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EUROSYSTEM

# Euro Introduction in Croatia and Macroeconomic Developments in the Euro Area

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October 2025



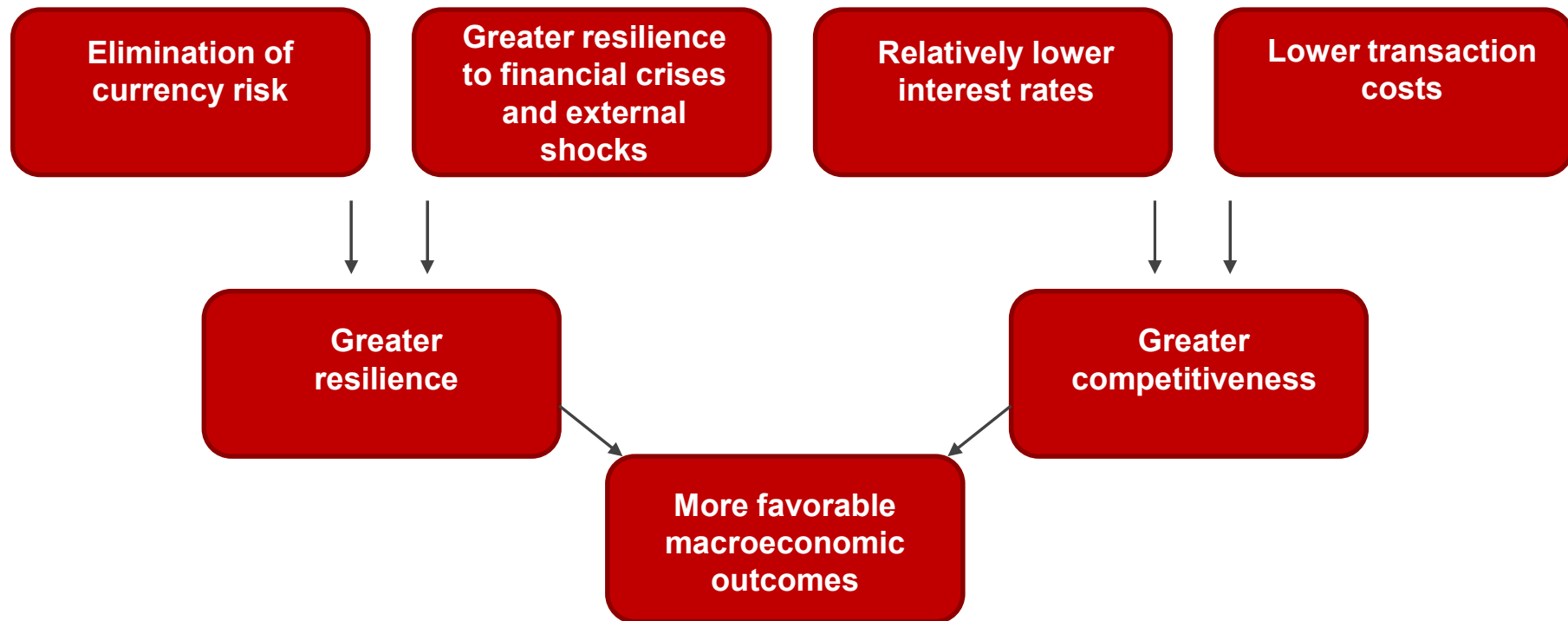
## ***The euro adoption process***

**Given the more demanding procedure, Croatia had to take a number of steps in order to get the „green light” for the euro**

June 2017	May 2018	February 2019	May 2019	June 2019	June 2020	July 2020
Excessive Deficit Procedure (EDP) closed – decision by the Council of the EU	Government adopted the Euro adoption strategy	Excessive macro imbalances eliminated – confirmation by the Commission	Request for close cooperation with the ECB	Letter of intent for ERM II and commitments were taken (19 policy measures in 6 areas)	Commission and the ECB confirmed that all measures had been completed	Kuna included in ERM II and additional commitments were taken (8 measures in 4 areas)

October 2020	December 2020	March 2022	June 2022	July 2022	1 January 2023
Close cooperation with the ECB started	Government adopted the National Euro Changeover Plan	Additional commitments fully implemented	Commission and the ECB confirmed that all entry criteria had been met	EU Council adopted a decision on euro adoption in Croatia	Introduction of the euro

## The economic benefits of adopting the euro are significant...



... while the costs were predominantly small and one-off



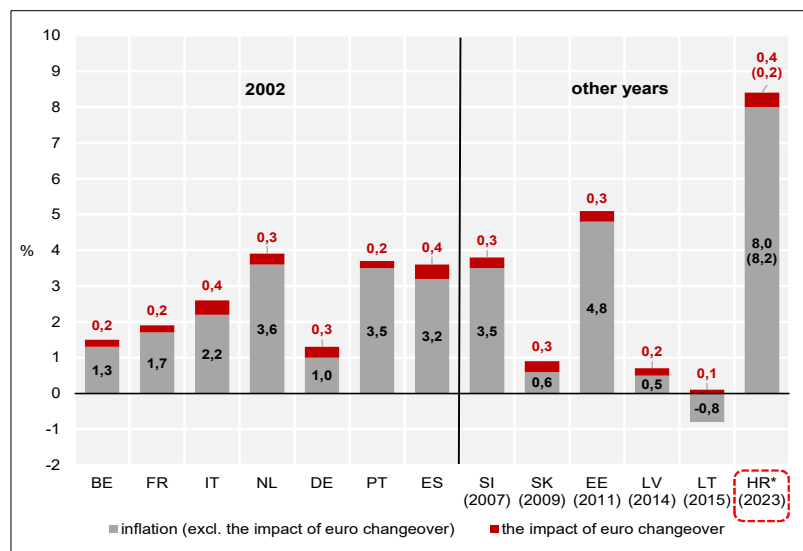
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Cost	Importance	Timing effect
Loss of independent monetary policy	Low	Permanent
Risk of rising price levels during conversion	Low	One-off
Risk of excessive capital inflows and growing imbalances	Low	Permanent
Conversion costs	Low	One-off
Transfer of funds to the European Central Bank	Low	One-off
Participation in providing financial assistance to other member states	Medium	One-off

# The impact of the euro on the aggregate price level was in line with the past experiences of other Member States

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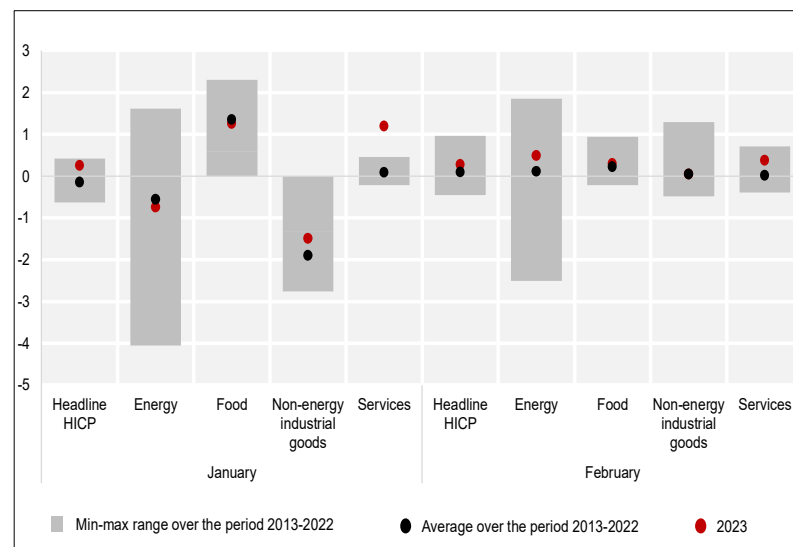
The estimated impact of euro changeover



\* The impact of euro adoption in Croatia is based on upper bound of the CNB/ECB assessment, while numbers in brackets indicate the upper bound of Eurostat's assessment. Sources: Eurostat and CNB/ECB estimates.

