valuation methods: price-to-rent ratio, price-to-income ratio, asset pricing approach and a Bayesian estimated inverted demand model. For further details see Box 3, Financial Stability Review, ECB, June 2011; and box 3, Financial Stability Review, ECB, November 2015. For each country, the blue bars represent the range of estimates across the four valuation methods.



### 3.13 Change in nominal residential property prices

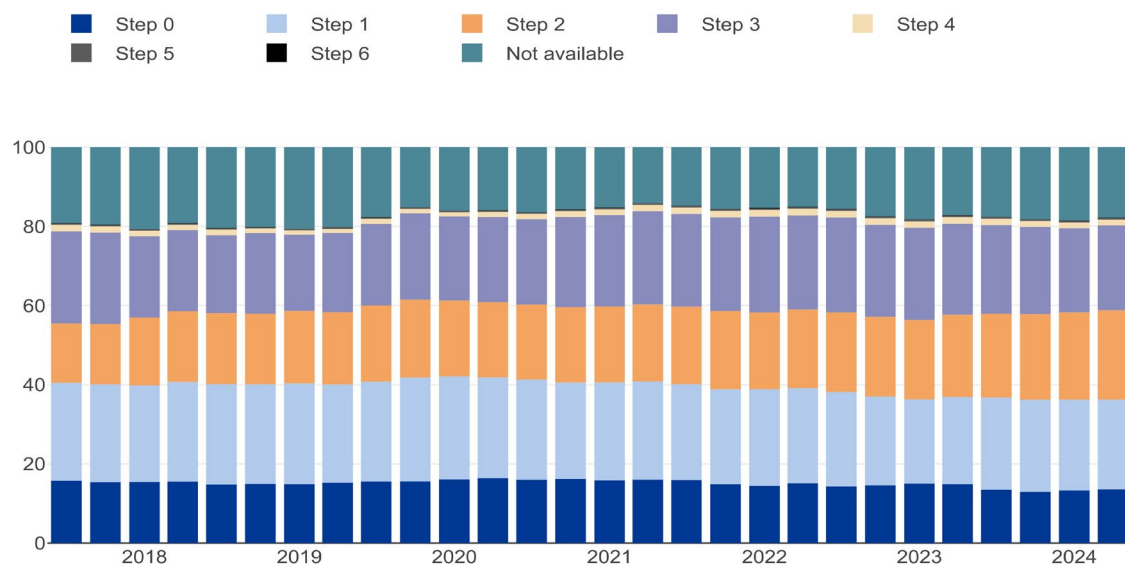
(EU; percentage points)



Last observation: Q2 2024  
The following datapoints are based on older data:  
(CY, Q1 2024)  
Source: ECB, national sources and ECB calculations.

### 3.14 Insurance groups' credit quality steps

(EU; share of total bond portfolio; percentages)



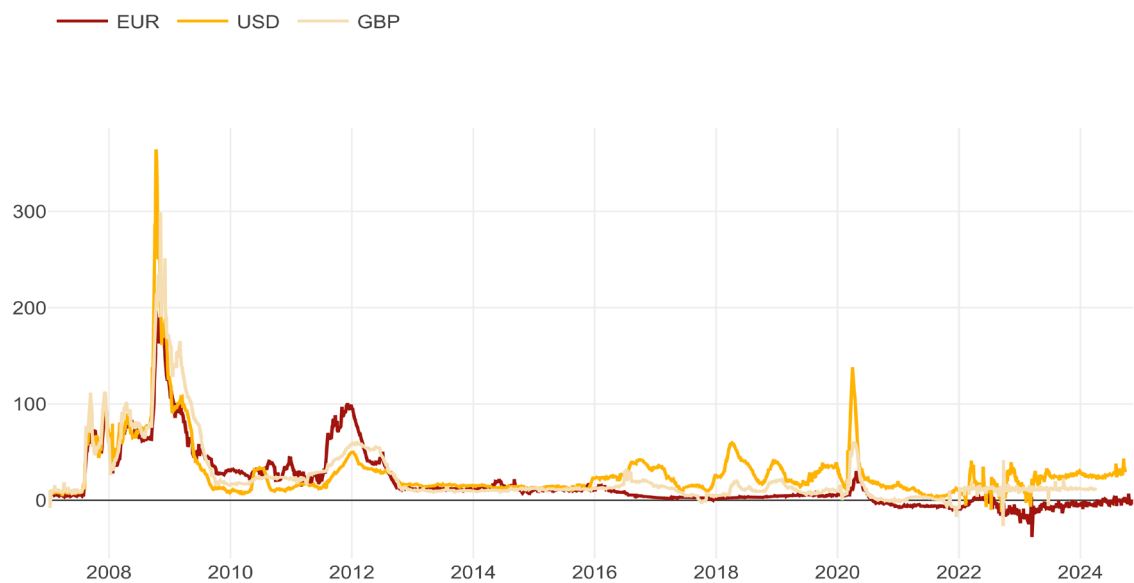
Last observation: Q2 2024  
Source: EIOPA, based on Solvency II Reporting.  
Note: Indicator presents breakdown of the insurers' bond portfolio according to the different credit quality steps. For more details on the Solvency II reporting please see Annex I to the risk dashboard.



## 4 Funding & Liquidity

### 4.1 Interbank interest rate spreads

(Three-month maturities; basis points)



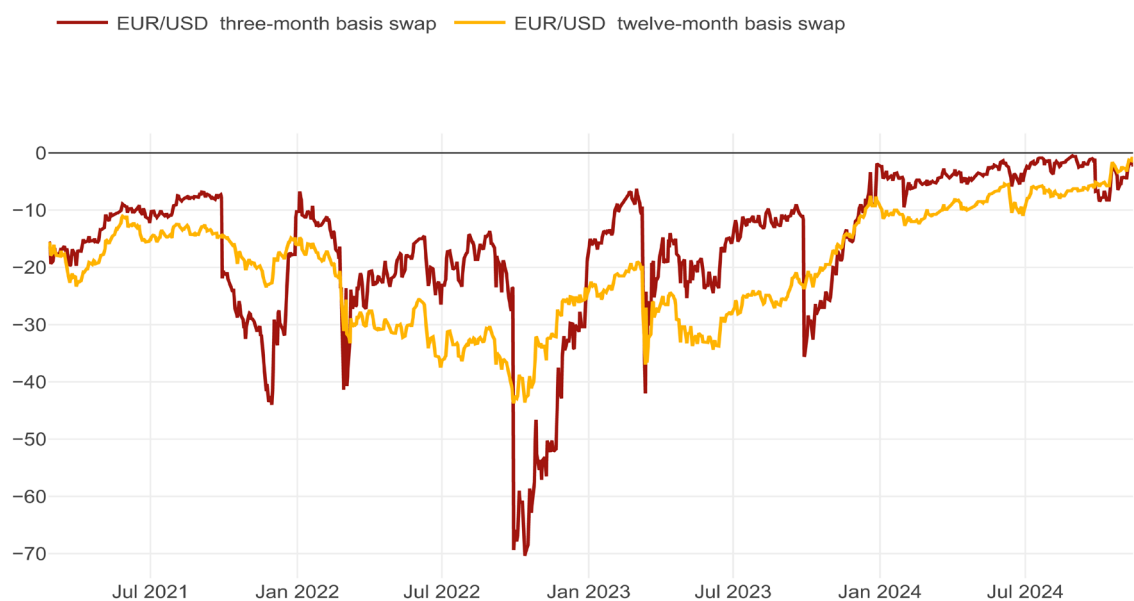
Last observation: 13 November 2024

Source: LSEG, Bloomberg Finance L.P. and ECB calculations.

Note: 1) Difference between interbank interest rates and overnight indexed swap. 2) GBP LIBOR discontinued in April 2024.

### 4.2 EUR/USD cross-currency basis swap spreads

(Basis points)



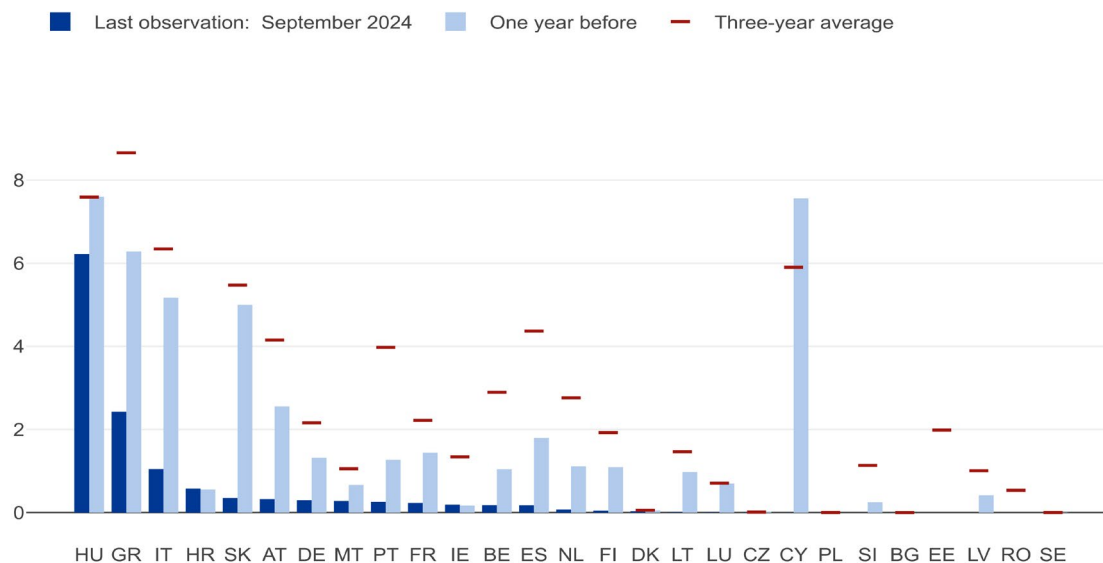
Last observation: 13 November 2024

Source: Bloomberg Finance L.P.



#### 4.3 Banks' funding by central banks

(EU; share of total liabilities; percentages)



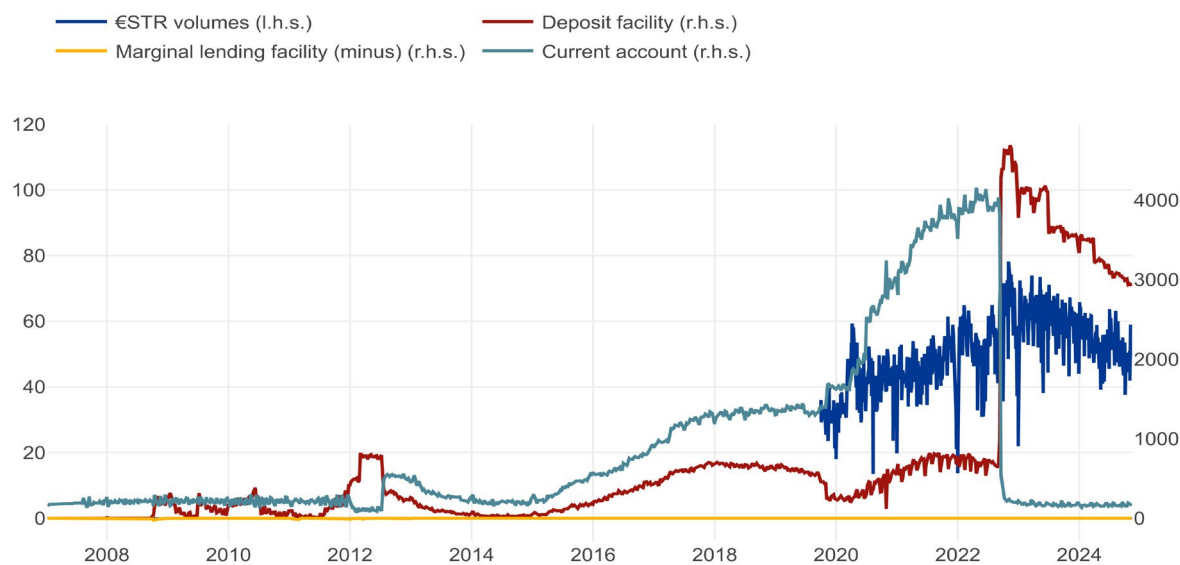
Last observation: September 2024

Source: ECB and ECB calculations.

Note: MFIs excluding the ESCB and Money Market Funds. Banks' funding by central banks comprises all loans granted by the ESCB. Total liabilities exclude capital and reserves as well as remaining liabilities.

#### 4.4 Money markets and the Eurosystem's standing facilities

(Euro area; EUR billions)



Last observation: 13 November 2024

Source: ECB and Bloomberg Finance L.P.

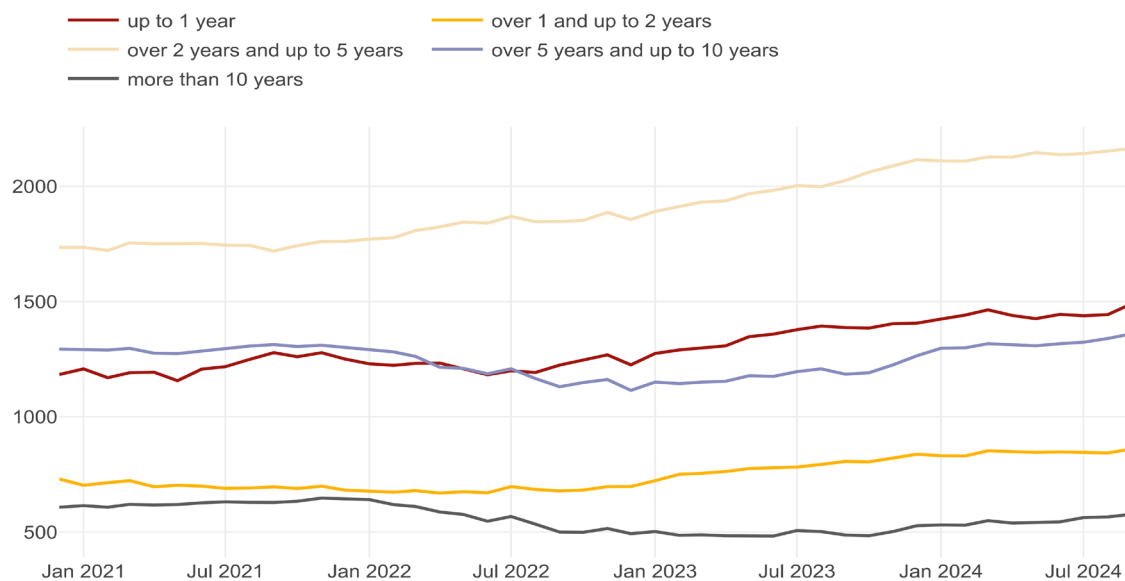
Note: Eurosystem's current account includes minimum reserves. Starting from October 2019 the EONIA rate has been officially replaced with the new interbank rate €STR.





