



EUROPEAN CENTRAL BANK

EUROSYSTEM

Reviving growth in the euro area

Isabel Schnabel
*Member of the Executive Board
of the ECB*

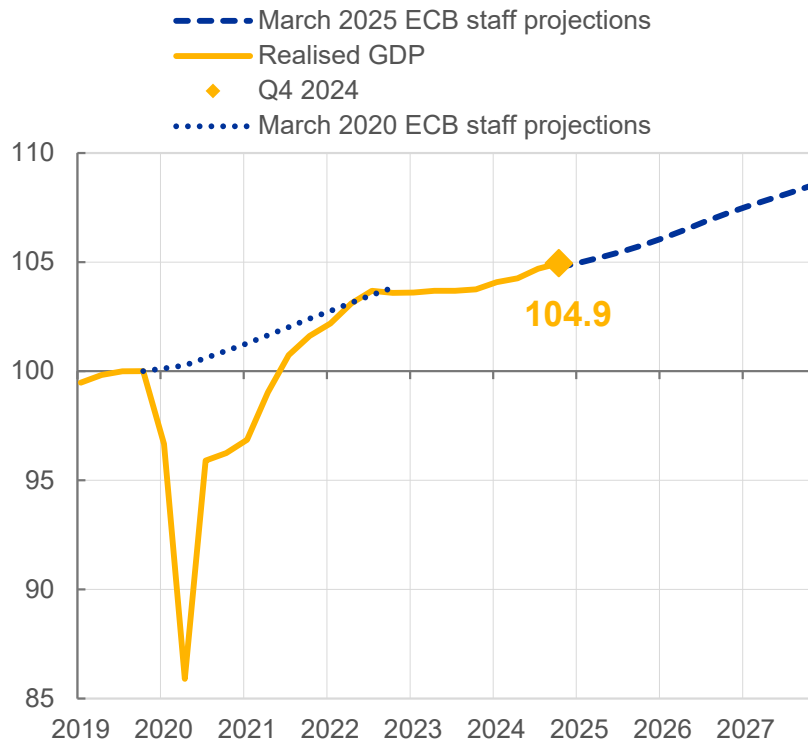


SciencesPo, Paris, 2 April 2025

Euro area economy is gradually recovering while disinflation remains on track

Real GDP

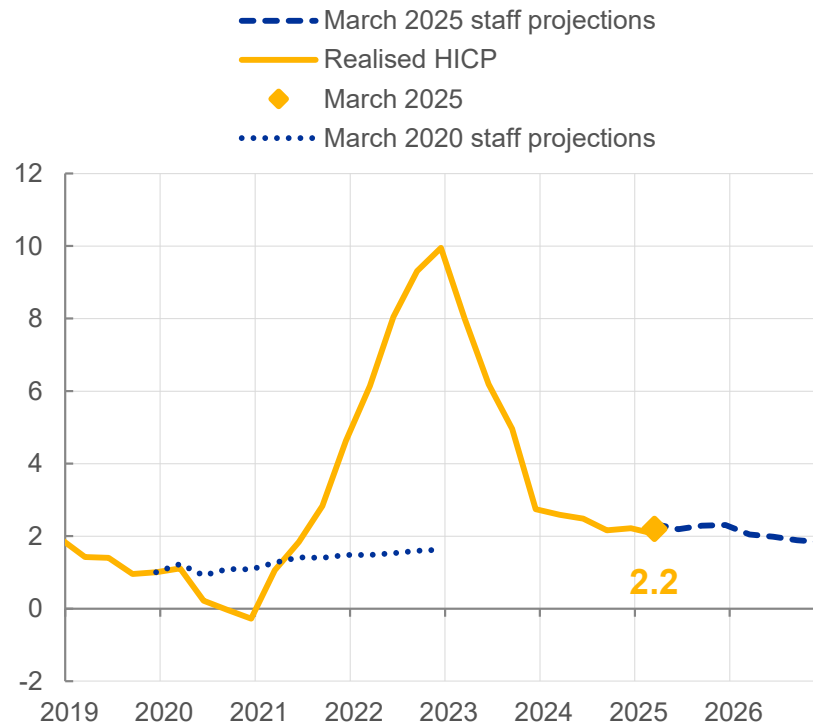
(index: Q4 2019 = 100)



Sources: Eurostat and ECB.
Latest observation: Q4 2024 for realised GDP (diamond).