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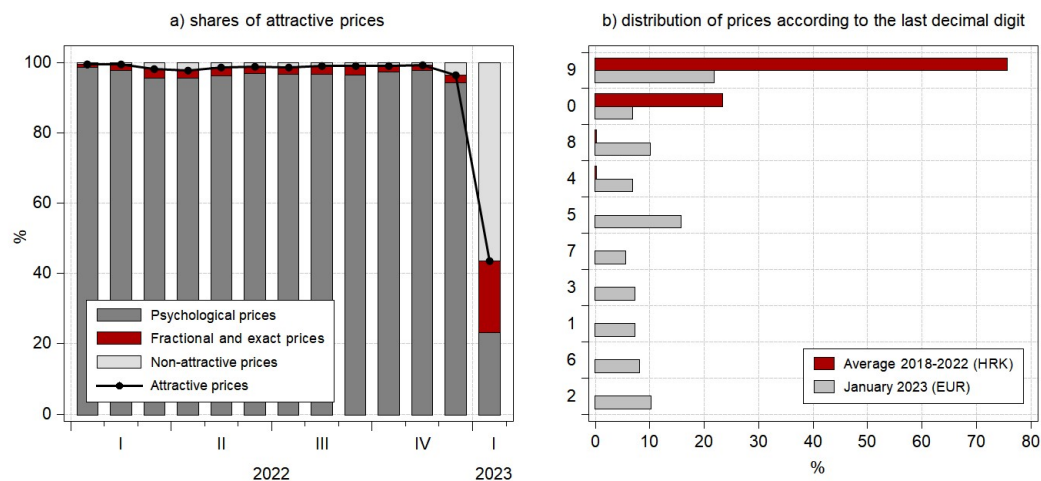
Monthly inflation in Croatia in January and February, total HICP and the main components, in %



Source: ECB Blog „Has the euro changeover really caused extra inflation in Croatia?“ (March 2023).

## ... while retail chains have complied with the rules on the conversion and rounding of prices

Pricing strategy in big retail chains in Croatia before and after the euro changeover



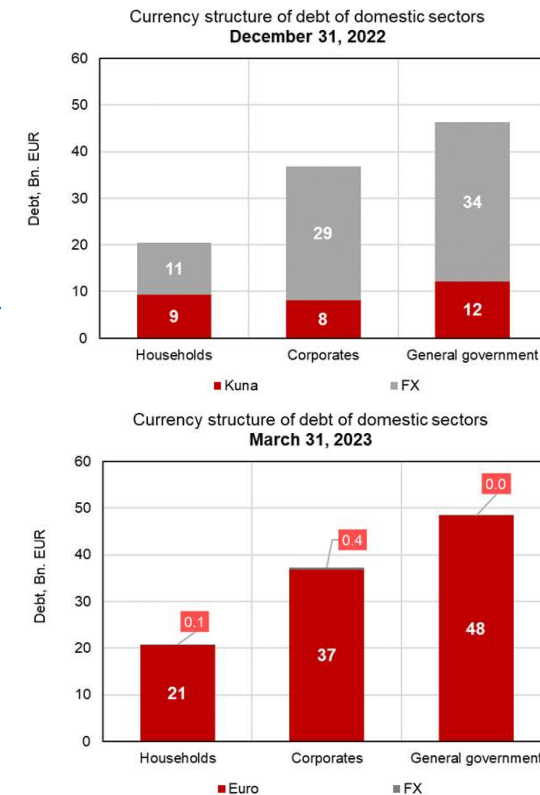
Source: CNB.

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- Prices of around 65% of products did not change after the euro changeover
  - a strong decrease in the share of so-called "attractive" prices
- It is likely that retailers will gradually set their prices at new attractive levels
  - these changes might occur as part of regular price adjustments
  - due to market competition and the obligation to display prices in both currencies by end-2023, the new attractive levels may not necessarily be higher

## Benefits of the euro: Elimination of currency risk

- Croatia was highly euroized country - introduction of the euro **has virtually eliminated the currency risk for borrowers.**
  - At the end of *December 2022*, the debt in **foreign currency amounted to 77 bn EUR** (115% of GDP)
  - At the end of *March 2023*, the debt in **foreign currency amounted to only 0.7 bn EUR**



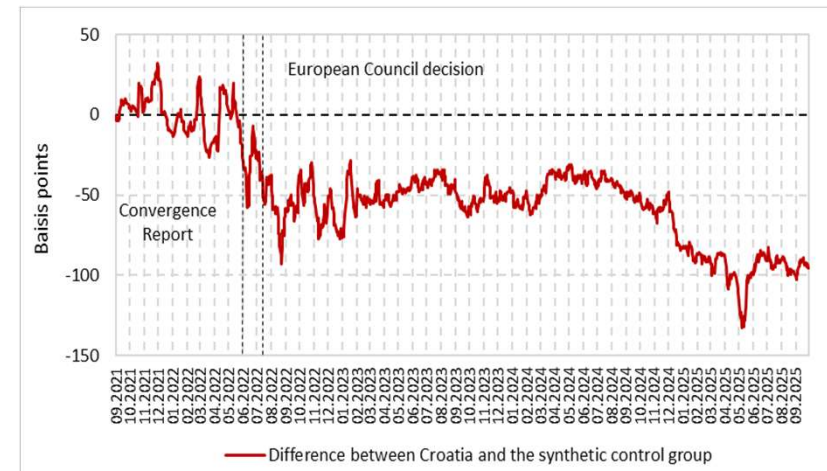
Source: CNB.



## Benefits of the euro: Reduced country risk premium

- Croatian bond spreads **narrowed noticeably** following the publication of the Convergence reports and the decision of the EU Council.
  - Probably lower bound estimate - some of the impact may have been frontloaded.

*The difference in yields between the ten-year euro denominated Croatian government bond compared to the synthetic control group of countries*



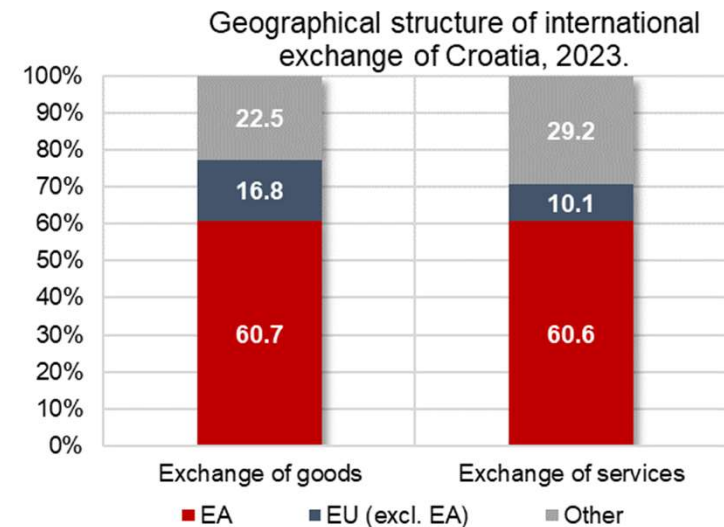
Source: CNB calculations.

## Benefits of the euro: Lower transaction costs

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- The introduction of the euro reduced transaction costs, which facilitates further trade and financial integration of Croatia with the euro area.
- Banks and exchange offices were expected to lose about 160 mn. EUR in revenues – large part, but not all, account for savings for local businesses and households

Croatia is strongly integrated in trade with the rest of the euro area

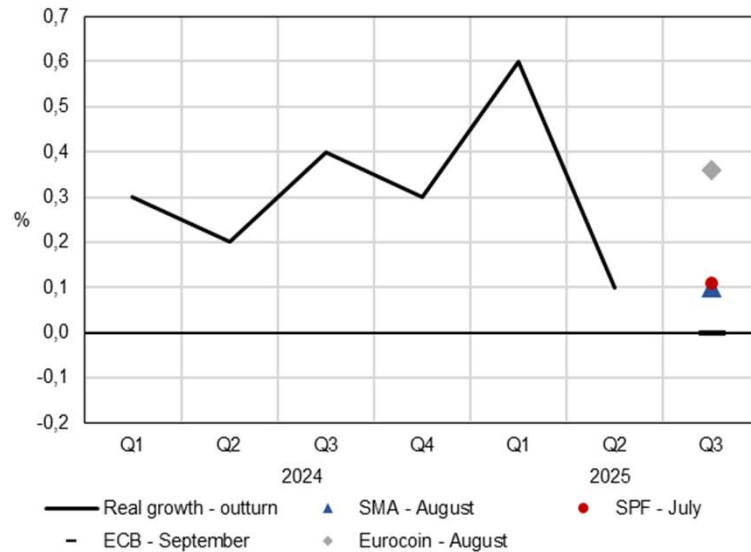


Source: Eurostat.