#### 4.5 Maturity profile of banks' outstanding debt securities

(EU27 fixed composition; EUR billions)



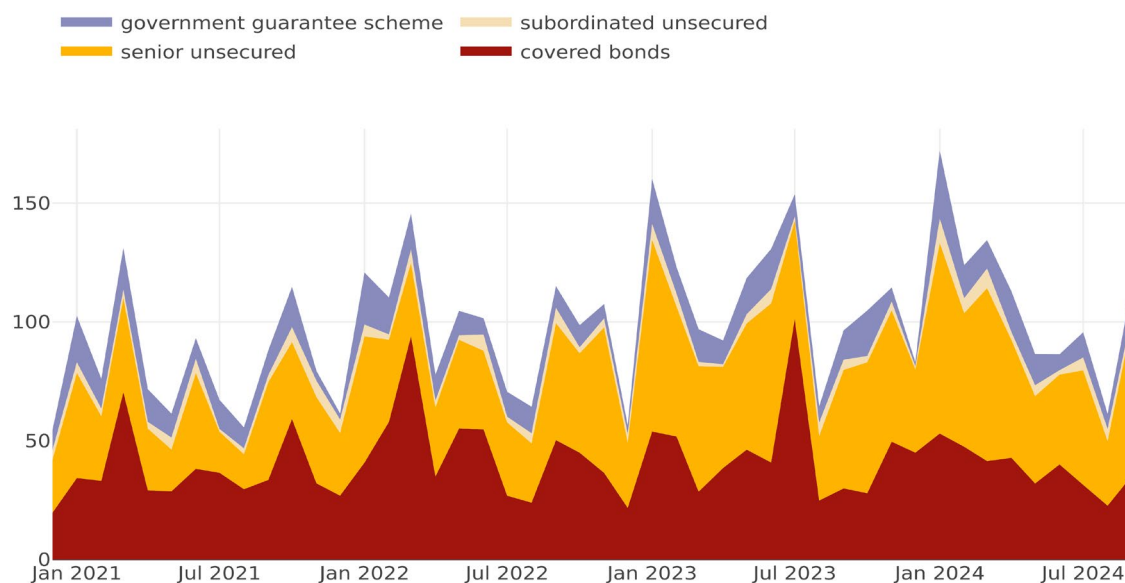
Last observation: September 2024

Source: CSEC.

Note: Outstanding amounts of debt securities at market value. The maturity profile refers to the residual maturity of debt securities.

#### 4.6 Banks' long-term debt securities issuance by type of bond

(EU27 fixed composition; EUR billions)



Last observation: September 2024

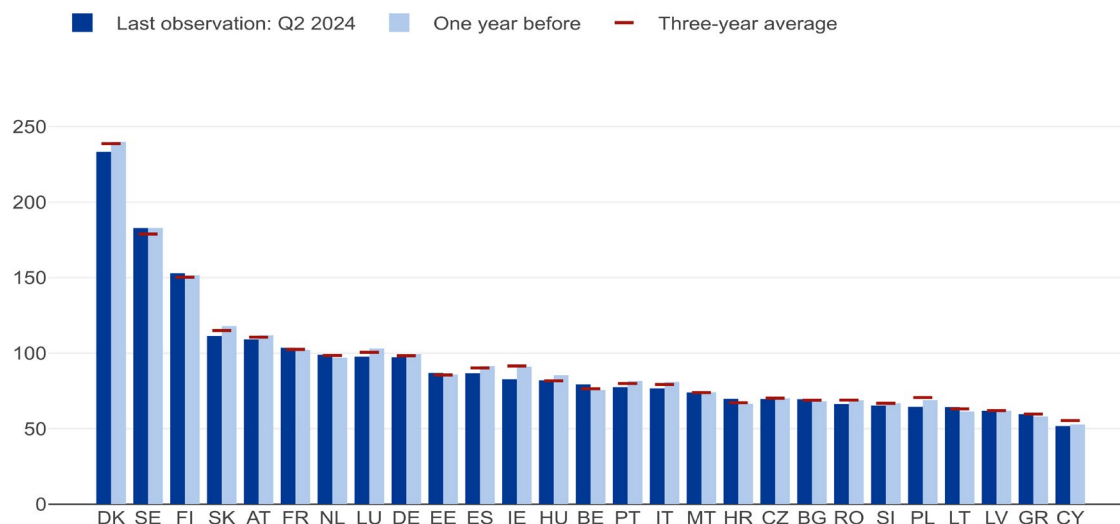
Source: CSEC.

Note: Long-term debt securities issuances, excluding ABS, MBS and other debt securities without seniority information.



## 4.7 Loan-to-deposit ratio

(EU; percentages)



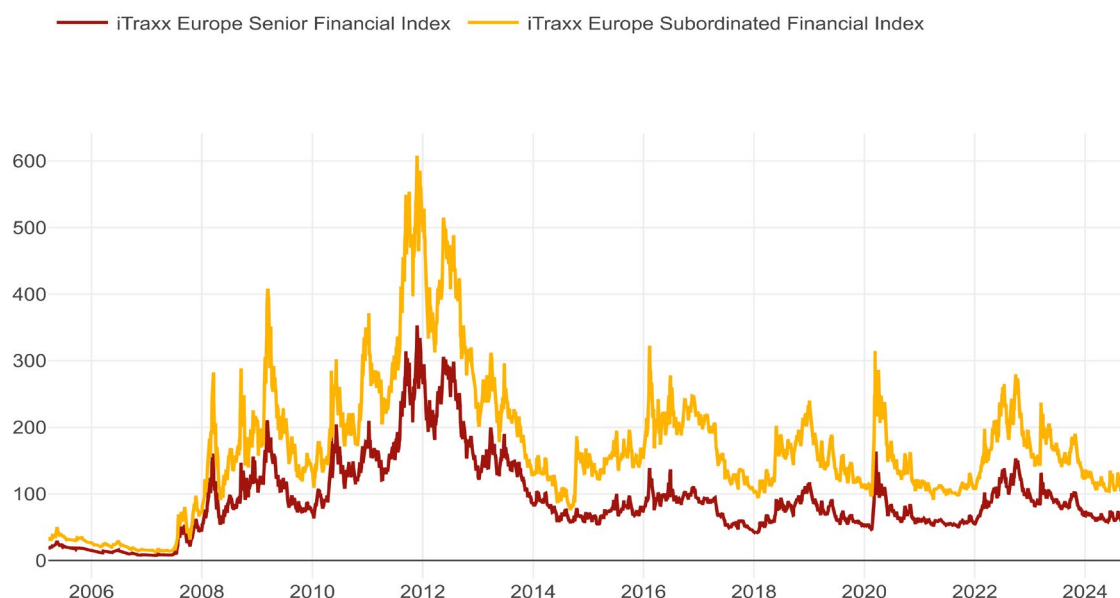
Last observation: Q2 2024

Source: ECB.

Note: MFI sector excluding the ESCB. Data refer to the ratio between total loans and total deposits vis-à-vis domestic and euro area households and NFCs, and non-domestic and non-euro area residents excluding banks and general government. Mortgage banks in Denmark, which represent around 55% of total MFI loans to domestic NFCs, are not allowed to take deposits owing to regulations, but must fund their lending through issuance of covered bonds only. Excluding mortgage banks from the indicator, the loan-to-deposit ratio for DK is equal to 0.59 for Q2 2024 and 0.58 for Q2 2023.

## 4.8 CDS spread between senior and subordinated debt

(EU; five-year maturities; basis points)

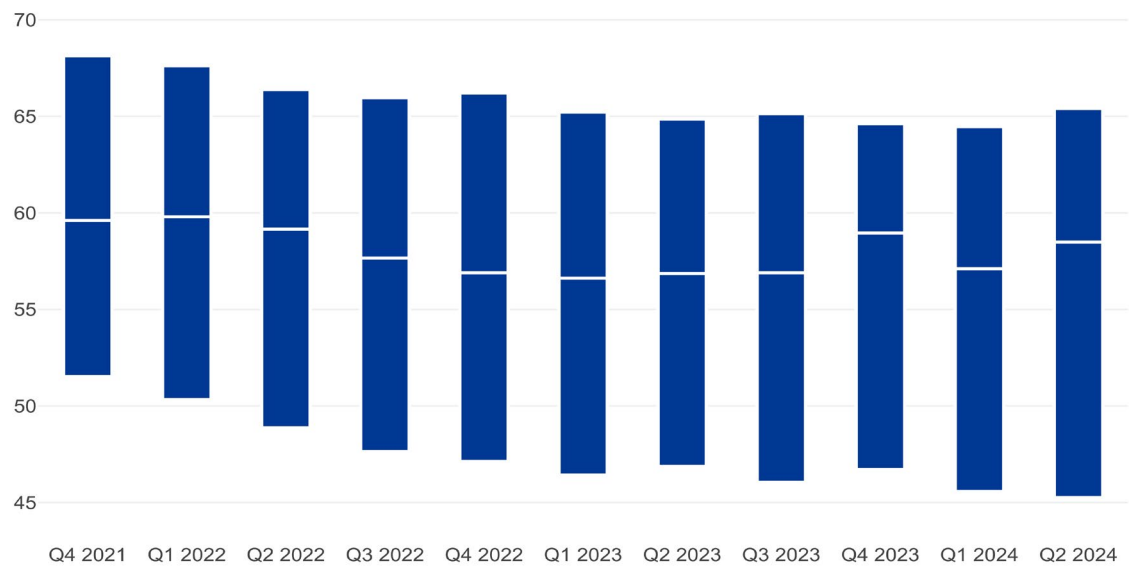


Last observation: 13 November 2024

Source: Datastream, iTraxx and ECB calculations.



4.9 Insurance groups' liquid asset ratio  
(EU; interquartile range and median; percentages)



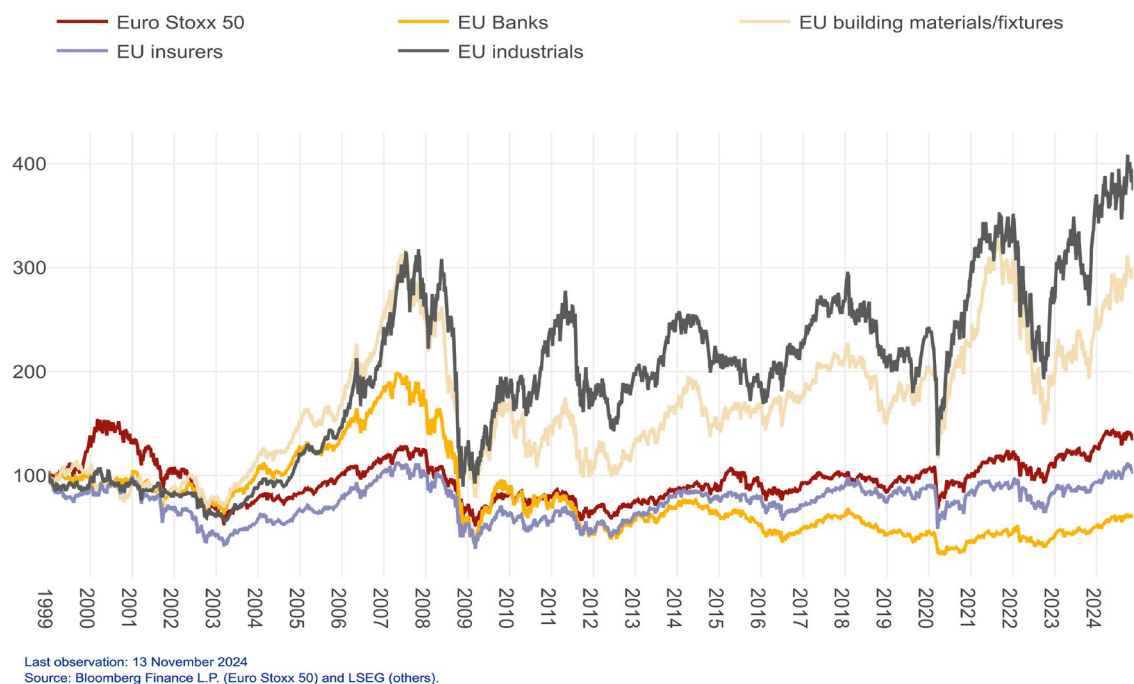
Last observation: Q2 2024  
Source: EIOPA, based on Solvency II Reporting.  
Note: Liquid asset ratio is expressed as proportion of liquid assets to total assets. For more details on the Solvency II reporting please see Annex I to the risk dashboard.



## 5 Market risk

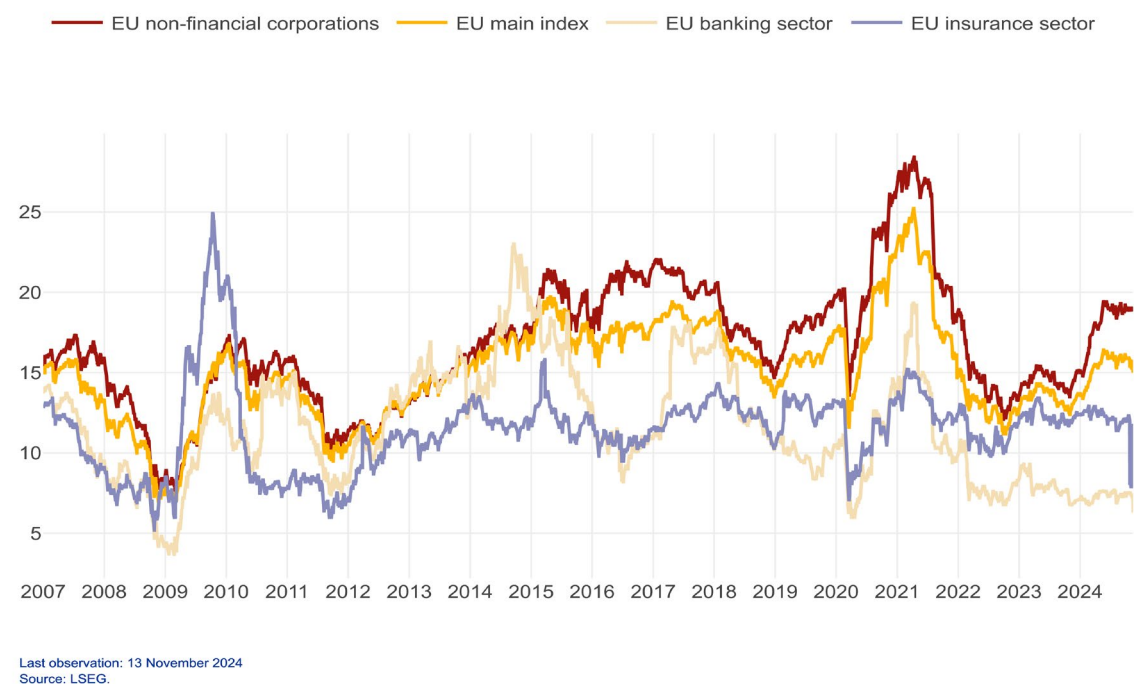
### 5.1 Equity indices

(EU; Equity indices, by sector; levels (EURO Stoxx 50 index 4 Jan. 1999 = 100))