Inflation

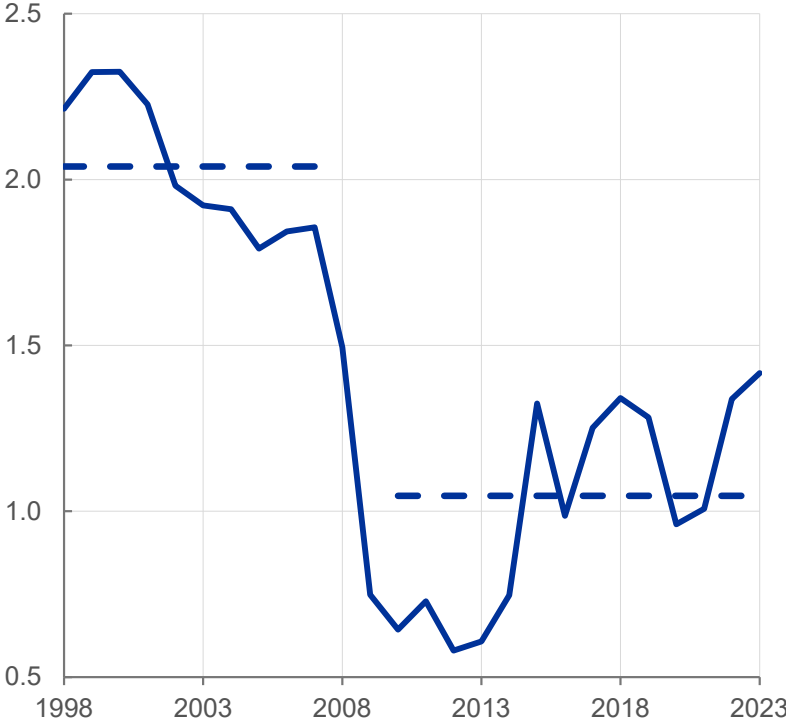
(annual percentage change, quarterly data)



Sources: Eurostat, ECB and Eurosystem.
Latest observation: Q4 2024 for quarterly data, March 2025 for monthly data (diamond).

Potential growth fell discernibly after global financial crisis and has not recovered

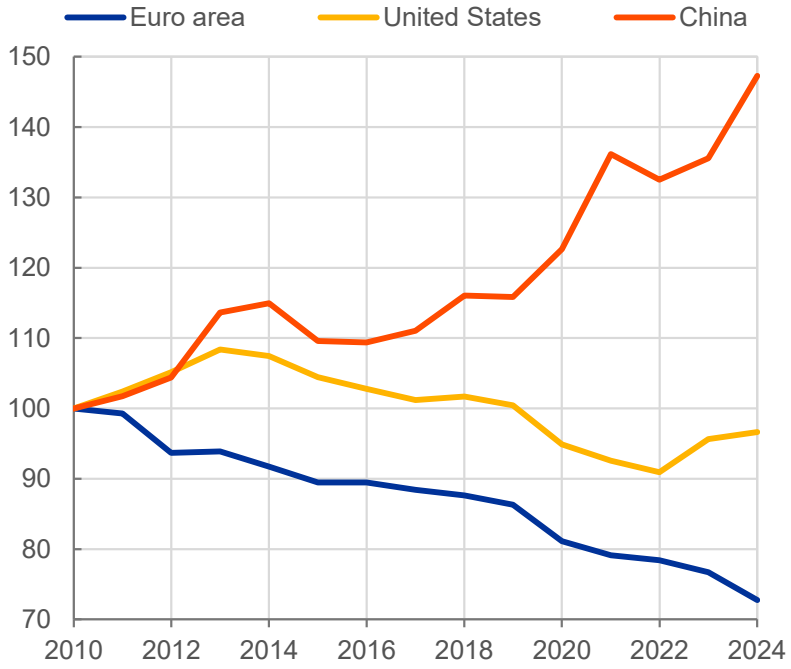
Potential GDP growth in the euro area (annual percentage change)



Source: European Commission's Autumn Forecast (November 2024)
Notes: This euro area series excludes Croatia. The solid line represents the annual percentage change, the first dashed line represents the average annual growth from 1998 to 2007, and the second dashed line represents the average annual growth from 2010 to 2023. Latest observation: 2023.