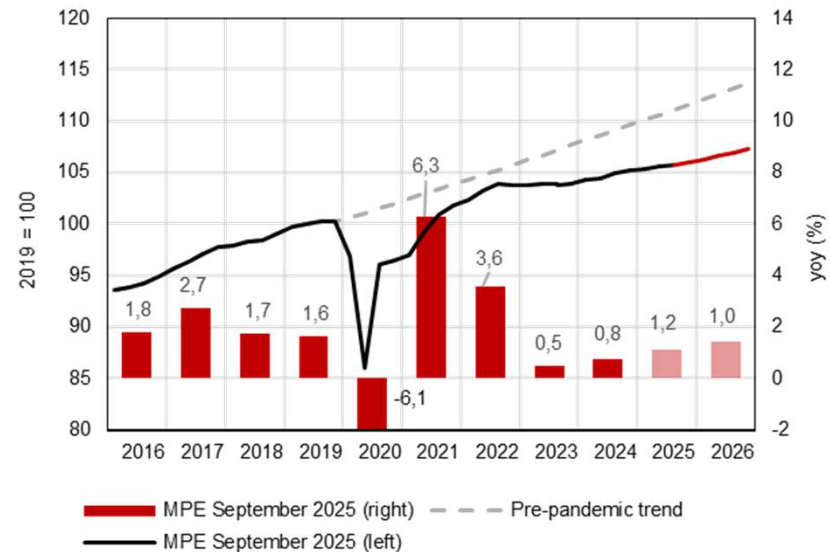
## ***Economic and monetary developments in Croatia and euro area***

## Euro area growth has thus far proved more resilient than expected, although short-term outlook remains relatively weak

Short term expectations for EA real GDP  
quarterly growth, %



Real GDP forecast for EA  
Index, 2019=100

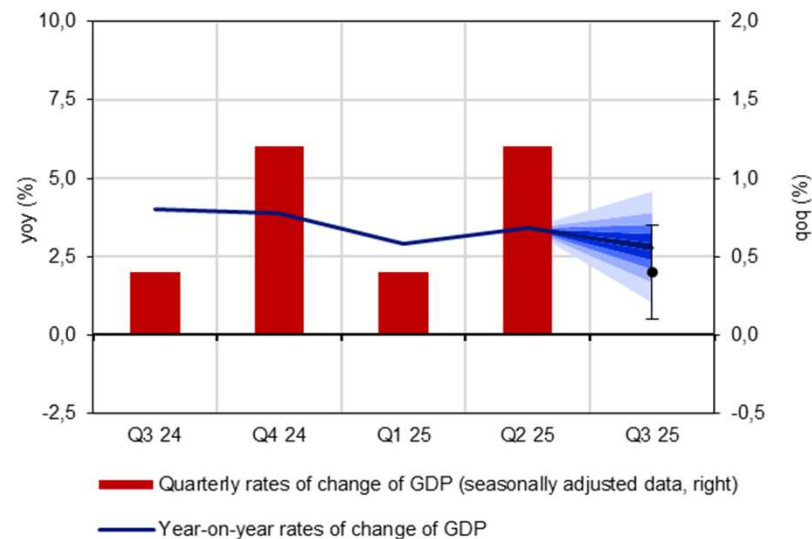


Note: SMA (Survey of Monetary Analysts) and SPF (Survey of Professional Forecasters) are ECB's surveys of market participants.  
Sources: Eurostat; ECB

Source: ECB staff macroeconomic projections.

# Robust growth driven by strong domestic demand in Croatia is expected to continue both this and next year

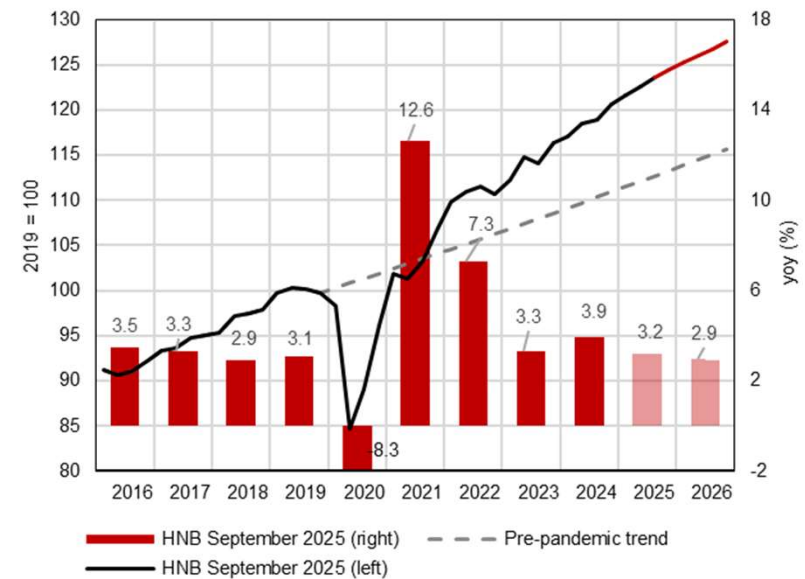
Short term expectations for real GDP



Source: HNB

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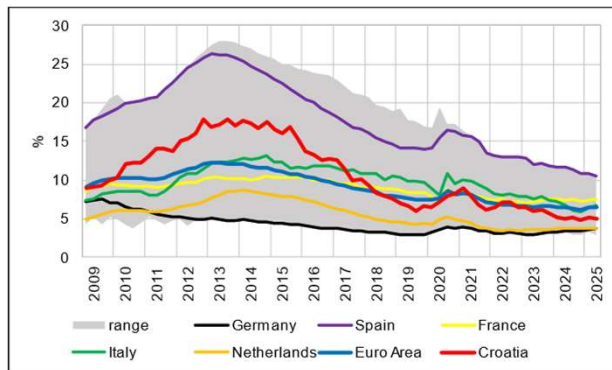
Real GDP forecast for Croatia



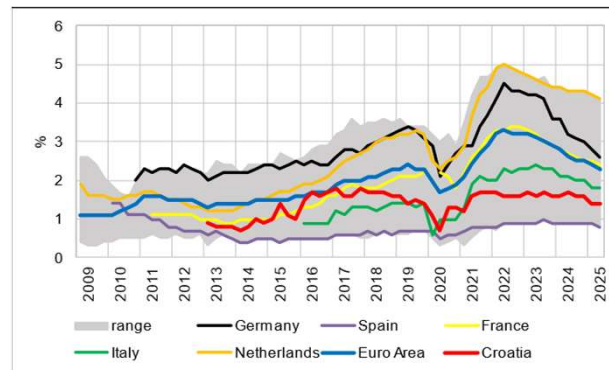
Source: HNB macroeconomic projections.