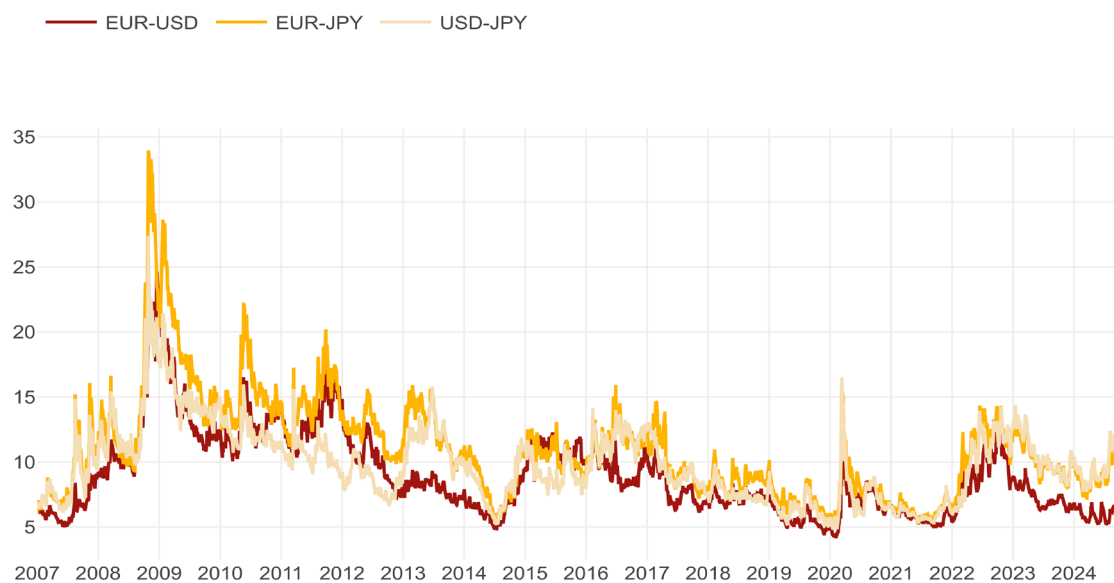
### 5.2 Price/earnings ratio of equity indices

(EU; Price/earnings ratio of equity indices; levels (EURO Stoxx 50 index 4 Jan. 1999 = 100))



### 5.3 Exchange rate volatility

(EUR/JPY/USD; Exchange rate volatility (cross-currency volatility ATM forward rate); percentage points)



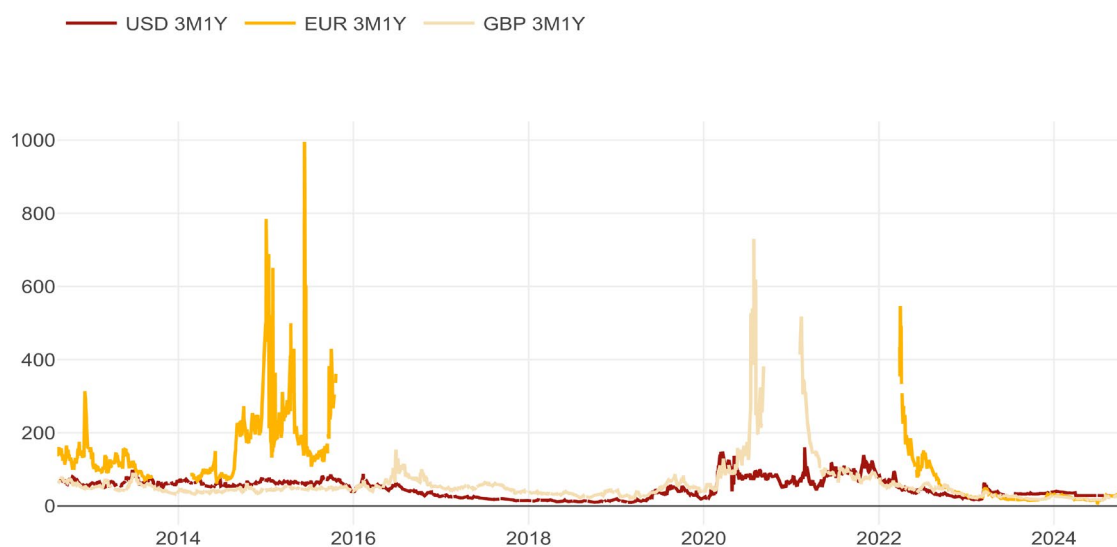
Last observation: 14 November 2024

Source: Bloomberg Finance L.P.

Note: Volatility is implied by at-the-money option prices observed in the market for major currencies, based on three-month maturity.

### 5.4 Short-term interest rates - implied volatility

(EUR/JPY/USD; Short-term interest rates - implied volatility (three-month to one-year maturities ATM forward rate); unit percent per annum)



Last observation: 13 November 2024

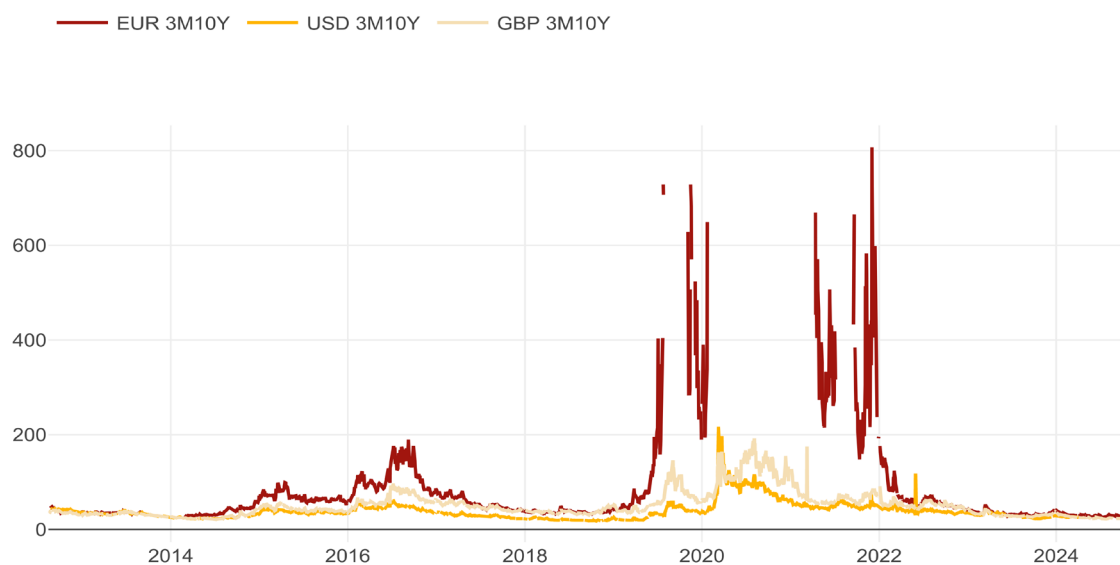
Source: LSEG.

Note: 1) Volatility is implied by at-the-money swaption prices observed in the market. 2) For technical reasons related to negative interest rates EUR 3M1Y rate is not available after 15 December 2014. Data become available as of 29 March 2022. 3) GBP 3M1Y rate is not available after 7 September 2020 as it was discontinued by the data supplier. Data become available as of 5 February 2021.



## 5.5 Long-term interest rates - implied volatility

(EUR/JPY/USD; Long-term interest rates - implied volatility (three-month to ten-year maturities ATM forward rate); unit percent per annum)



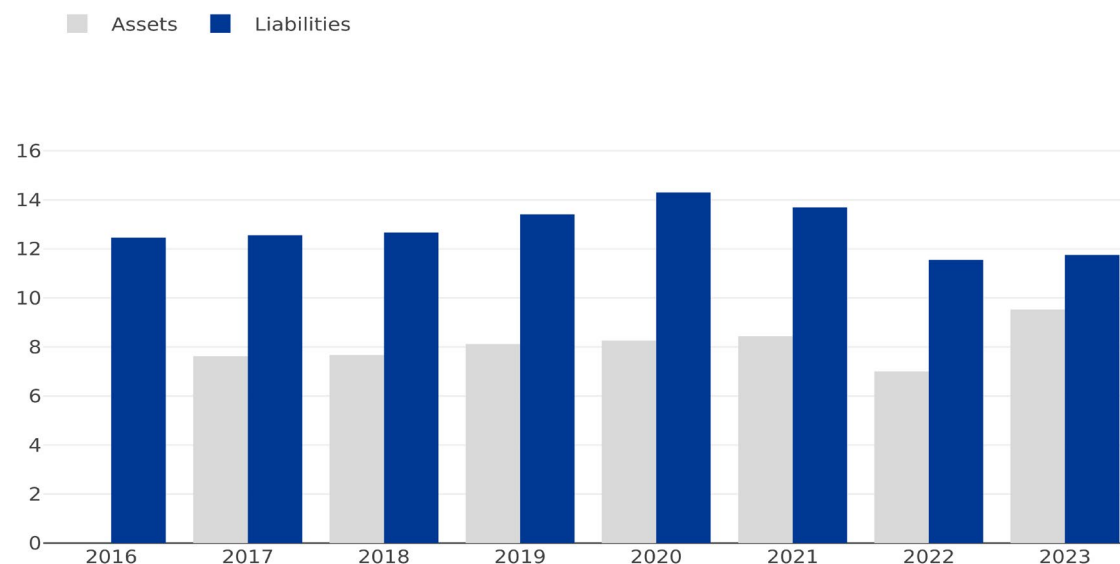
Last observation: 13 November 2024

Source: LSEG.

Note: 1) Volatility is implied by at-the-money swaption prices observed in the market. 2) For technical reasons related to negative interest rates the EUR 3M10Y rate is not available after 28 June 2019. Data become available as of 17 September 2021.

## 5.6 Insurance groups' assets and liabilities duration

(EU; average duration; years)



Last observation: 2024

Source: EIOPA, based on Solvency II Reporting.

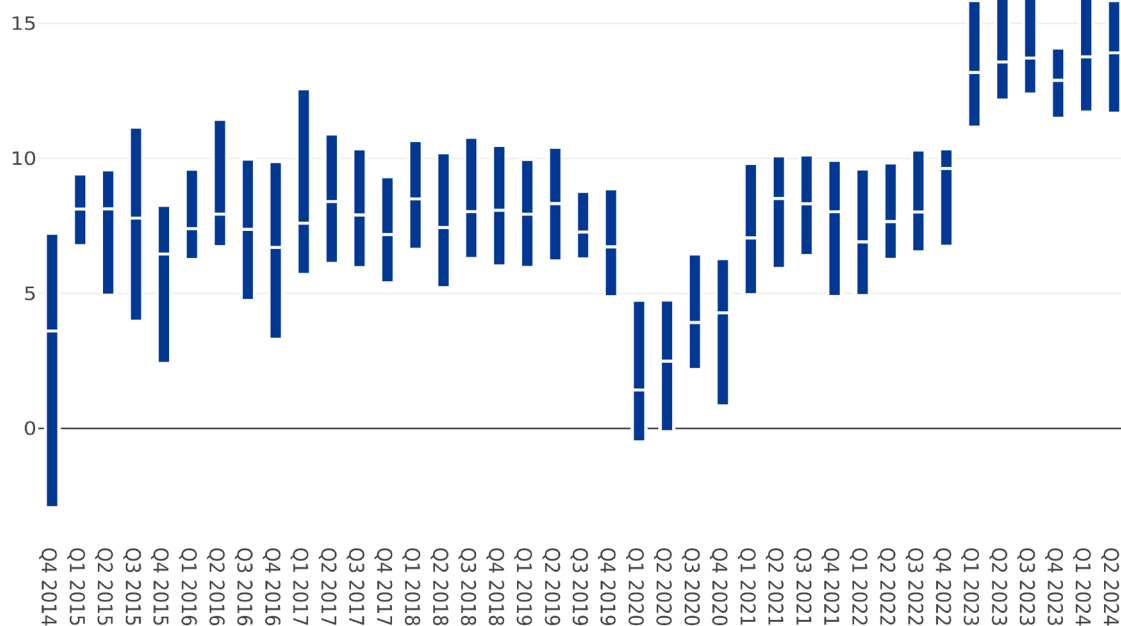
Note: Asset duration is calculated as Weighted Average Modified Duration. Liability duration is calculated as Weighted Average Modified Duration from 2023, and as Weighted Average Macaulay Duration in previous years. For more details on the Solvency II reporting, please see Annex I to the risk dashboard.



## 6 Profitability and Solvency

### 6.1.a Banking groups' profitability indicators - Return on equity

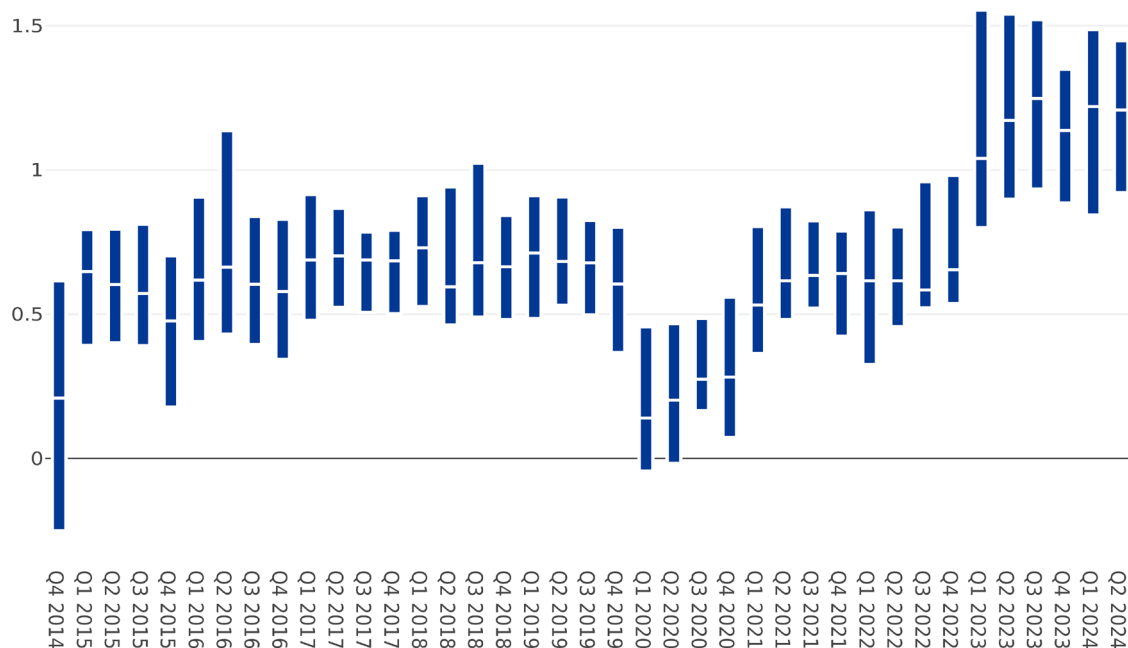
(EU; interquartile range and median; percentage points)



Last observation: Q2 2024  
Source: ECB.  
Note: Quarterly flows are annualised.

### 6.1.b Banking groups' profitability indicators - Return on assets

(EU; interquartile range and median; percentage points)

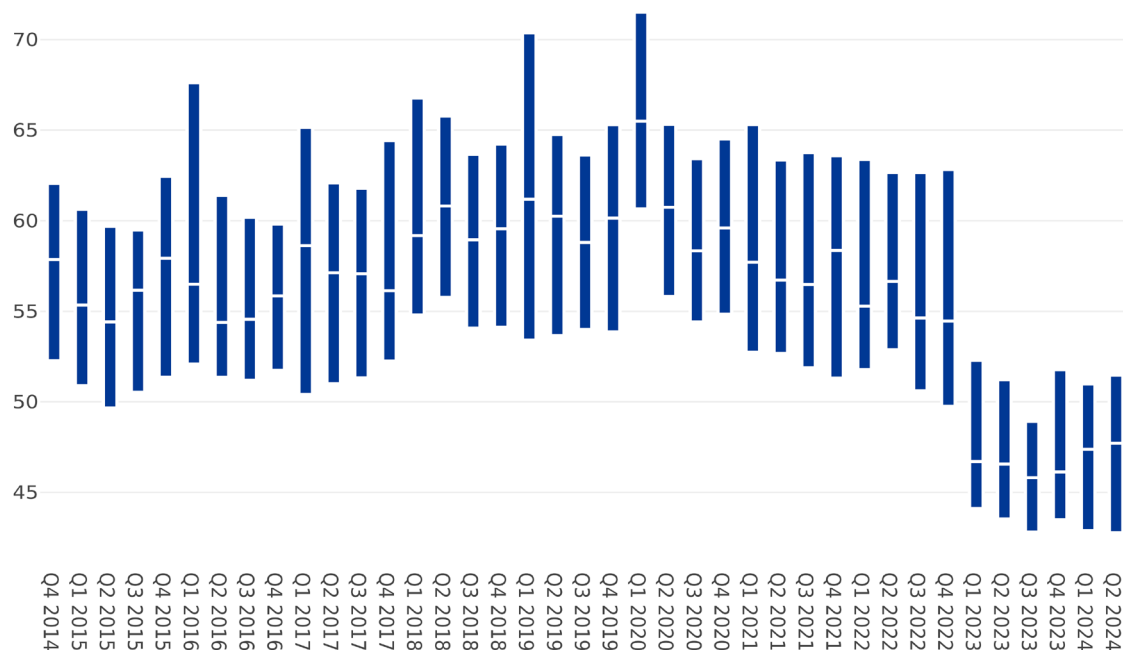


Last observation: Q2 2024  
Source: ECB.  
Note: Quarterly flows are annualised.