Export market shares declined steadily already well before the pandemic

Global export market shares of non-energy goods volumes (index: 2010 = 100)



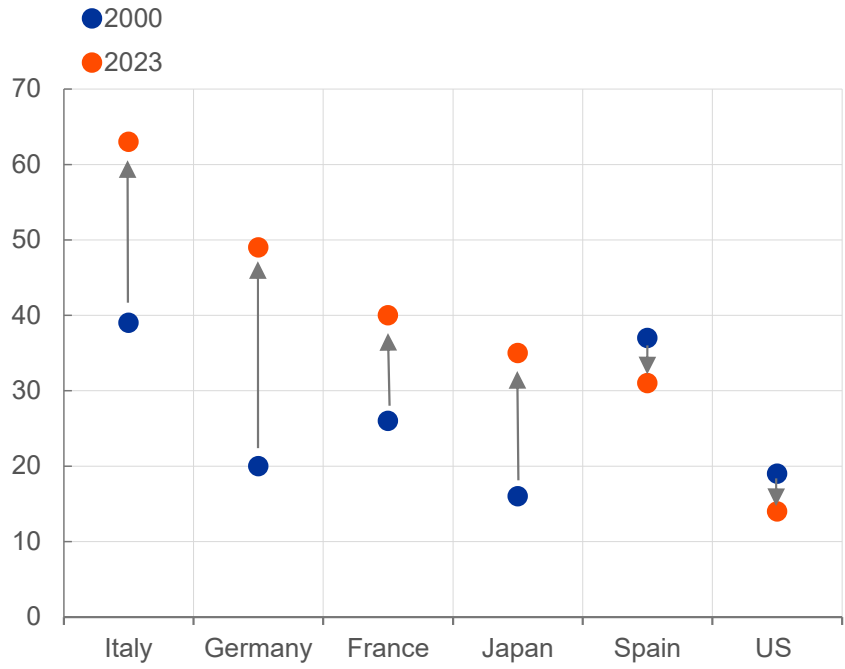
Sources: CPB, TDM and ECB staff calculations.

Notes: Long-run trends in export market shares in volume terms should be interpreted with caution. Euro area export volumes and world import volumes are not fully consistent, as each statistical office employs specific methodologies for deflating and outlier cleaning. These methodologies may differ in terms of outlier detection and replacement and quality adjustment. Based on this, the volumes (excluding energy) series used to compute the export market shares shown in the chart are calculated by taking CPB (CPB Netherlands Bureau for Economic Policy Analysis) volumes (in 2005 chain linked billion euros) and subtracting the share of energy exports. This share of energy exports is based on TDM (Trade Data Monitor) values and includes HS2 sectors 25, 26, 27, 97, 98, 99.

Latest observation: 2024.

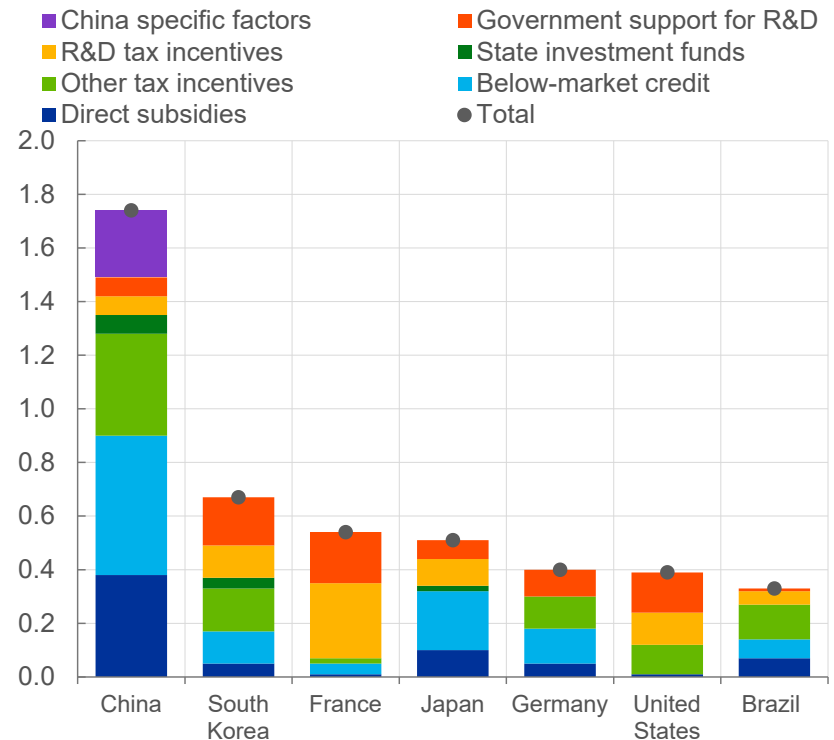
China has become a main competitor, with state subsidies distorting competition