## Wage pressures in the EA seem to stabilize in 2025, considering also tight labour market

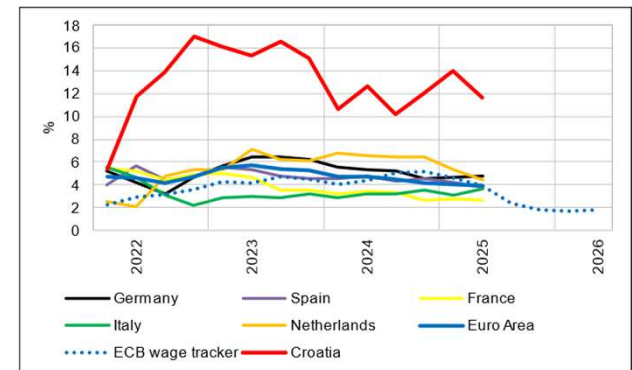
Unemployment rate



Job vacancy rate



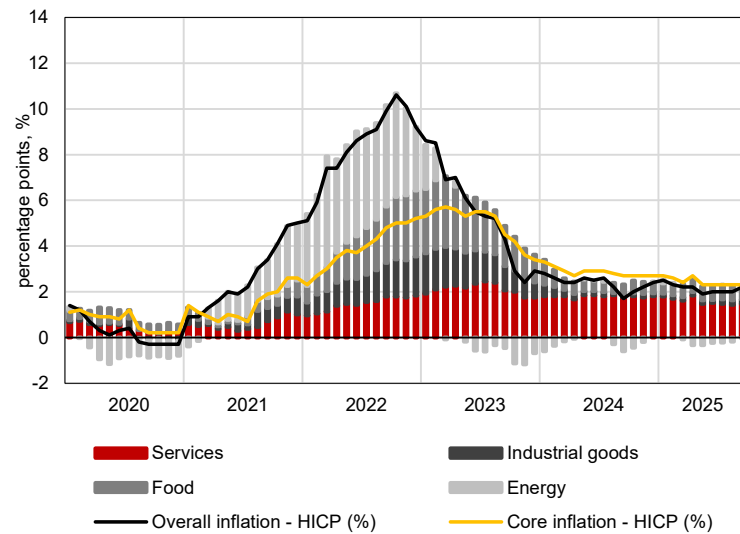
Compensation per employee



Sources: Eurostat and ECB

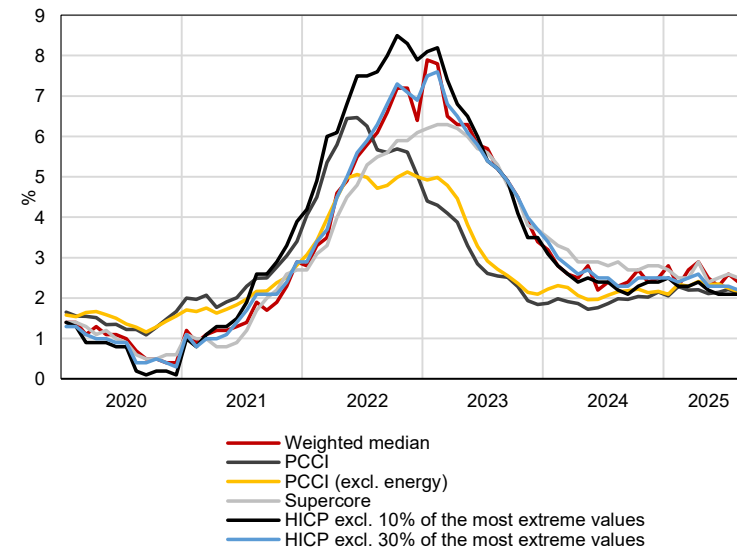
## Inflation in eura area has been hovering around 2% target

Inflation indicators in euro area



Note: Core inflation is measured by the harmonised index of consumer prices, which excludes energy, food, alcoholic beverages and tobacco prices.  
Sources: Eurostat and CNB calculations

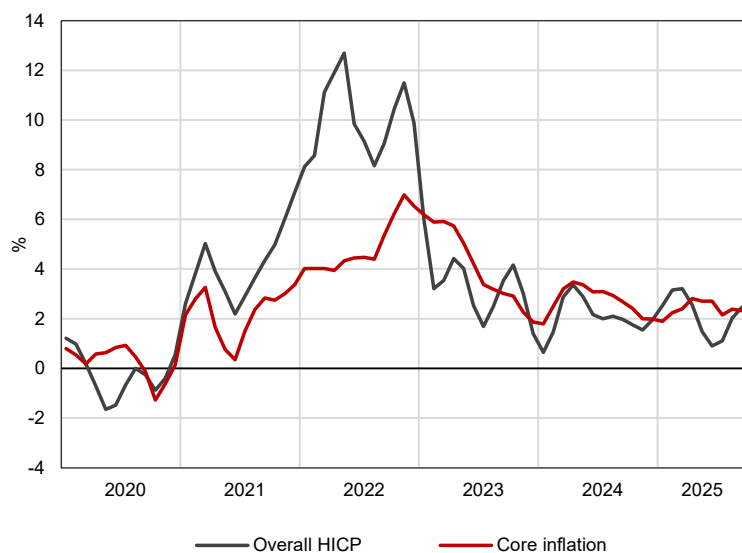
Core inflation indicators in euro area



Notes: Trimmed mean is the measure of the central tendency calculated by eliminating 5% (15%) of components with maximum and minimum annual rates of change in a given month. The total data set refers to 87 HICP components. The weighted median without the most extreme values, which excludes all values but the weighted median of the distribution of price change.  
Sources: Eurostat and CNB calculations

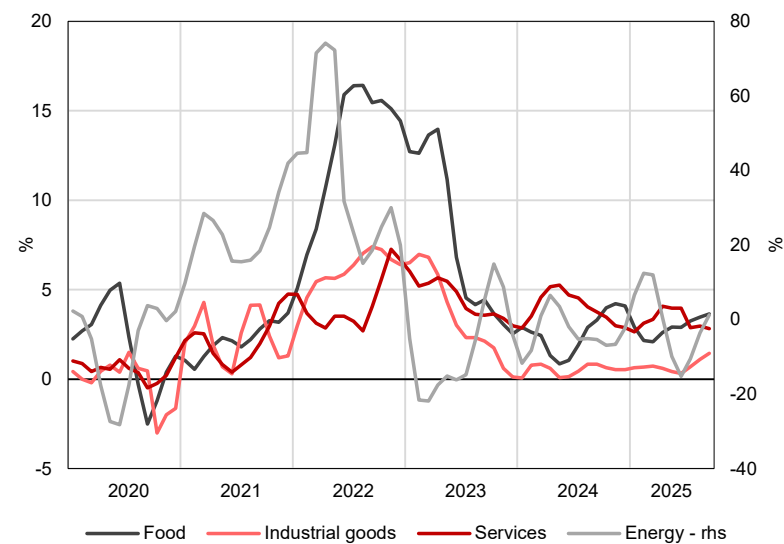
## Current pressures on prices have moderated

Momentums of overall and core inflation in euro area



Note: The quarterly rate of change on an annual level is calculated from the quarterly moving average of seasonally adjusted harmonised consumer price indices.  
Sources: ECB and CNB calculations

Momentums of main inflation components in euro area

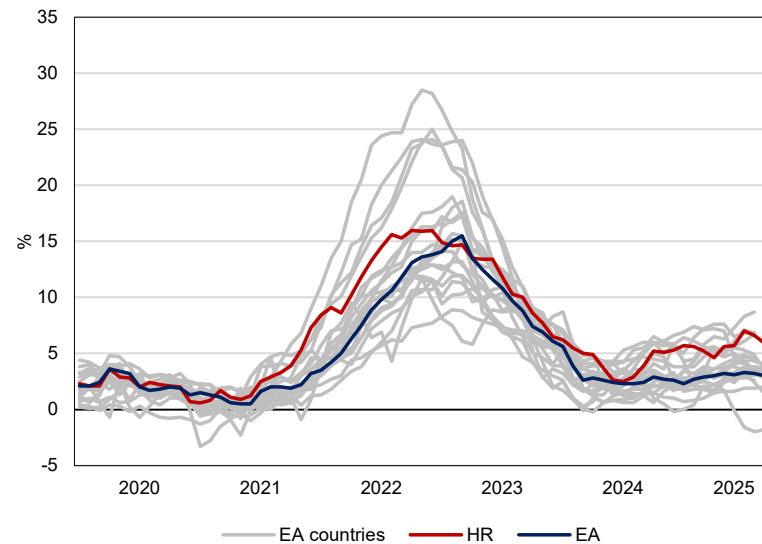


Note: The quarterly rate of change on an annual level is calculated from the quarterly moving average of seasonally adjusted harmonised consumer price indices.  
Sources: ECB and CNB calculations



## Food inflation has increased since the beginning of the year, hovering around 3.1% in the last six months

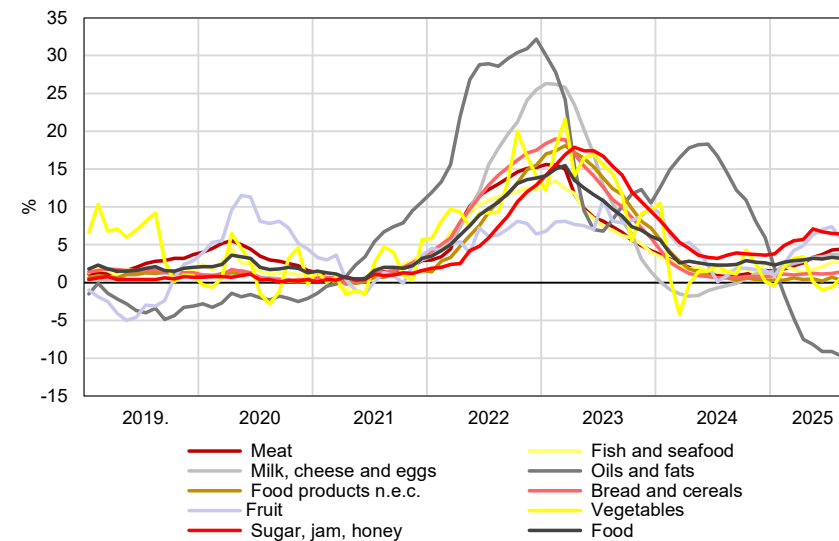
Food inflation in euroarea countries, in %



Source: Eurostat.