### 6.1.c Banking groups' profitability indicators - Cost-income ratio

(EU; interquartile range and median; percentage points)



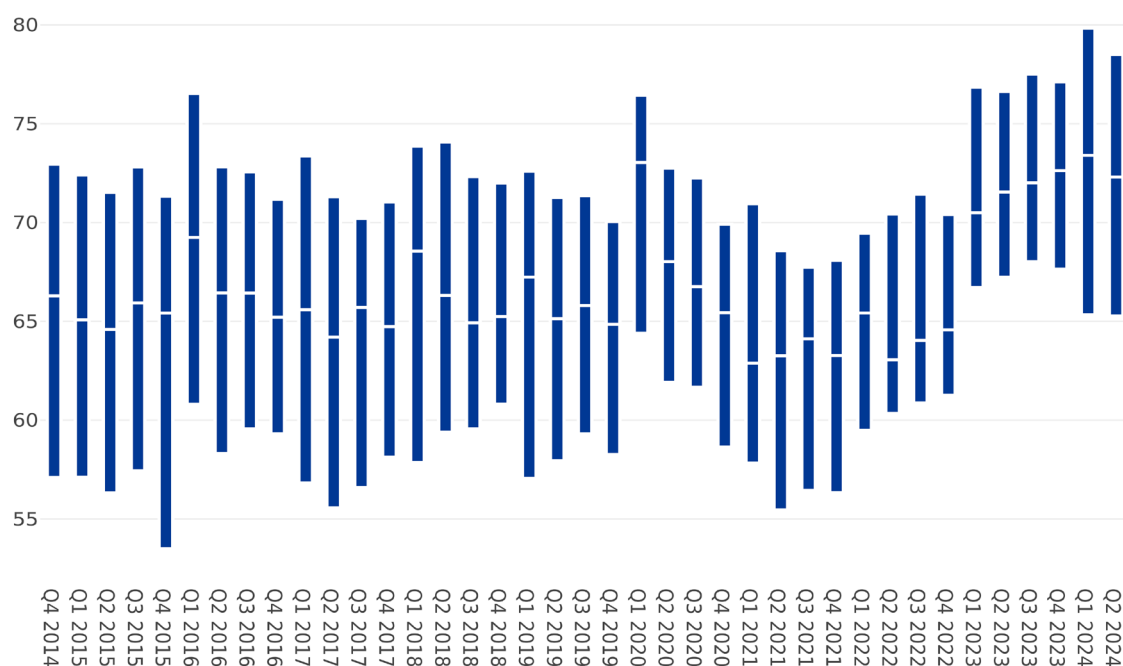
Last observation: Q2 2024

Source: ECB.

Note: Quarterly data refer to cumulative flows over the corresponding year.

### 6.1.d Banking groups' profitability indicators - Net interest income to total operating income

(EU; interquartile range and median; percentage points)



Last observation: Q2 2024

Source: ECB.

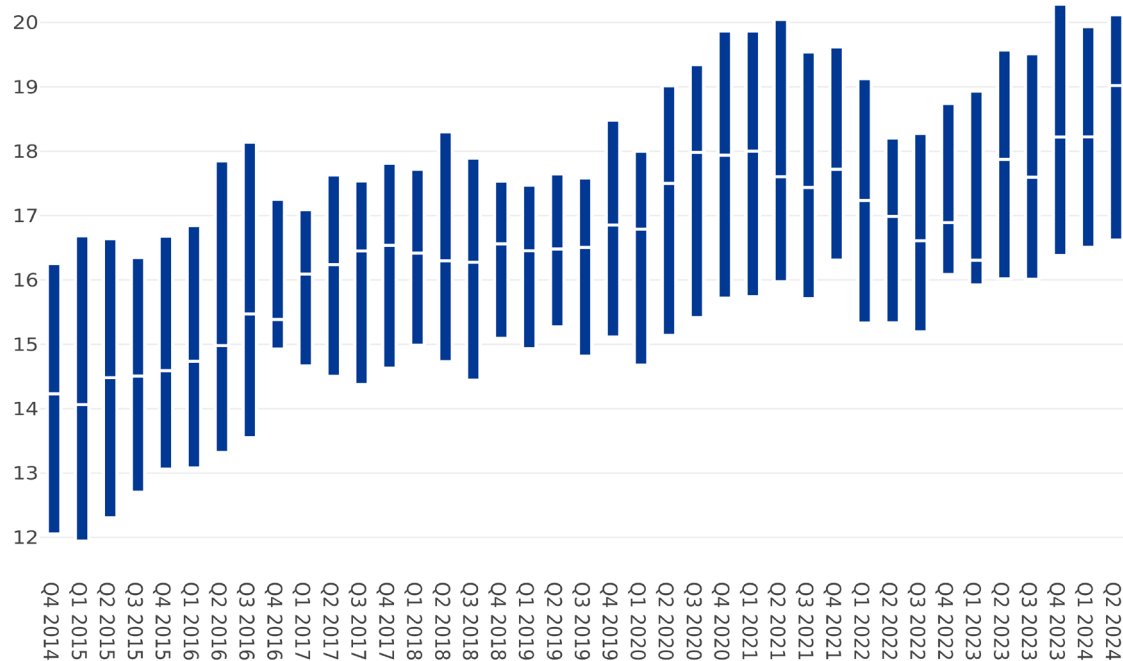
Note: Quarterly data refer to cumulative flows over the corresponding year.





## 6.2.a Banking groups' solvency, liquidity and balance sheet structure indicators - CET1 ratio

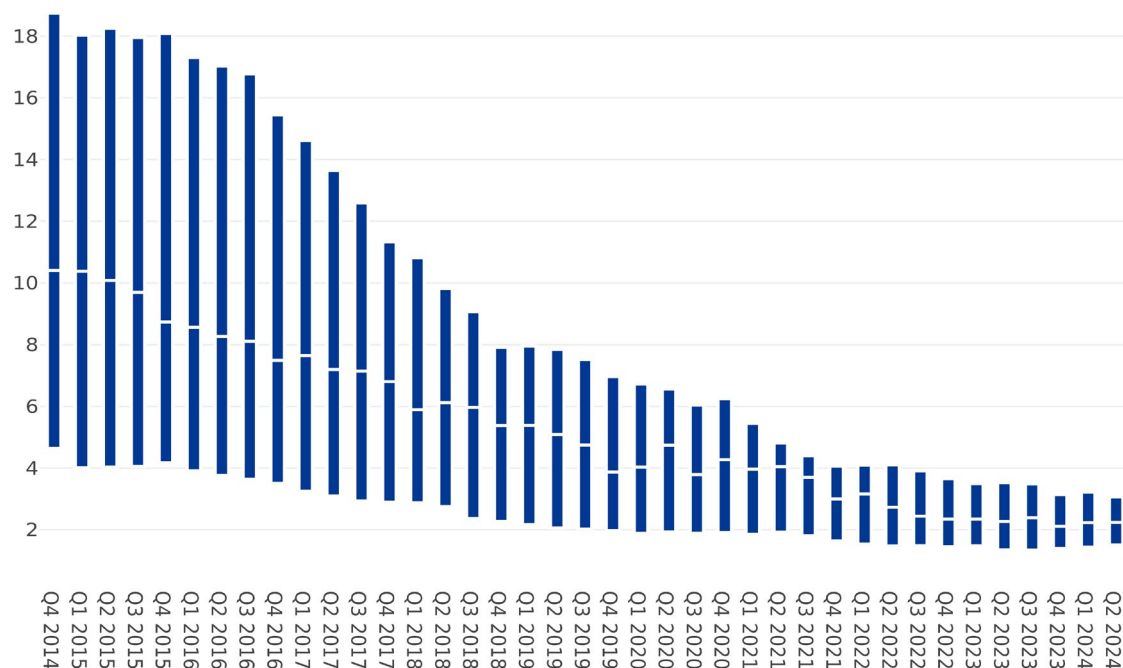
(EU; interquartile range and median; percentage points)



Last observation: Q2 2024  
Source: ECB.

## 6.2.b Banking groups' solvency, liquidity and balance sheet structure indicators - Gross non-performing loans and advances to total of gross loans and advances

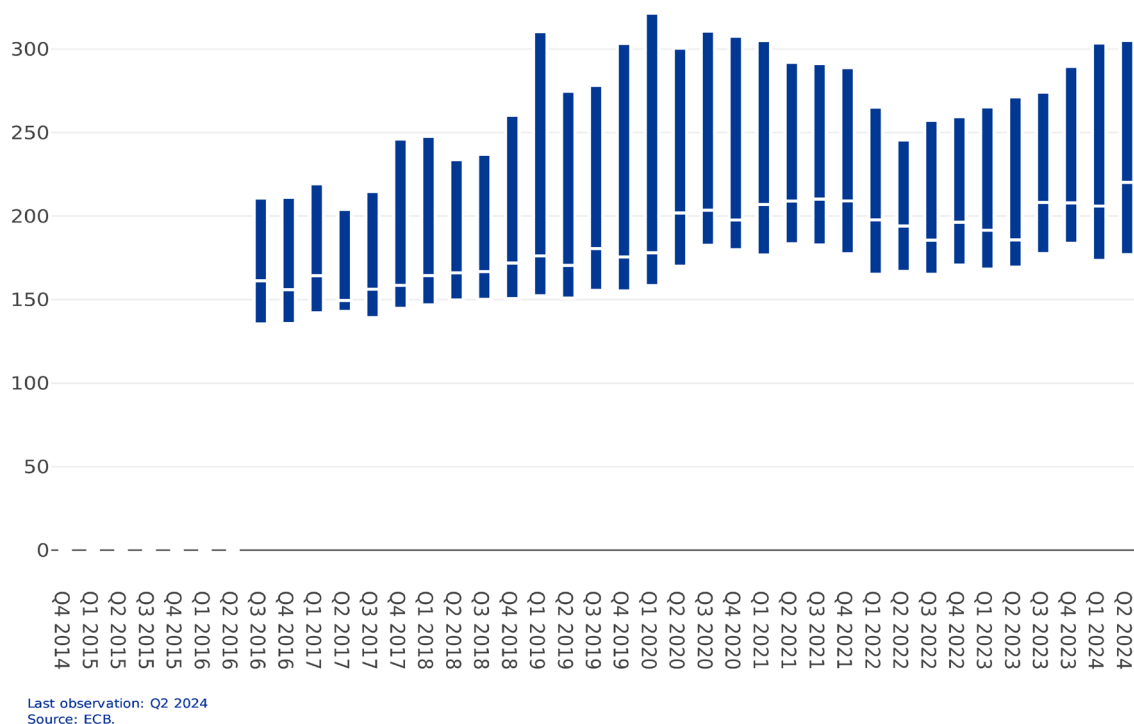
(EU; interquartile range and median; percentage points)



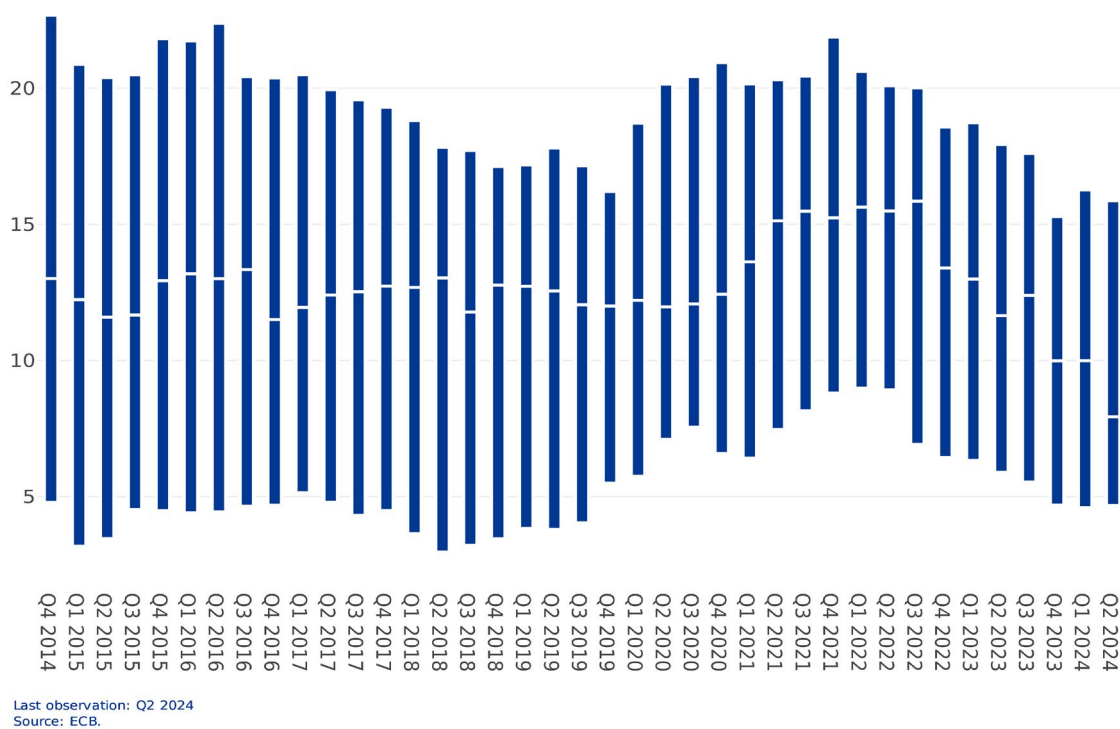
Last observation: Q2 2024  
Source: ECB.