Number of product categories with comparative advantage of both China and another country



Sources: UNCTAD and ECB staff calculations.
 Notes: The chart shows comparative advantage, referring to the revealed comparative advantage indicator, measuring the ratio between the share of country's exports in a particular product category in its total exports, and the same share for the world as a whole. A country has comparative advantage if the value of this ratio is above 1. For instance, if Italy and China both specialise in the same specific product category, they are likely to directly compete for exports. Latest observation: 2023.

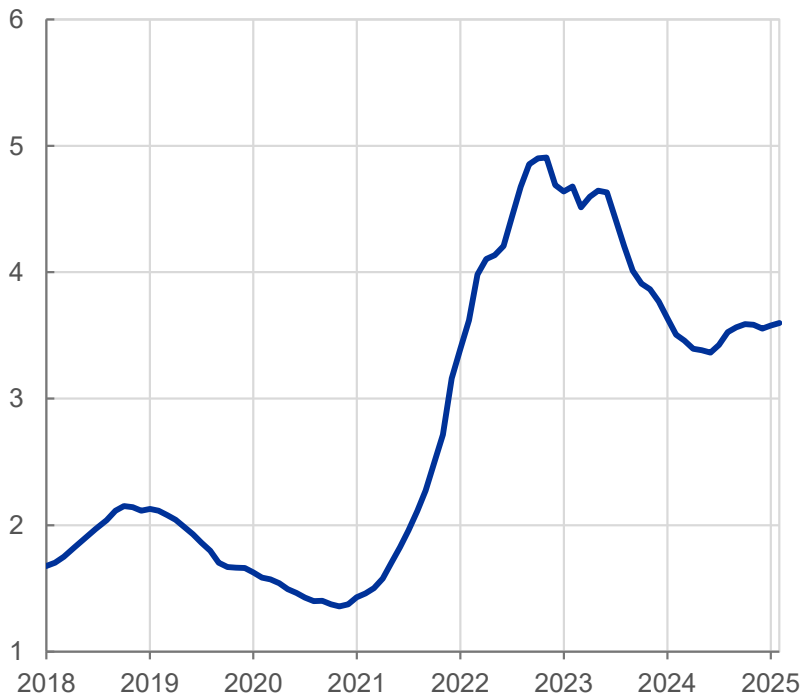
Industrial policy share in GDP (percentage share and percentage point contributions)



Source: Center for Strategic and International Studies.
 Notes: The estimates refer to 2019.