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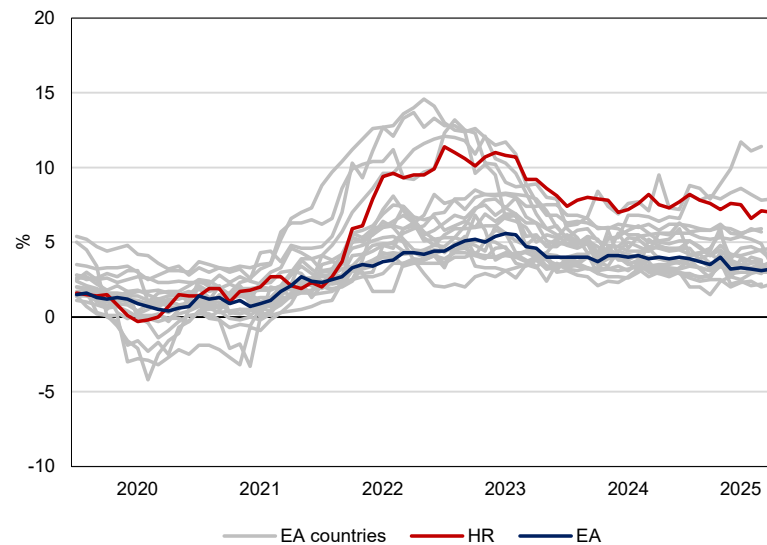
Inflation of food subcomponents in euroarea



Sources: Eurostat and CNB calculations.

## Services inflation is still elevated but has gradually declined, hovering around average 3.2% in the last five months

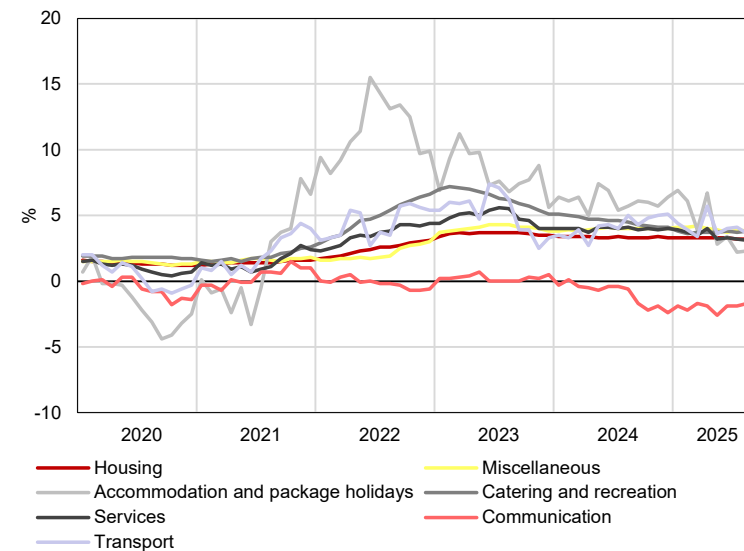
Services inflation in EA countries, in %



Source: Eurostat.

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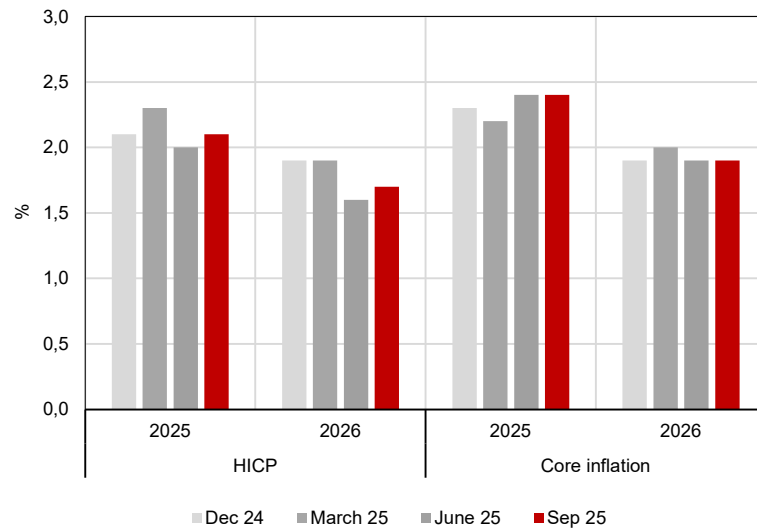
Inflation of services subcomponents in EA



Sources: Eurostat and CNB calculations.

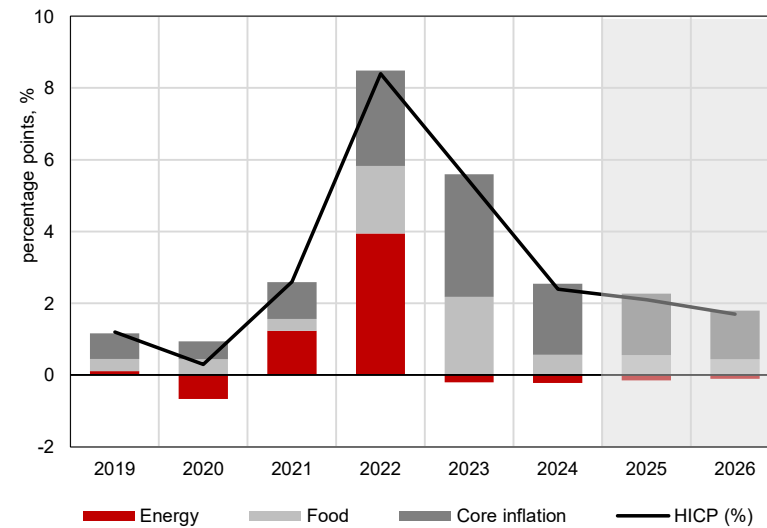
## Inflation is set to temporarily undershoot the target in 2026 with projections becoming more stable

Inflation forecast in EA



Sources: Eurostat; ECB forecast

Inflation forecast in EA

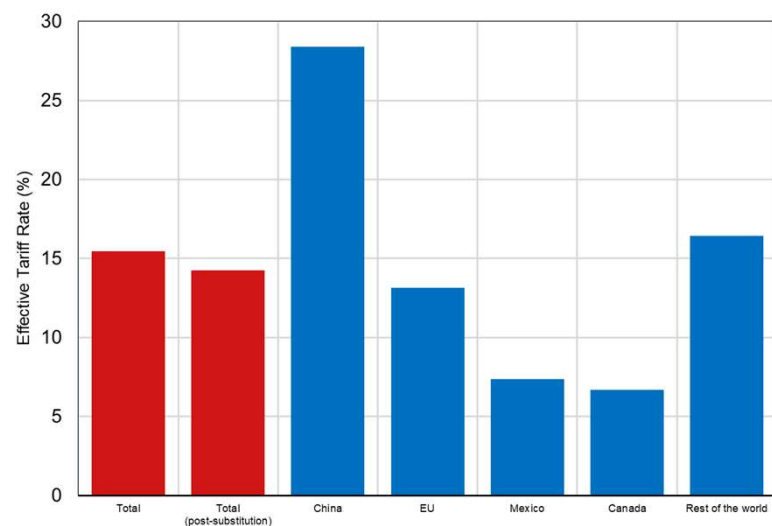


Sources: Eurostat; ECB forecast

## Uncertainty around US tariff policy and potential ramifications for economic outlook remain high

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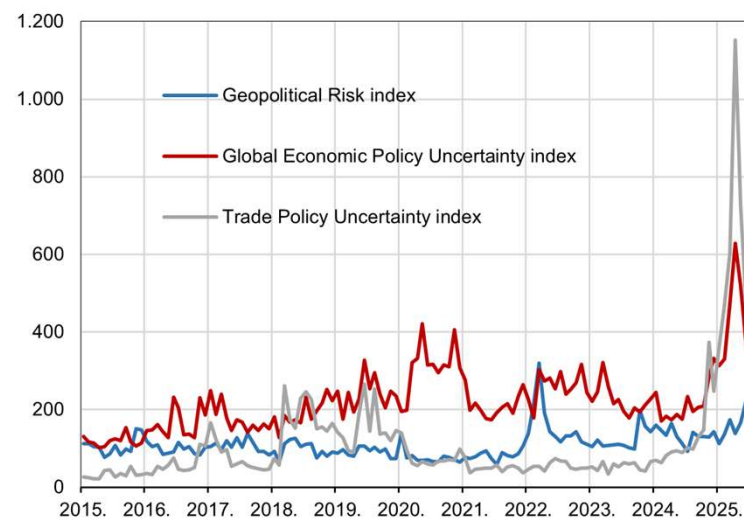
### Effective Tariff Rates for Selected Countries



Source: The Budget Lab at Yale, Eurostat, The Federal Register

Note: The overall effective tariff rate is calculated as a weighted average of the tariff rates as of September 26th, 2025, assuming unchanged trade patterns. The post-substitution rate takes into account expected changes in trade structure, i.e., changes in the shares of individual countries following the implementation of tariffs.