6.2.c Banking groups' solvency, liquidity and balance sheet structure indicators - Liquidity Coverage Ratio  
(EU; interquartile range and median; percentage points)

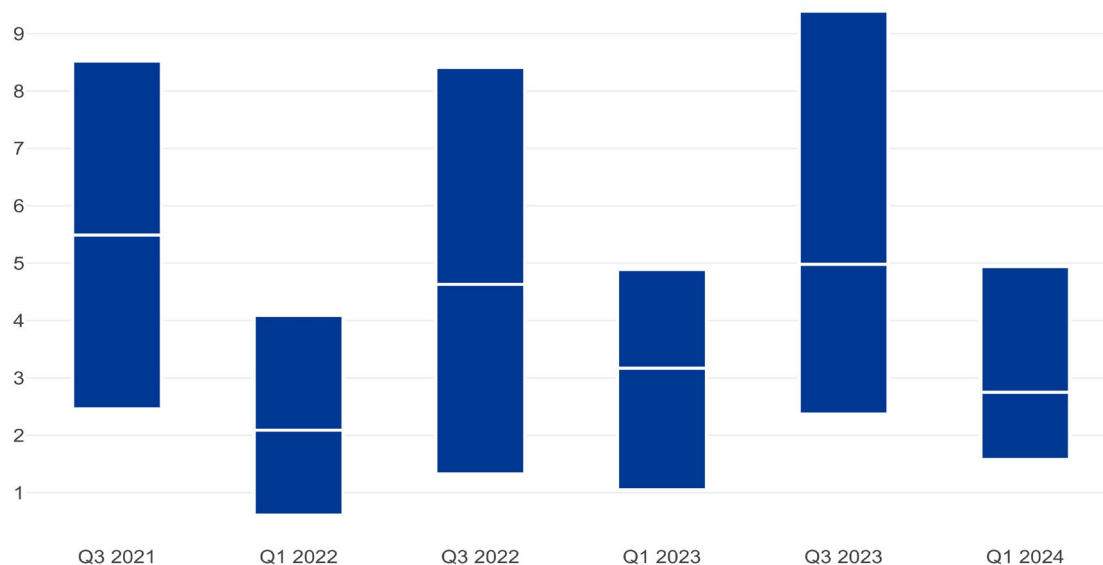


6.2.d Banking groups' solvency, liquidity and balance sheet structure indicators - Asset encumbrance ratio  
(EU; interquartile range and median; percentage points)



### 6.3.a Insurance groups' profitability indicators - Return on equity

(EU; interquartile range and median; percentages)



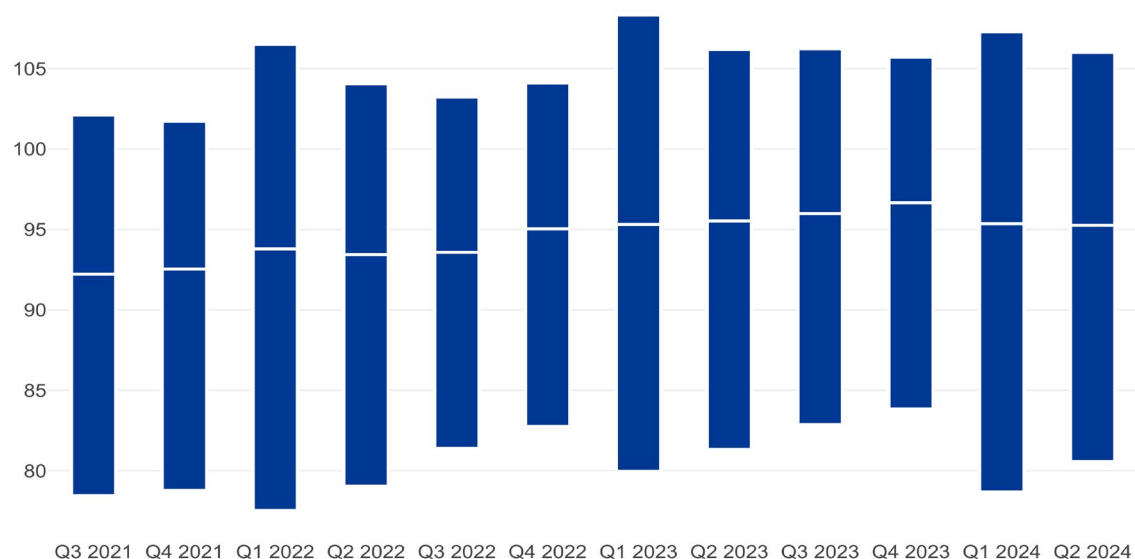
Last observation: Q1 2024

Source: EIOPA, based on Solvency II Reporting.

Note: The return on equity is defined as the cumulated profit (loss) after tax and before dividends, divided by the excess of assets over the liabilities for the current quarter. Data not annualised. For more details on the Solvency II reporting please see Annex I to the risk dashboard.

### 6.3.b Insurance groups' profitability indicators - Combined ratio - non-life insurance

(EU; interquartile range and median; percentages)



Last observation: Q2 2024

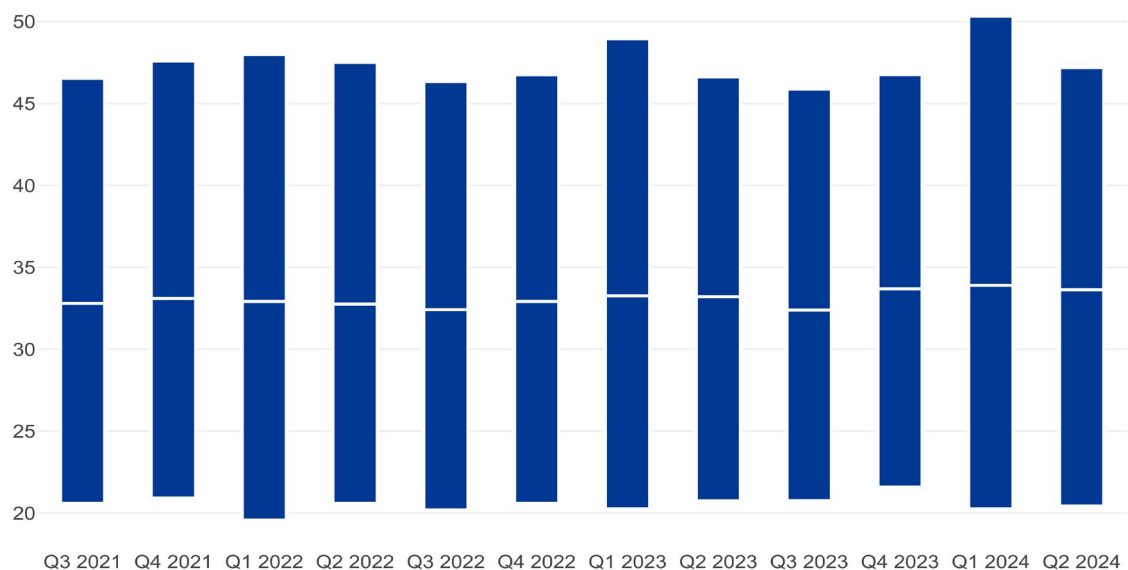
Source: EIOPA, based on Solvency II Reporting.

Note: The combined ratio is defined as the sum of the cumulative profit (loss) after tax and before dividends, divided by the excess of assets over the liabilities for the current quarter. Data not annualised. For more details on the Solvency II reporting please see Annex I to the risk dashboard.



### 6.3.c Insurance groups' profitability indicators - Expense ratio - non-life insurance

(EU; interquartile range and median; percentages)



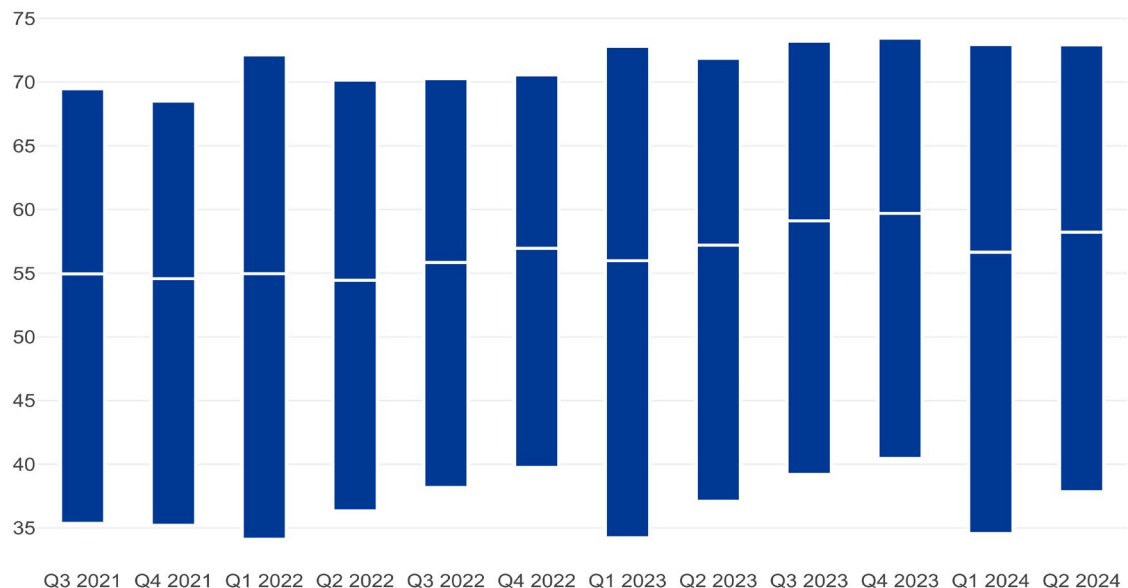
Last observation: Q2 2024

Source: EIOPA, based on Solvency II Reporting.

Note: The return on equity is defined as the cumulated profit (loss) after tax and before dividends, divided by the excess of assets over the liabilities for the current quarter. Data not annualised. For more details on the Solvency II reporting please see Annex I to the risk dashboard.

### 6.3.d Insurance groups' profitability indicators - Loss ratio - non-life insurance

(EU; interquartile range and median; percentages)



Last observation: Q2 2024

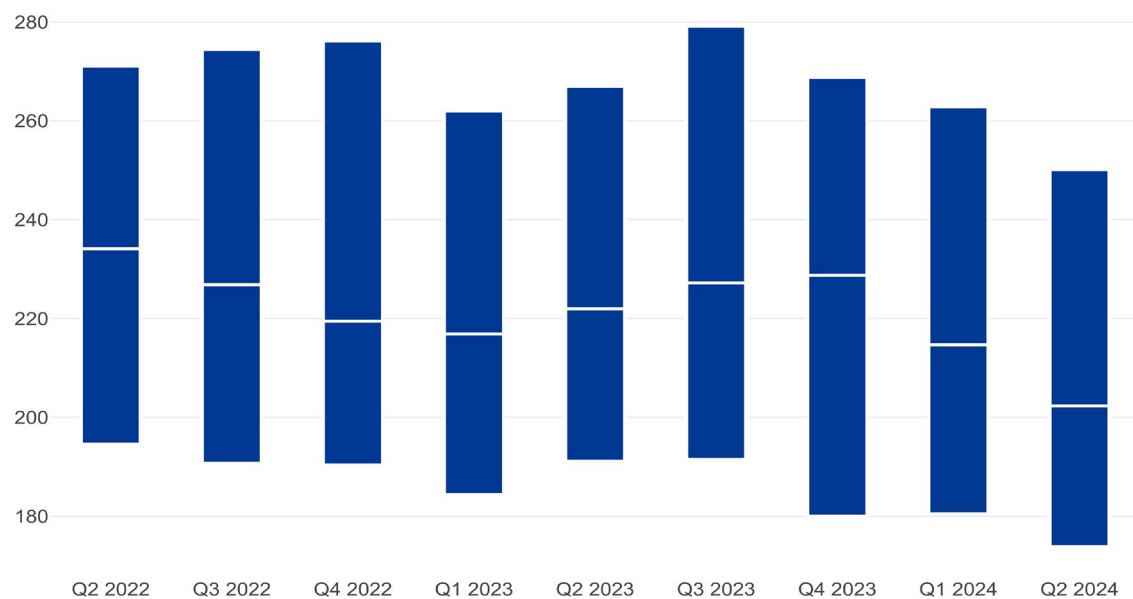
Source: EIOPA, based on Solvency II Reporting.

Note: The return on equity is defined as the cumulated profit (loss) after tax and before dividends, divided by the excess of assets over the liabilities for the current quarter. Data not annualised. For more details on the Solvency II reporting please see Annex I to the risk dashboard.



## 6.4.a Insurance groups' solvency indicators - Solvency ratio

(EU; interquartile range and median; percentages)



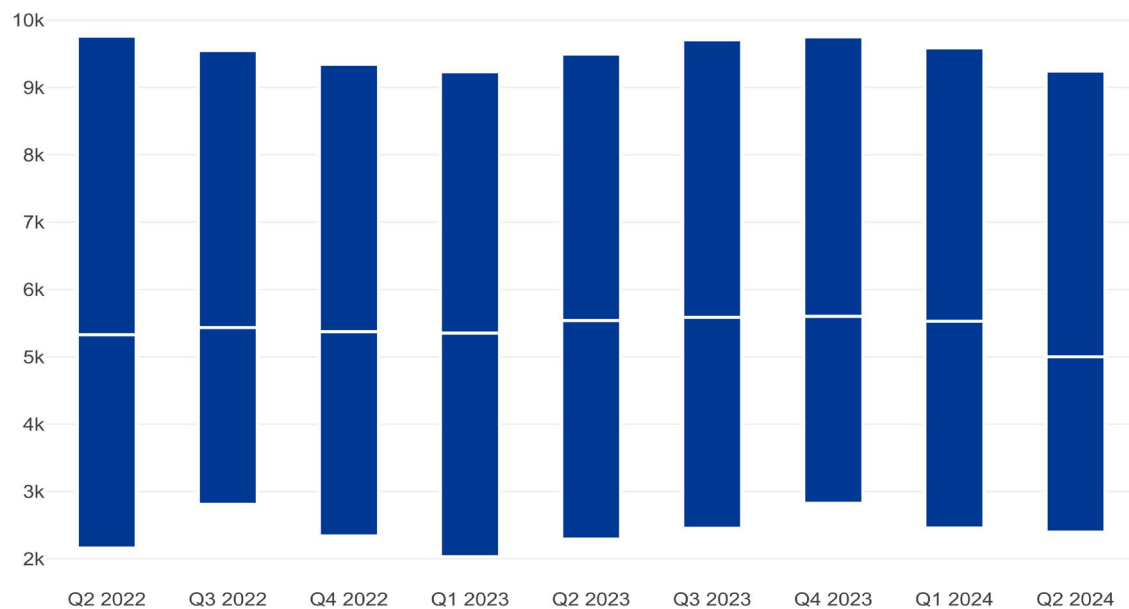
Last observation: Q2 2024

Source: EIOPA, based on Solvency II Reporting.

Note: For more details on the Solvency II reporting please see Annex I to the risk dashboard.

## 6.4.b Insurance groups' solvency indicators - Excess of assets over liabilities

(EU; interquartile range and median; percentages)



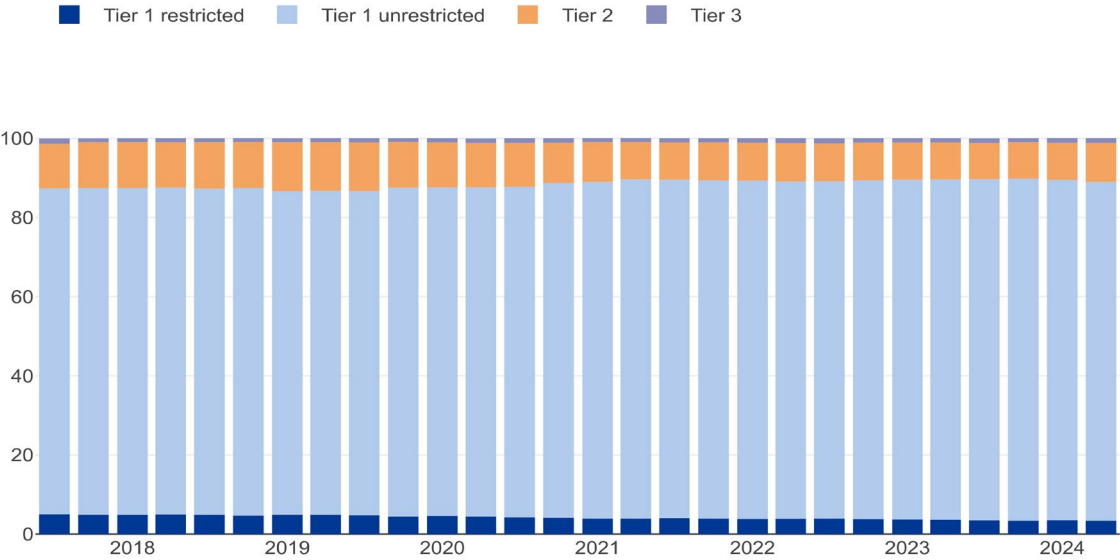
Last observation: Q2 2024

Source: EIOPA, based on Solvency II Reporting.