### Risk and uncertainty indices remain elevated

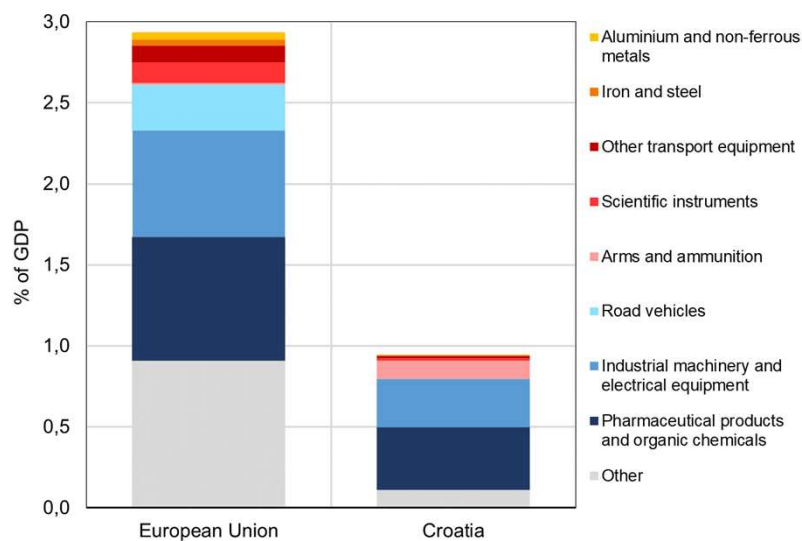


Source: Caldara and Iacoviello, Baker et al.

Although direct exposure of EU is relatively limited, negative effects of potential tariffs are more pronounced in certain sectors

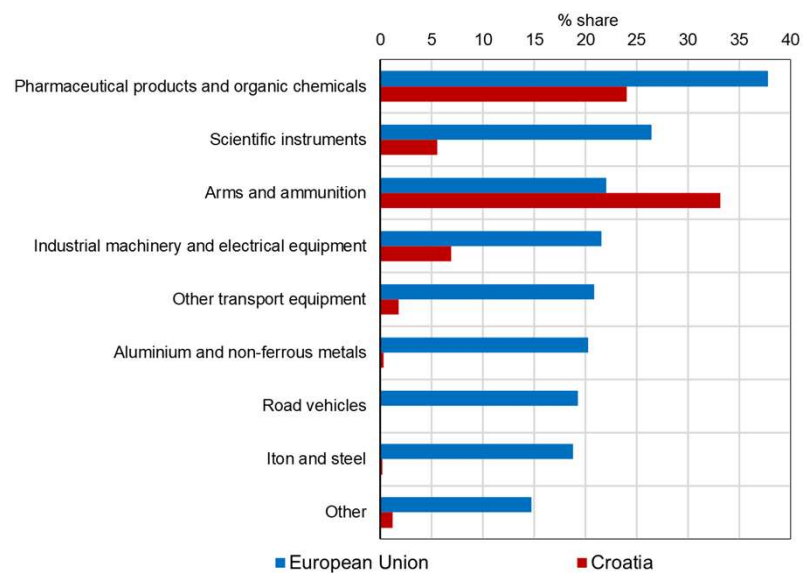
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Structure of Goods Exports to the United States, 2024



Source: Eurostat

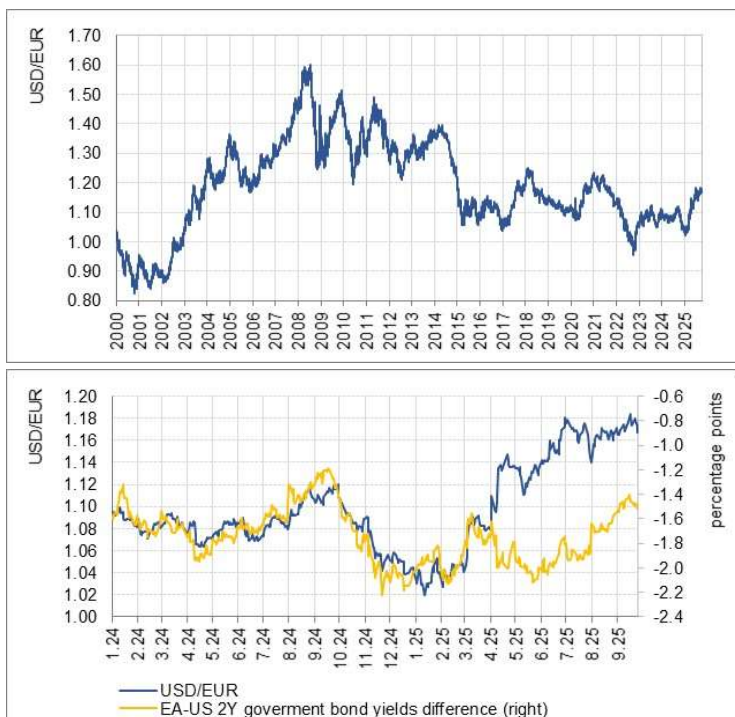
Share of the United States in Total Exports Outside the EU, 2024



Source: Eurostat

## Impact of tariffs augmented by EUR appreciation since end-2024, however, current levels are not exceptional

Euro foreign exchange reference rate vs. US dollar

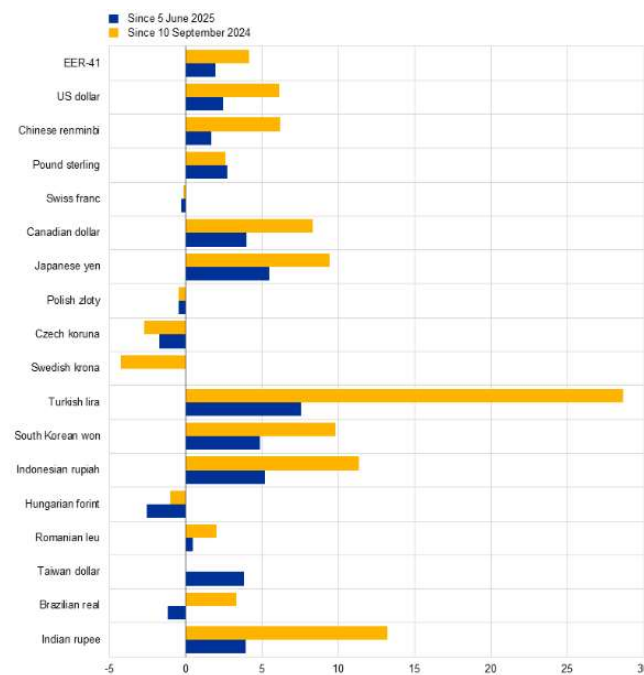


Sources: ECB; Bloomberg; HNB calculations.

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Changes in the exchange rate of the euro vis-à-vis selected currencies (in %)

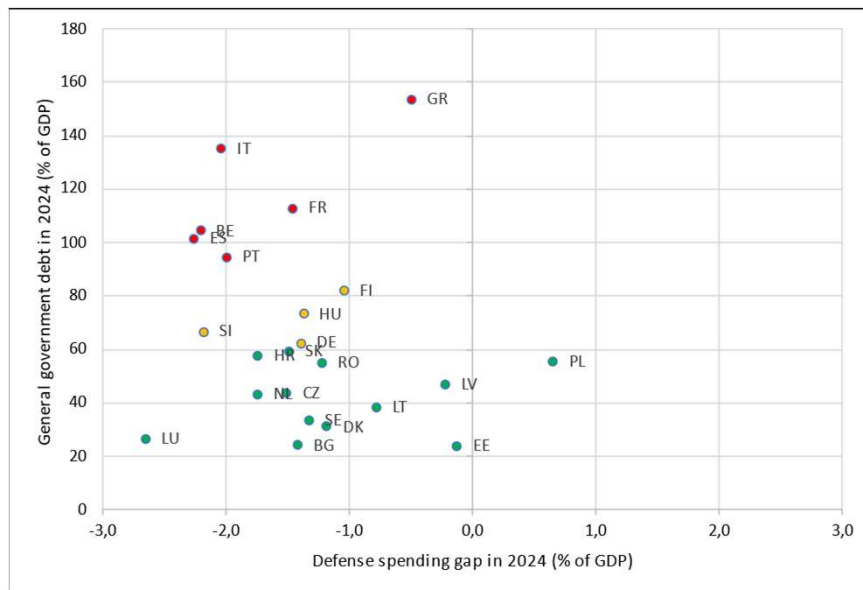


Source: ECB calculations.