Note: For more details on the Solvency II reporting please see Annex I to the risk dashboard.



6.5 Insurance groups' quality of own funds  
(EU; share of total eligible own funds; percentages)



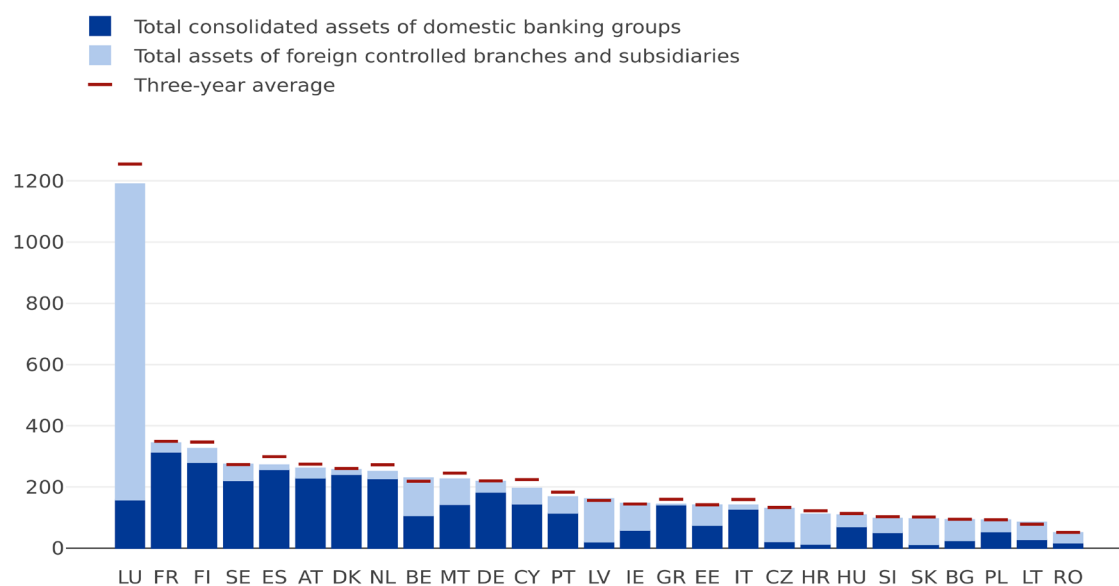
Last observation: Q2 2024  
Source: EIOPA, based on Solvency II Reporting.  
Note: Indicator presents breakdown of the quality of the Solvency II own funds according to the different tiers. For more details on the Solvency II reporting please see Annex I to the risk dashboard.



## 7 Structural risk

### 7.1 Banking sector size

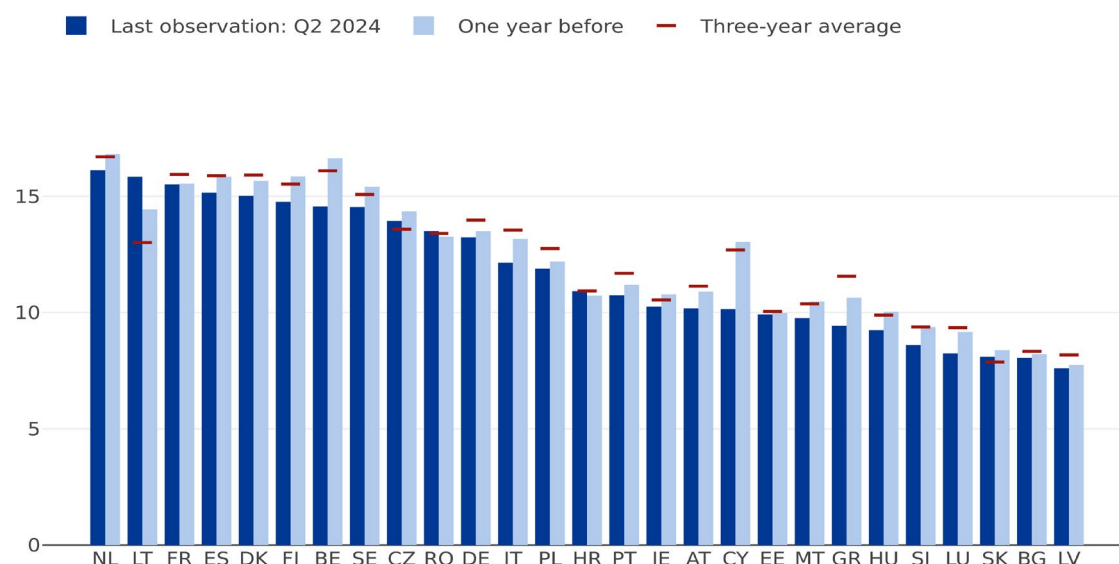
(EU; share of nominal GDP; percentage points)



Last observation: Q2 2024  
Source: ECB and Eurostat.  
Note: Based on Consolidated Banking Data. The three-year average is based on quarterly data.

### 7.2 Banking sector leverage

(EU; share of total assets in capital; percentage points)

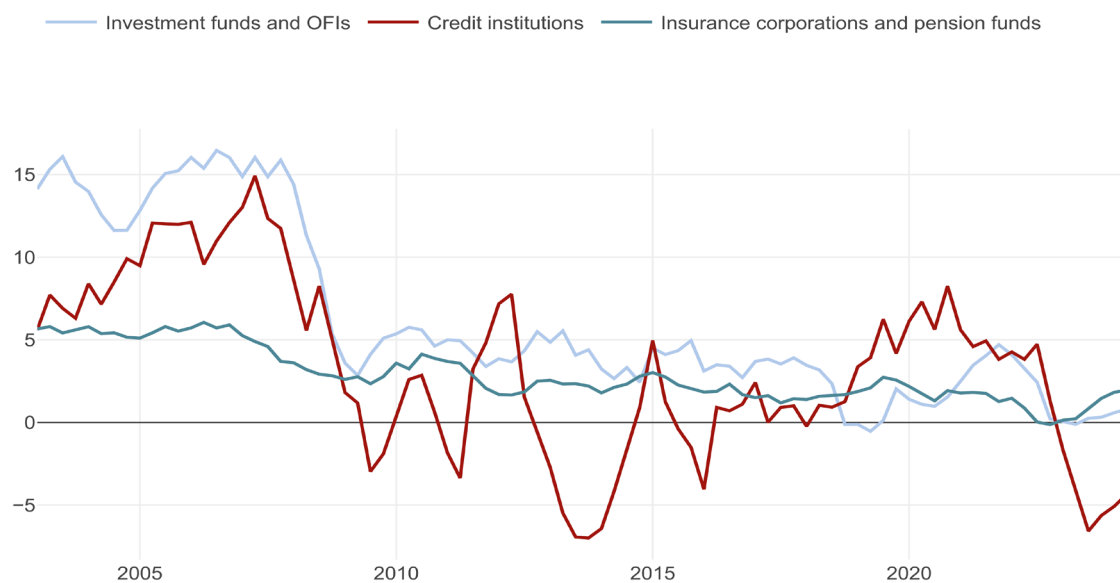


Last observation: Q2 2024  
Source: ECB.  
Note: Share of total assets in capital for domestic banking groups and stand-alone credit institutions. Consolidated data. The three-year average is based on quarterly data.



### 7.3 Growth of components of the EU financial sector

(EU; total assets annualised growth rates; percentages)



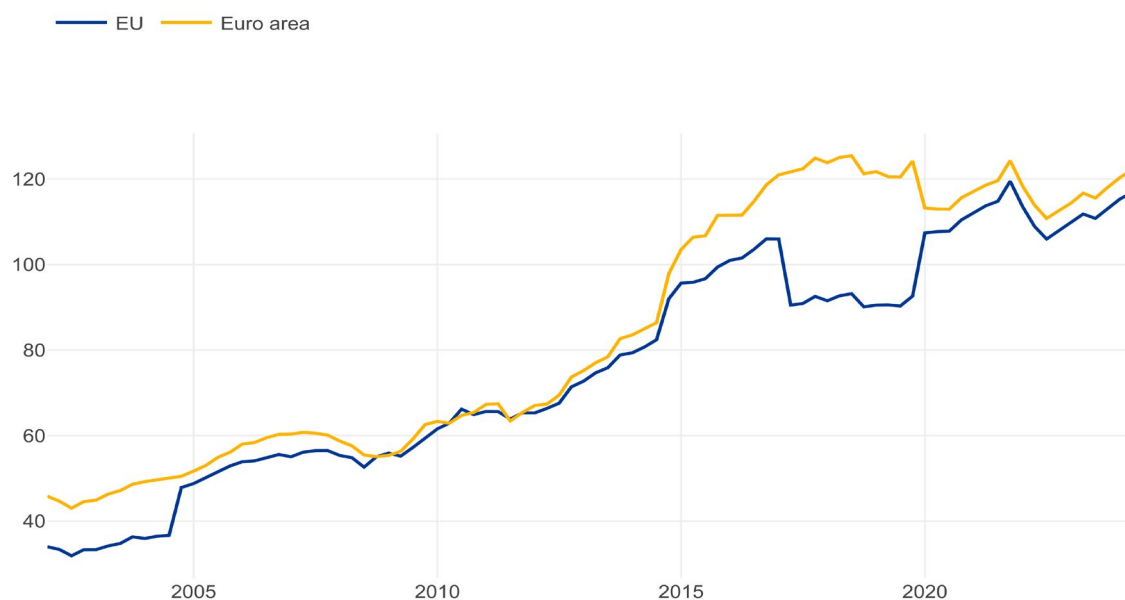
Last observation: Q2 2024

Source: ECB.

Note: Data based on financial accounts and monetary statistics. Data refer to the non-consolidated balance sheets of the respective entities.

### 7.4 Total assets of investment funds and OFIs

(as per cent of credit institutions' total assets)



Last observation: Q2 2024

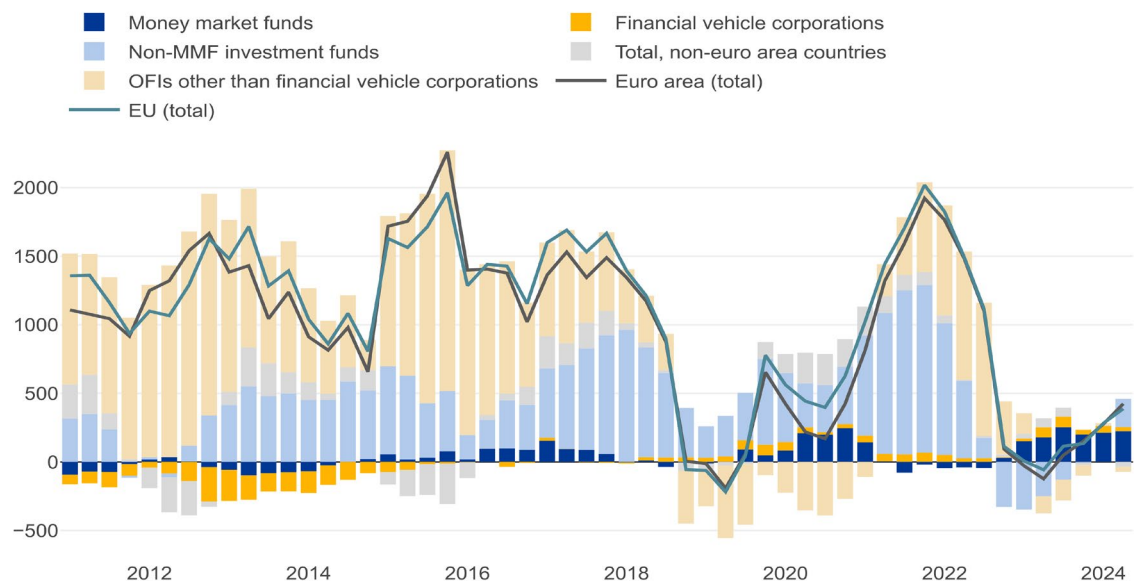
Source: ECB.





## 7.5 Total assets of investment funds and OFIs in the EU

(EU; EUR billions; four-quarter cumulated flows)



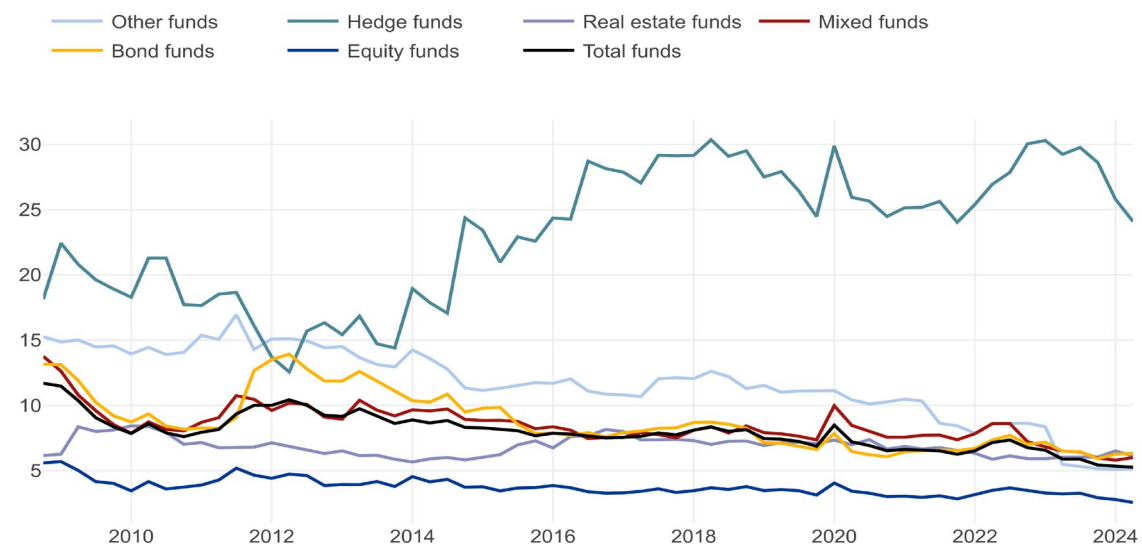
Last observation: Q2 2024

Source: ECB and European Commission.

Note: The full set of breakdowns is only available for euro area Member States.

## 7.6 Non-MMF investment funds ratio of short term assets to short term liabilities

(Euro area; percentages)



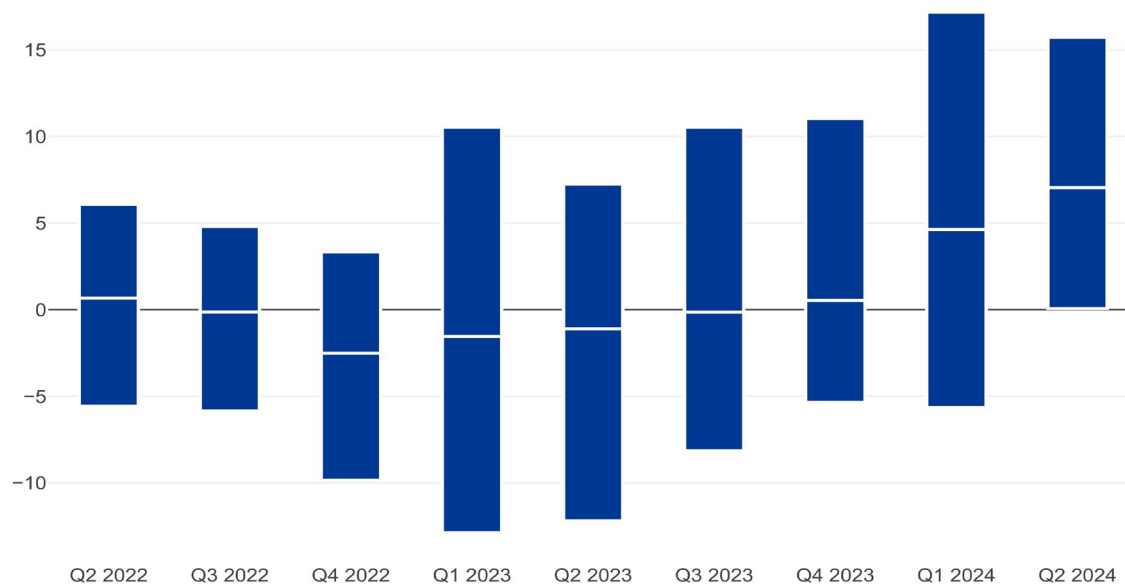
Last observation: Q2 2024

Source: ECB.

Note: Short-term assets include non-MMF investment funds' holdings of debt securities and loans and deposits with original maturity up to one year; short-term liabilities include open-ended fund units issued and loans received with original maturity up to one year. Maturity breakdowns for loans and deposits are available from 2014 Q4 and are estimated for prior periods based on the maturity breakdowns in 2015 for these instruments (for respective counterparty sectors).

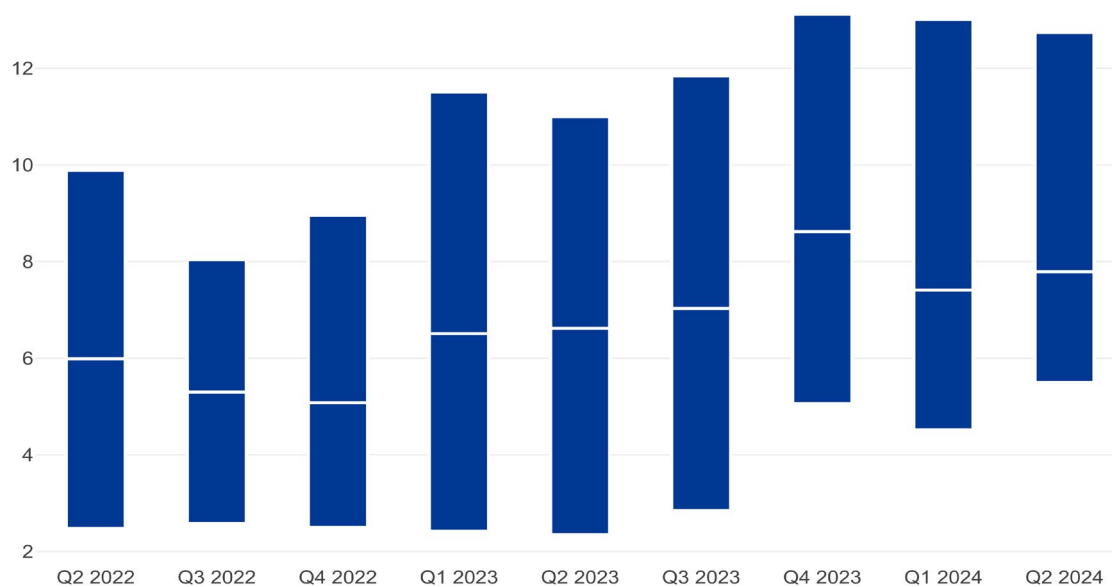


### 7.7.a Insurance groups' profitability indicators - Gross premiums written - Life insurance (EU; annual growth rates; interquartile range and median; percentages)



Last observation: Q2 2024  
Source: EIOPA, based on Solvency II Reporting.  
Note: For more details on the Solvency II reporting please see Annex I to the risk dashboard.

### 7.7.b Insurance groups' profitability indicators - Gross premiums written - Non-life insurance (EU; annual growth rates; interquartile range and median; percentages)



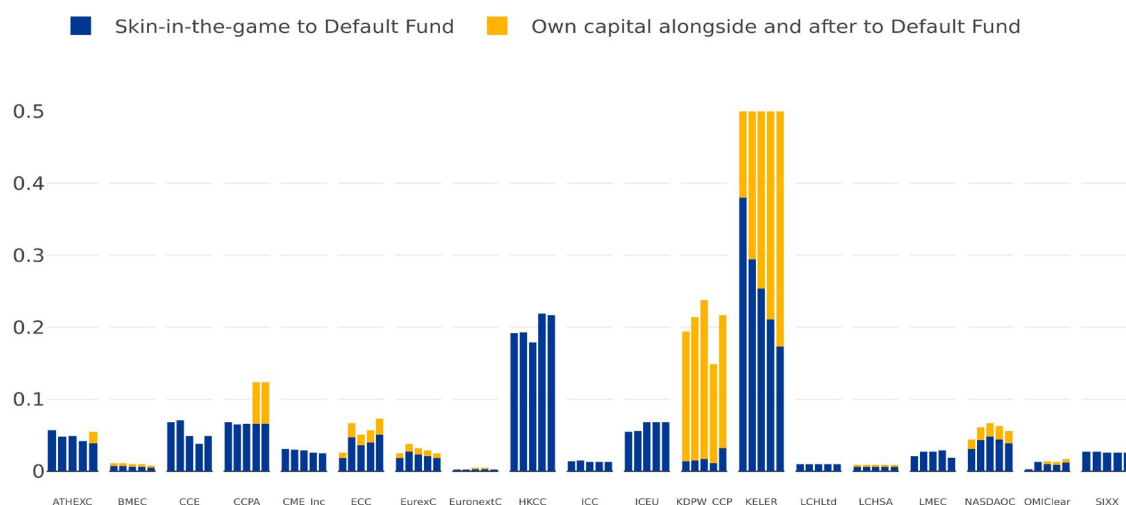
Last observation: Q2 2024  
Source: EIOPA, based on Solvency II Reporting.  
Note: For more details on the Solvency II reporting please see Annex I to the risk dashboard.



## 8 Risk related to central counterparties

### 8.1 Prefunded default resources

(Ratio of own capital to default funds (quarter-end); ratio)



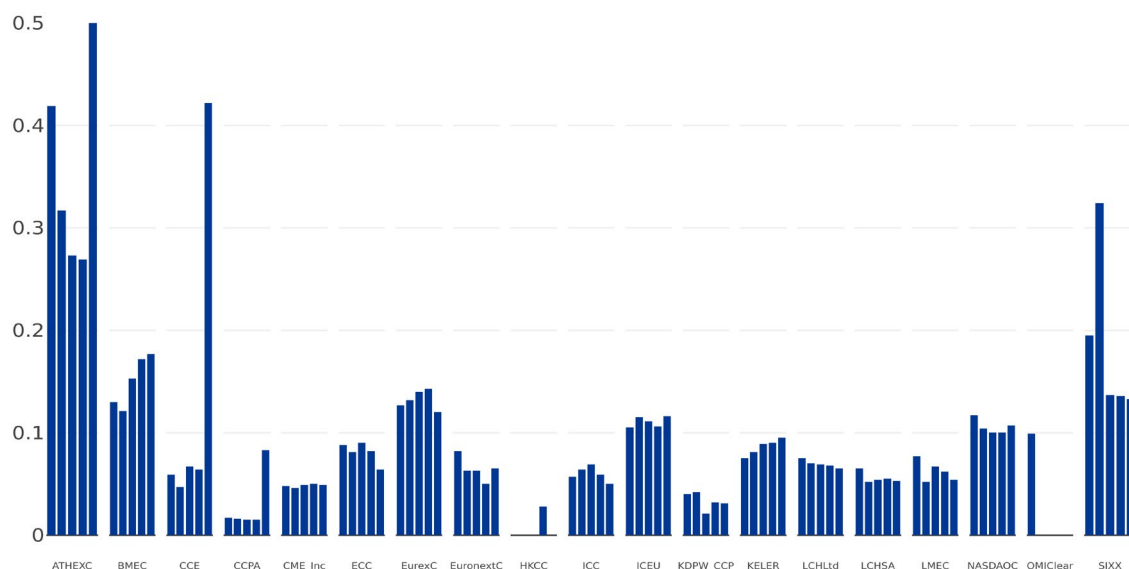
Last observation: Q2 2024

Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: Mutualised default funds are only used to absorb losses if the defaulting member's variation margin, initial margin, and CCP's skin-in-the-game, respectively, are insufficient. Initial margin is the first line of defence against loss mutualisation and calculated in relation to the risk brought by clearing members. The primary purpose of skin-in-the-game is to ensure CCPs' incentives are aligned with those of their clearing members. It is calculated in relation to a capital requirement. The chart shows a ratio of own capital (with graphical distinction of its subparts) to the default fund contributions provided by the clearing members. Information provided for segregated clearing services have been aggregated into a single structure. Each bar represents a quarter. CCPA's Skin-in-the-game to Default Fund values for Q1 and Q2 2024 are currently under investigation; the chart shows values from Q4 2023.

### 8.2 Haircut and margining policies

(Haircut on non-cash initial margin (quarter-end); fractions)



Last observation: Q2 2024

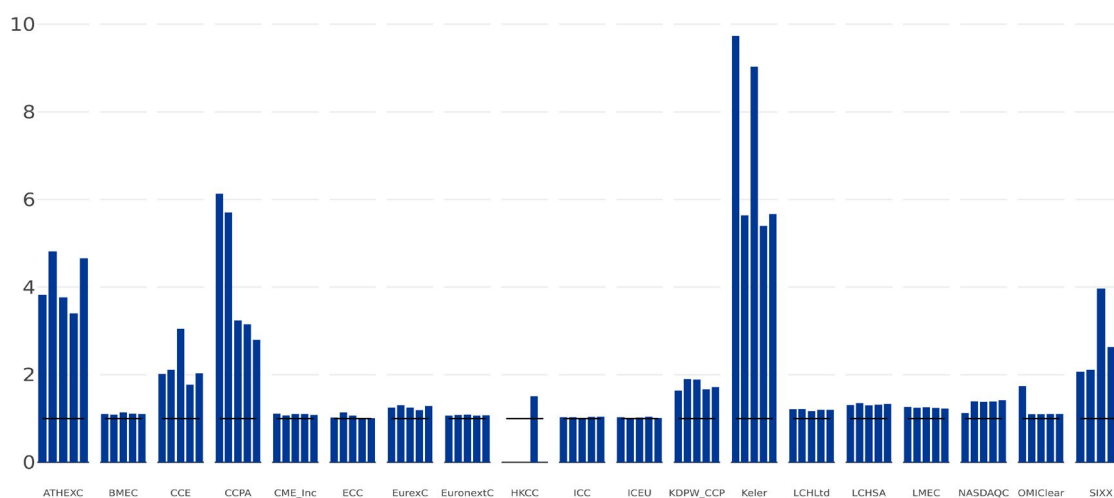
Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: Margins and haircuts are essential parts of the CCP risk management frameworks. Initial margins are designed to protect a CCP against losses stemming from the default of a clearing member while haircuts aim to mitigate a fall in market value of collateral in case the collateral has to be sold. PQD 20.2.1 is added to PQD 6.2.15 for EuronextC as they do not include initial margin resulting from interoperability arrangements in PQD 6.2.15. Each bar represents a quarter. OMIClear's values are under investigation. Nasdaq's value for Q1 2024 is under investigation; the chart shows value from Q4 2023 in place of the Q1 2024 value.



### 8.3 Collateral policies

(Collateralisation (quarter-end); ratio)



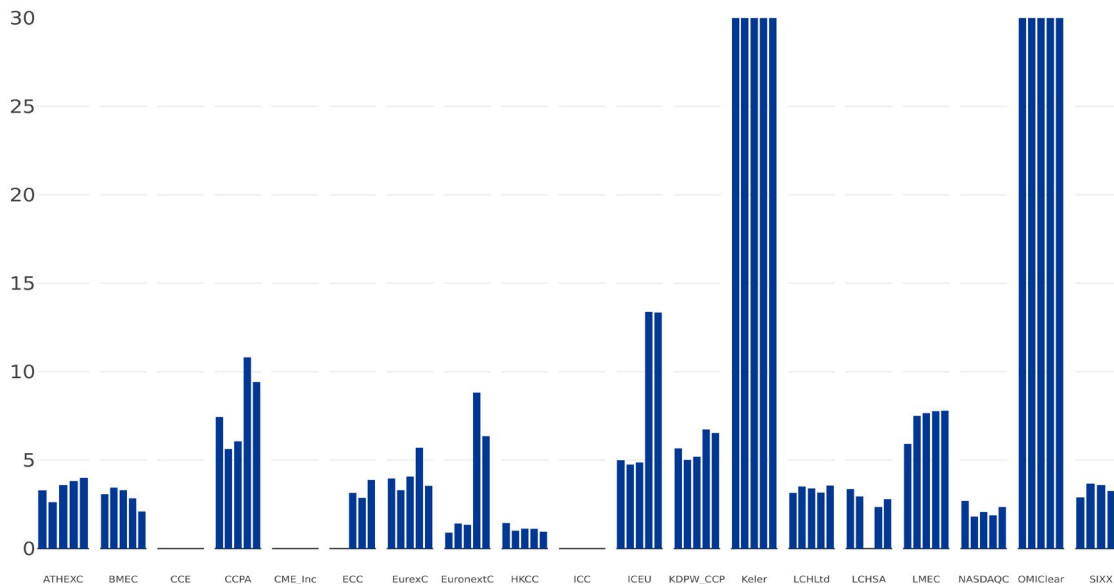
Last observation: Q2 2024

Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: A level above 1 indicates an overcollateralisation, while a level below 1 an undercollateralisation. Clearing members may voluntarily hold a buffer of excess collateral to reduce operational complexity. CPMI-IOSCO final guidance on CCP resilience recommends that CCPs do not rely on the additional collateral posted by their members over the margin required when assessing the adequacy of their financial resources. This is because the additional collateral might be withdrawn in a stressed period. PQD 20.2.1 is added to PQD 6.2.15 for EuronextC as they do not include initial margin resulting from interoperability arrangements in PQD 6.2.15. Information provided for segregated clearing services has been aggregated into a single structure. Each bar represents a quarter. Any collateral held above 1.0 reflects an amount of overcollateralisation and implies that more collateral is held at the CCP than required. This is good for financial stability reasons - more overcollateralisation means less need to call for additional collateral and thus less procyclicality - but can be very costly for the clearing member that deposited this additional collateral.