Notes: EER-41 is the nominal effective exchange rate of the euro against the currencies of 41 of the euro area's most important trading partners. A positive (negative) change corresponds to an appreciation (depreciation) of the euro. All changes have been calculated using the foreign exchange rates prevailing on 10 September 2025.

## Funding the future of EU defense: The challenge of limited fiscal space

General government debt and the defense expenditure gap



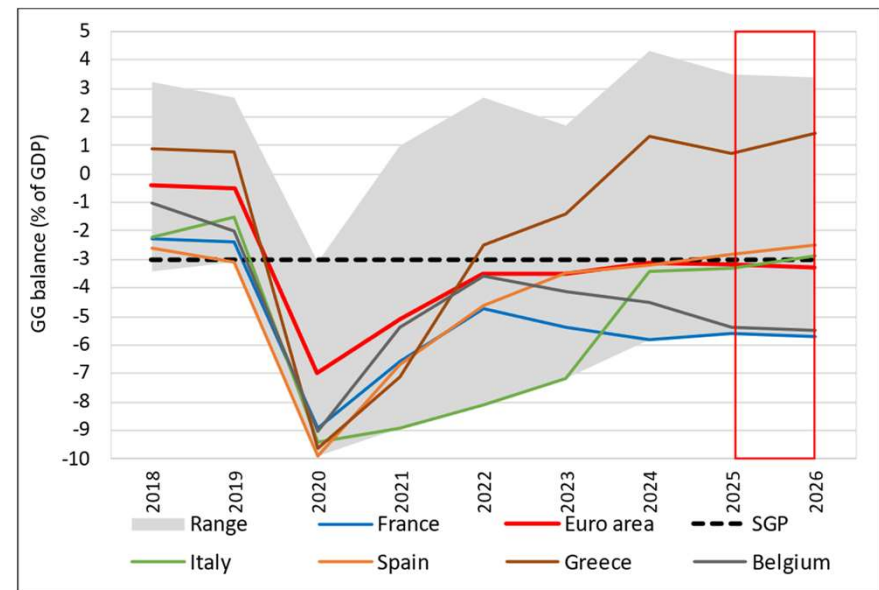
Note: The defense spending gap is calculated as the difference between current defense spending and the newly set NATO target of 3,5%. Colors indicate different levels of debt under the new fiscal rules: green (lowest risk, < 60%), orange (medium risk, 60%-90%) and red (high risk, > 90%).

Source: Eurostat

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General government balance



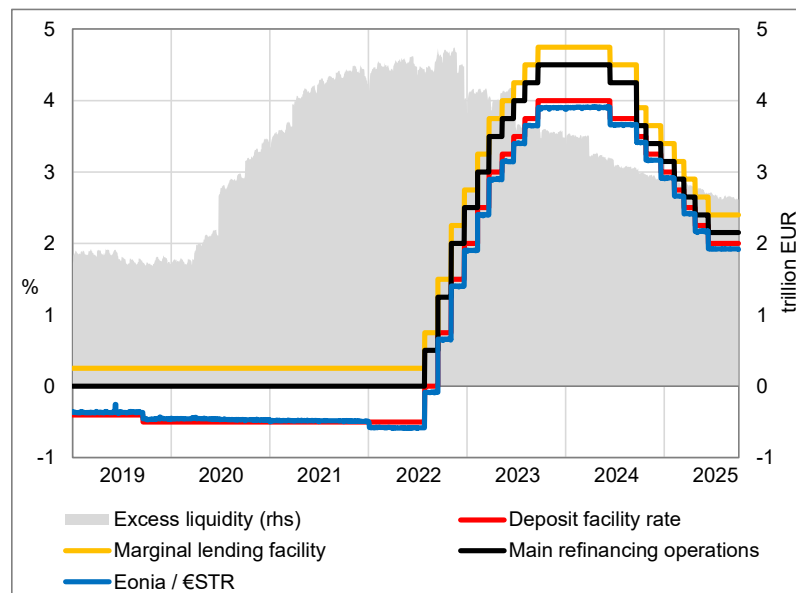
Note: The red rectangle represents the projection period

SGP represents the Stability and Growth Pact criterion, which sets a limit of -3% for the government deficit as a percentage of GDP.

Source: EC, AMECO

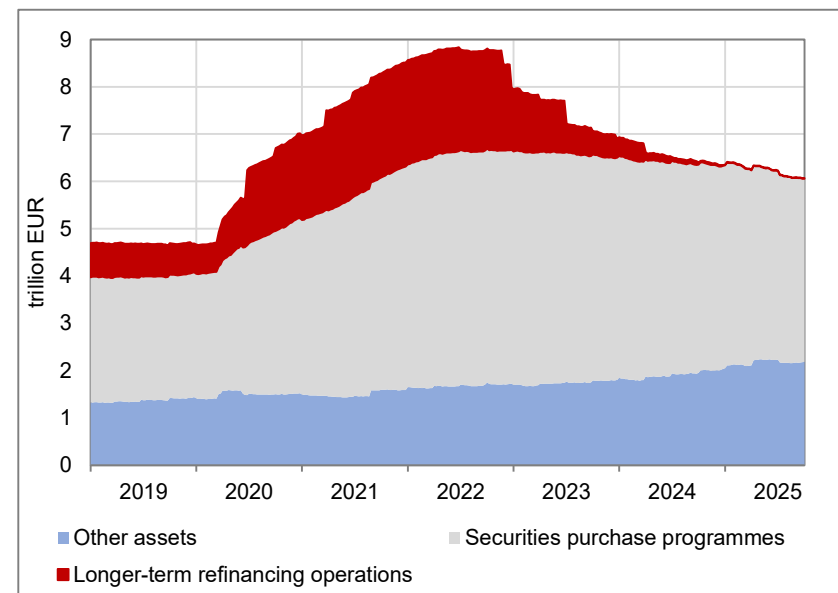
## ECB lowered policy rates by 200 basis points to neutral levels as balance sheet normalizes

Key ECB interest rates



Note: The EONIA was replaced by €STR in early 2022.  
Source: ECB.

Eurosystem balance sheet

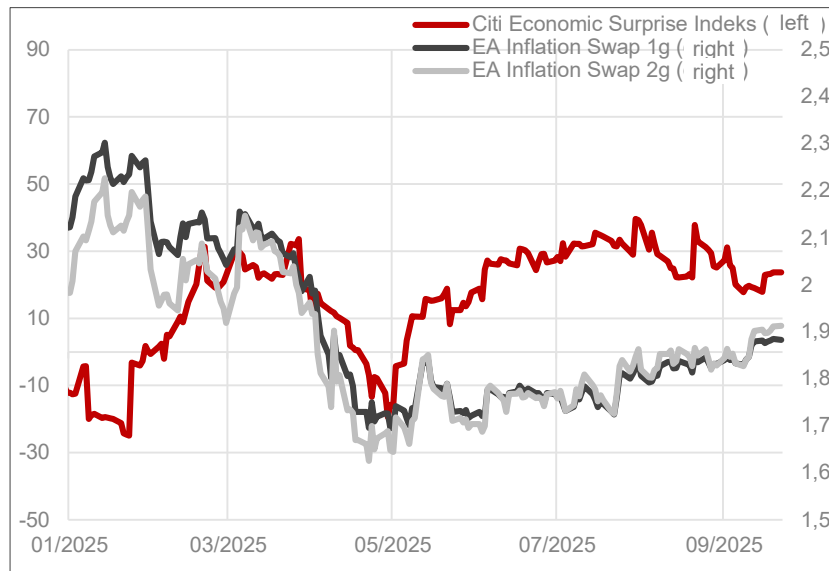


Source: ECB.



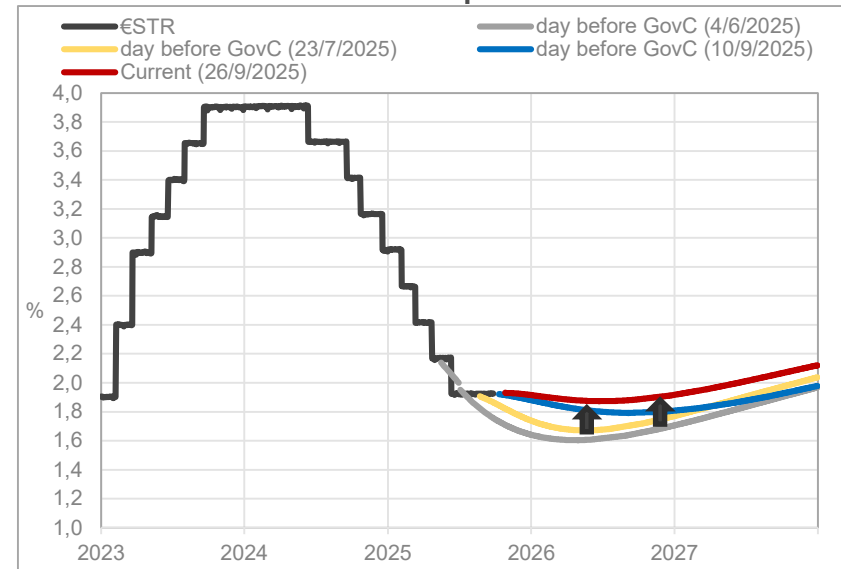
## Markets anticipate near end of ECB rate-cutting phase amid stronger euro area macroeconomic picture and recovery in inflation expectations

Citi Economic Surprise Index and Inflation Expectations



Note: Citi Economic Surprise Index measures how economic data releases compare to market expectations by aggregating the "surprises" of various economic indicators.  
Source: Bloomberg

ESTR forward curves: markets divided over one more 25bps cut



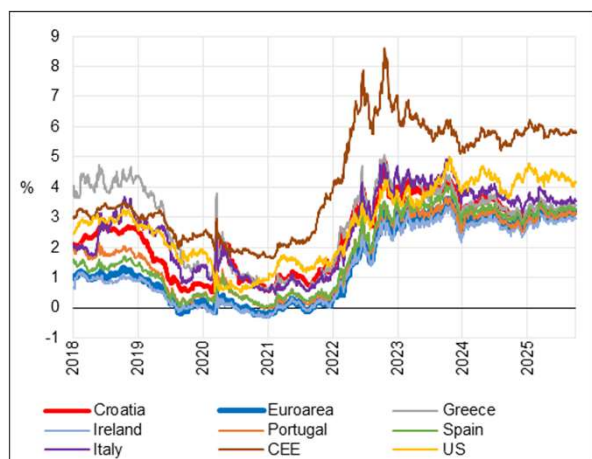
Note: The picture shows forward curve estimated using the overnight indexed swap rate (OIS). The curves represent forward curves formed a day before GovC meetings and on the last observation date.

Sources: Bloomberg, CNB

**Interest rates on loans to corporates are generally declining in the euro area, while rates for households have mostly remained stable at the levels reached in the first half of the year ...**

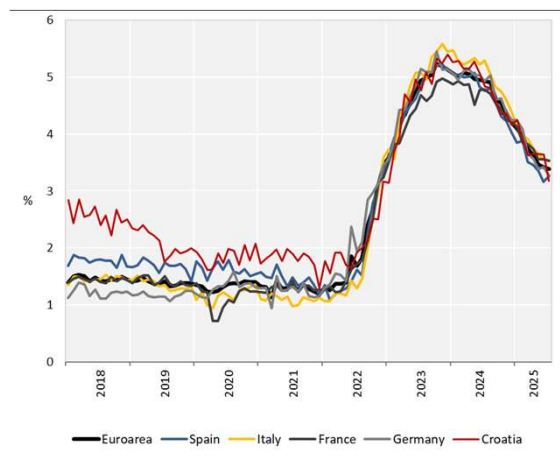
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**Yields on 10 government bonds yields**



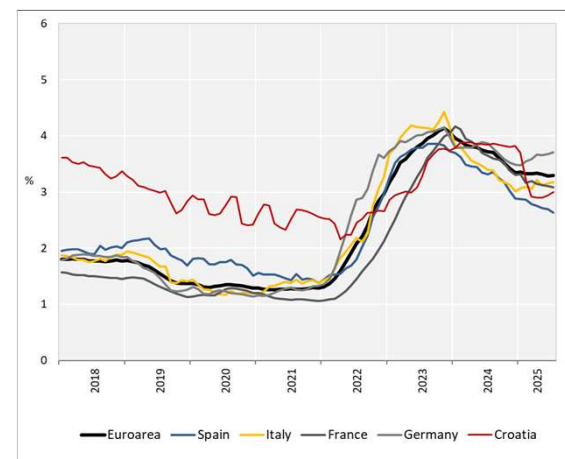
Notes: CEE – Central and Eastern Europe (the Czech Republic, Hungary, Poland and Romania); yields for the euro area and CEE have been weighted by the share of GDP of the countries included. Last data is for 30 September 2025.  
Source: Bloomberg.

**Interest rates on loans to NFCs**



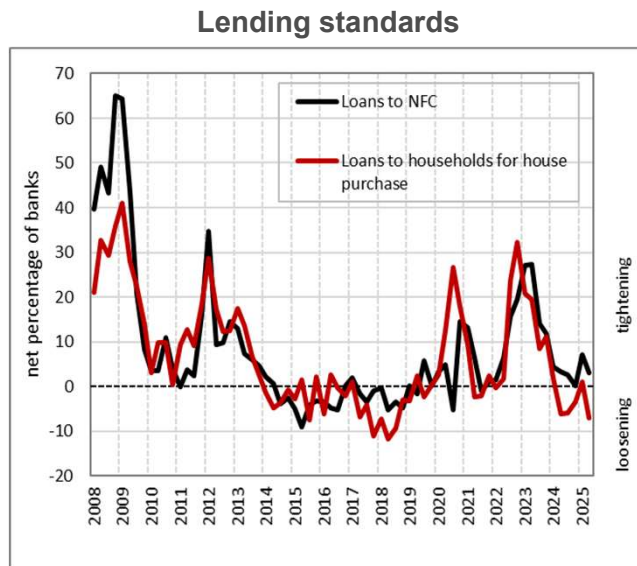
Note: Data refers to new business loans until Aug 2017, and pure new loans after.  
Source: ECB.

**Interest rates on loans to HHs**

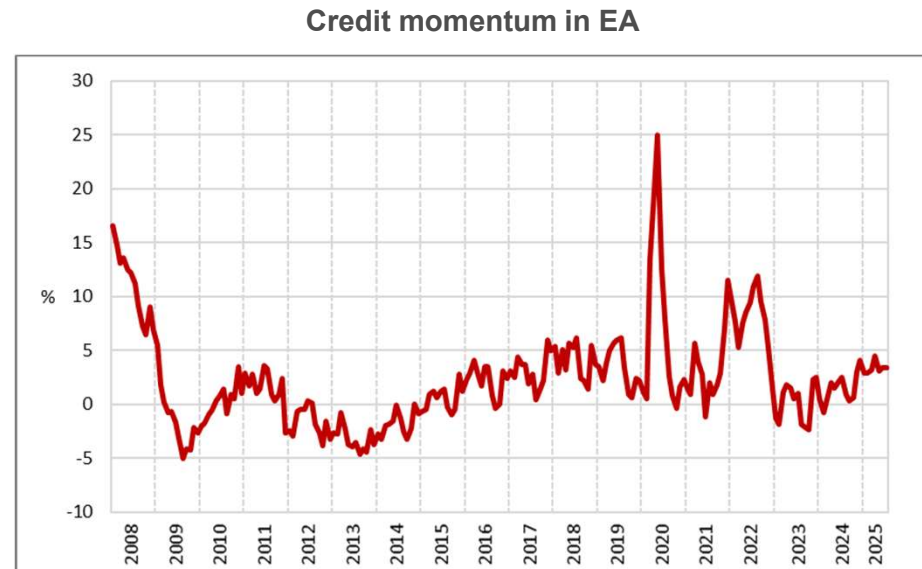


Note: Data refers to new business loans to households for house-purchase until Aug 2017, and pure new loans after.  
Source: ECB.

... and EA banks are gradually loosening lending standards, with credit activity slowly recovering in recent months



Source: ECB (BLS).



Note: Data up to July 2025 refer to transactions (flows) to NFC.  
Source: ECB; CNB calculations.



**Thank you very much for your attention!**

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