### 8.4 Liquidity policies: qualifying liquid resources to the estimated largest same-day payment obligation

(Ratio of qualifying liquid resources over estimated largest same-day payment obligation (quarter-end); ratio)



Last observation: Q2 2024

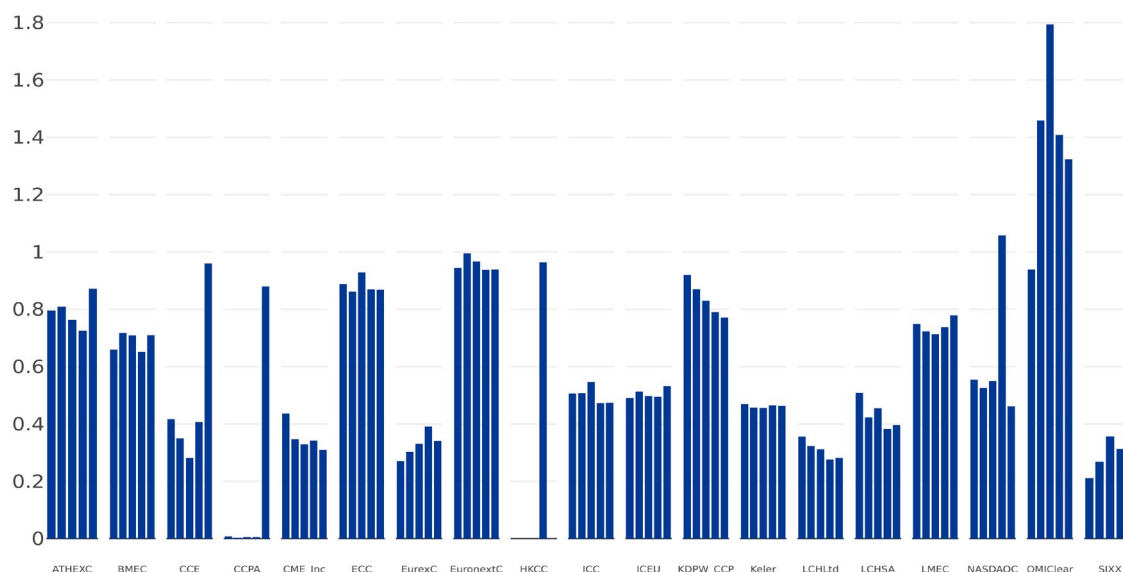
Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: EMIR requires CCPs to cover liquidity risk generated by the default of at least the two clearing members to which the CCP has the largest exposures. Each bar represents a quarter. Average values have been taken for PQD 7.1.2-7.1.9 in order to align stocks with flows. To better visualise lower values, the y-axis limit is set to 30.



## 8.5 Liquidity policies: cash ratio

(Cash ratio (quarter-end); ratio)



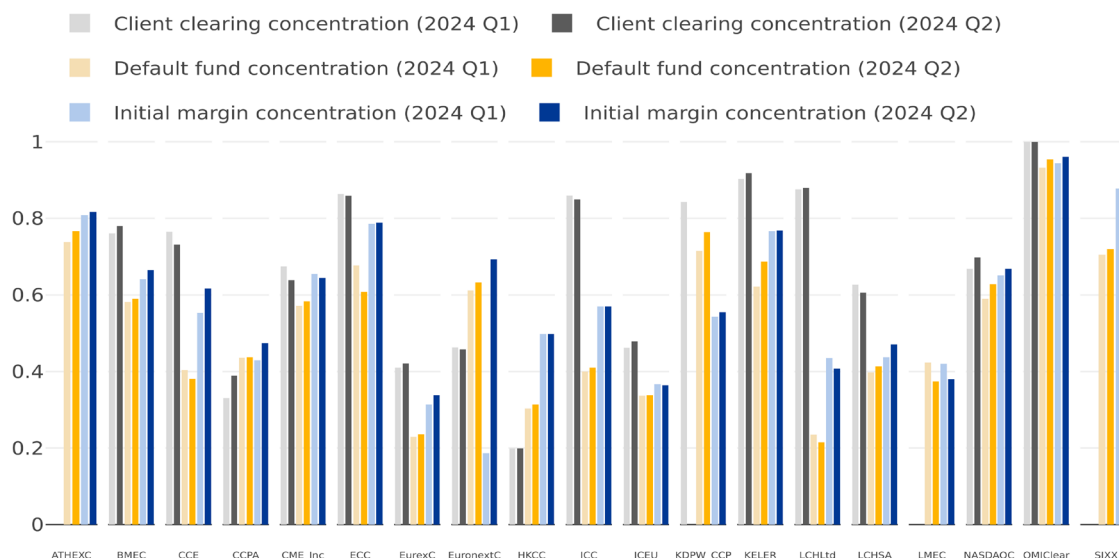
Last observation: Q2 2024

Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: EMIR requires that CCPs maintain sufficient liquid resources commensurate with their liquidity requirements. This indicator shows the share of initial margin provided and held in cash. Each bar represents a quarter. PQD 20.2.1 is added to PQD 6.2.15 for EuronextC as they do not include initial margin resulting from interoperability arrangements in PQD 6.2.15.

## 8.6 Concentration at CCP level

(Initial margin, default fund and client clearing concentration (average in quarter); ratio)



Last observation: Q2 2024

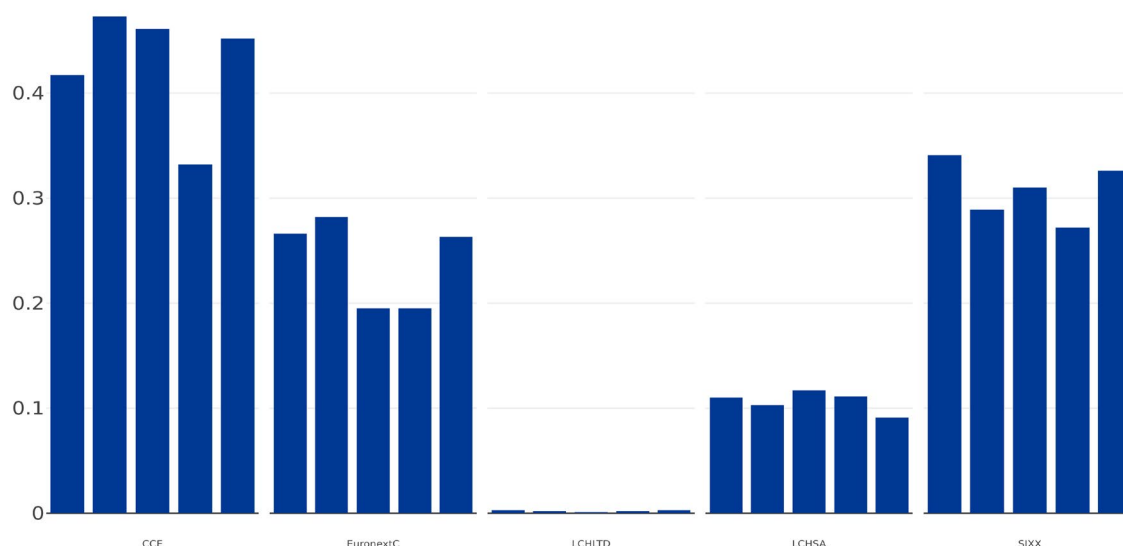
Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: This indicator shows an estimate of the five largest clearing members' average contributions to total initial margin, default fund contributions and client clearing at the clearing service level within a CCP. All bars refer to the two most recent quarters observed. PQD 18.3 and 18.4 show quarter averages and therefore averages are taken for PQD 6.2.15 and 4.1.5 to match stocks with flows.



## 8.7 Interoperability arrangements

(Share of initial margin provided for interoperability arrangements in total margin at clearing service level (quarter-end); ratio)



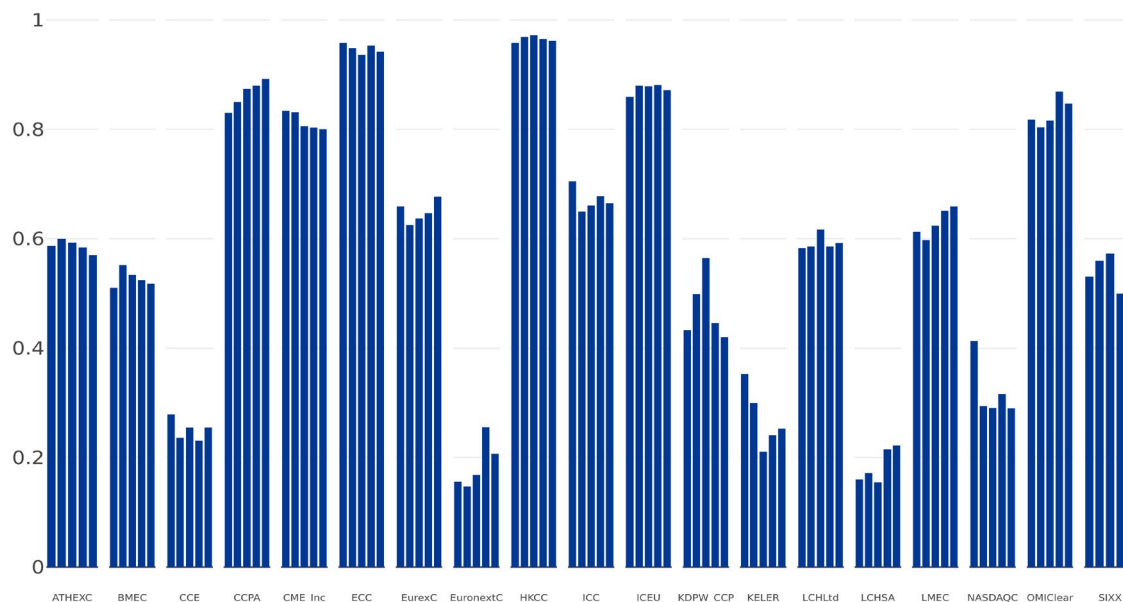
Last observation: Q2 2024

Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: Interoperability arrangements allow clearing members of a CCP to clear their trades through a different CCP. Currently, there are five interoperability arrangements in Europe in place: EuronextC - LCH SA, CCE - LCH Ltd., CCE - SIX X-clear AG (CH), LCH Ltd. - SIX X-clear AG (CH), LCH Ltd. - SIX X-clear Norwegian branch (CH/NO). The indicator shows the initial margin provided for interoperability arrangements as a share of total initial margin. Each bar represents a quarter.

## 8.8 Share of client clearing

(Share of total initial margin required for client clearing (quarter-end))



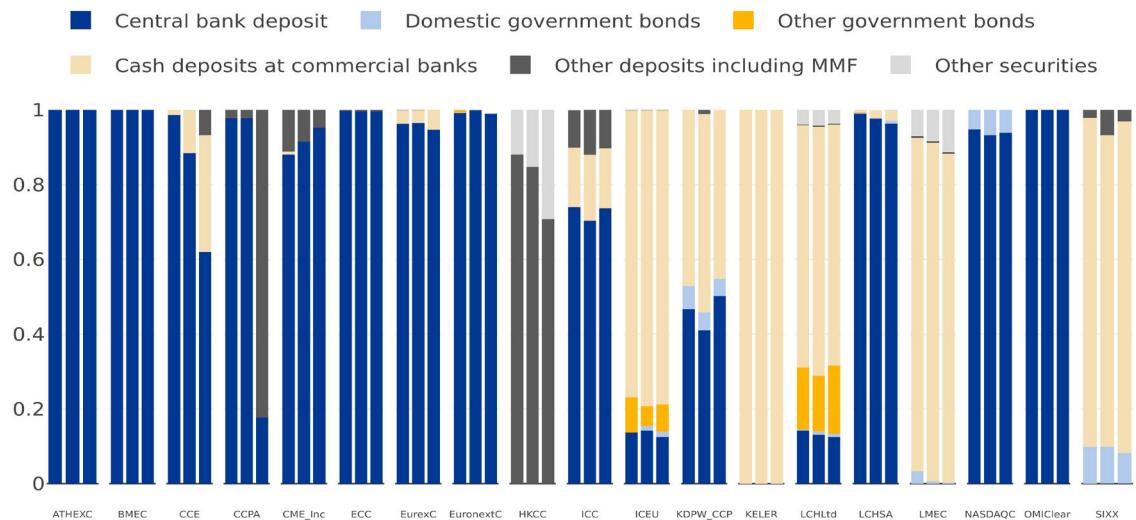
Last observation: Q2 2024

Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.

Note: This indicator considers the extent of direct and indirect clearing at a CCP. Client clearing is an essential part of a well-functioning clearing market, but a high share of client clearing may indicate an increased dependence on some direct members offering client clearing.



8.9 Cash reinvestment policies  
(Breakdown info (quarter-end))



Last observation: Q2 2024  
Source: CPMI-IOSCO quantitative public disclosure data & ESRB Secretariat calculations.  
Note: This indicator shows the investment strategies applied by a CCP. In line with EMIR requirements, a CCP could either deposit the cash received from clearing members in a central bank or other financial institution, or reinvest it in securities, including domestic or foreign government bonds. 'Other deposits' include unsecured deposits at commercial banks, deposits in MMF and in other forms. 'Other securities' include agency bonds, state/municipal bonds and other instruments. The chart shows the last three quarters. The y-axis limit is set to 1 to enhance clarity, even though EuronextC and NasdaqC report amounts above this threshold.



## List of countries and aggregates

<b>AT</b>	Austria	<b>FR</b>	France	<b>NL</b>	The Netherlands
<b>BE</b>	Belgium	<b>GR</b>	Greece	<b>PL</b>	Poland
<b>BG</b>	Bulgaria	<b>HR</b>	Croatia	<b>PT</b>	Portugal
<b>CY</b>	Cyprus	<b>HU</b>	Hungary	<b>RO</b>	Romania
<b>CZ</b>	Czech Republic	<b>IE</b>	Ireland	<b>SE</b>	Sweden
<b>DE</b>	Germany	<b>IT</b>	Italy	<b>SI</b>	Slovenia
<b>DK</b>	Denmark	<b>LT</b>	Lithuania	<b>SK</b>	Slovakia
<b>EE</b>	Estonia	<b>LU</b>	Luxembourg	<b>UK</b>	United Kingdom
<b>ES</b>	Spain	<b>LV</b>	Latvia	<b>EA</b>	Euro area
<b>FI</b>	Finland	<b>MT</b>	Malta	<b>EU</b>	European Union

## List of acronyms

<b>BIS</b>	Bank for International Settlements	<b>ICPF</b>	Insurance Corporation and Pension Funds
<b>CDS</b>	Credit Default Swap	<b>IMF</b>	International Monetary Fund
<b>CISS</b>	Composite Indicator of Systemic Stress	<b>IPD</b>	Investment Property Databank
<b>COREP</b>	Common Solvency Ratio Reporting	<b>MFI</b>	Monetary and Financial Institutions
<b>EBA</b>	European Banking Authority	<b>MMF</b>	Money Market Funds
<b>ECB</b>	European Central Bank	<b>NFC</b>	Non-Financial Corporations
<b>EIOPA</b>	European Insurance and Occupational Pensions Authority	<b>OFI</b>	Other Financial Intermediaries
<b>ITS</b>	Implementing Technical Standards	<b>EONIA</b>	Euro OverNight Index Average
<b>SovCISS</b>	Sovereign Composite Indicator of Systemic Stress	<b>ESCB</b>	European System of Central Banks

## Cut-off date

Data available to the ECB by Thursday, 14 November 2024 were taken into account in these statistics.

## Contact

For enquiries regarding the risk dashboard and its contents, please contact: <https://ecb-registration.escb.eu/statistical-information>

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