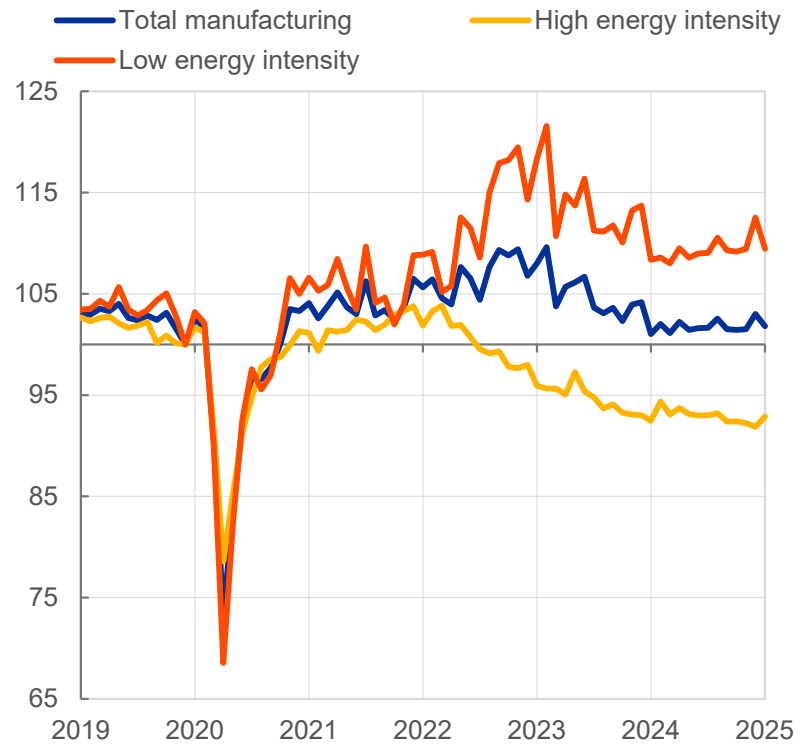
Energy prices in the euro area relative to the United States

(ratio)



Industrial production: manufacturing sector

(index: December 2019 = 100)



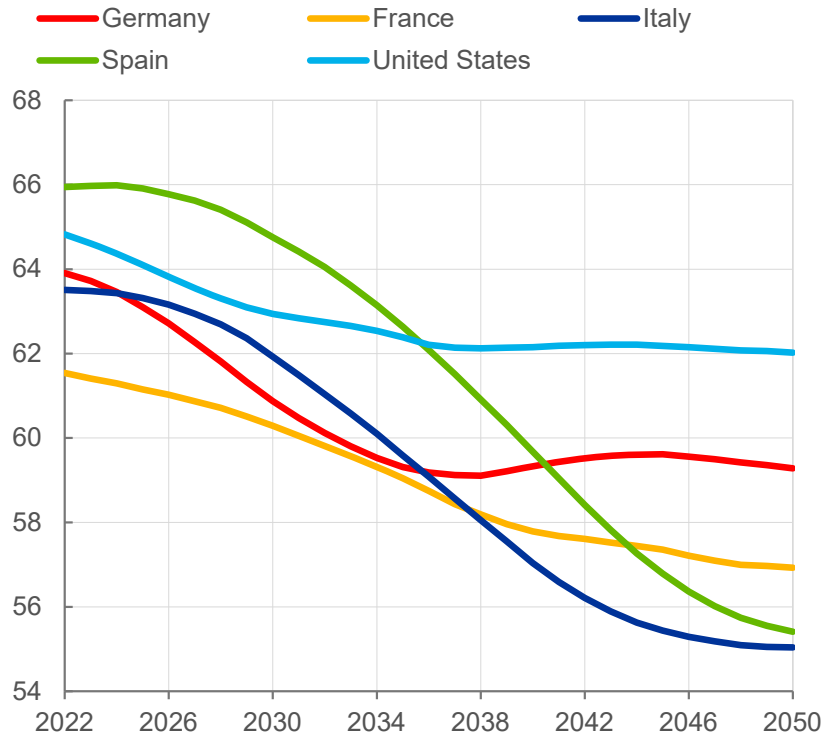
Sources: Trade data monitor, IMF, ADB-MRIO and ECB staff calculations.
 Notes: The relative energy price (REP) is the weighted average of the relative natural gas price and relative oil prices in the euro area vs the US where each component is respectively weighted by the share of gas and electricity and oil and coal in the energy mix for each industry-country pairs. Aggregation weights are the share of country-sector exports in total euro area exports.
 Latest observation: February 2025.

Sources: Eurostat, Trade Data Monitor and ECB staff calculations.
 Notes: Data are seasonally-adjusted. Industrial production indices for individual sectors are aggregated with value-added weights. Low (high) energy-intensity sectors are defined as those with an energy intensity lower (higher) than that of the median sector. For more details, see [Chiacchio, De Santis, Gunnella and Lebastard \(2023\)](#).
 Latest observation: January 2025.

Euro area economies are likely to face structural labour scarcity due to ageing societies

Working-age population projections

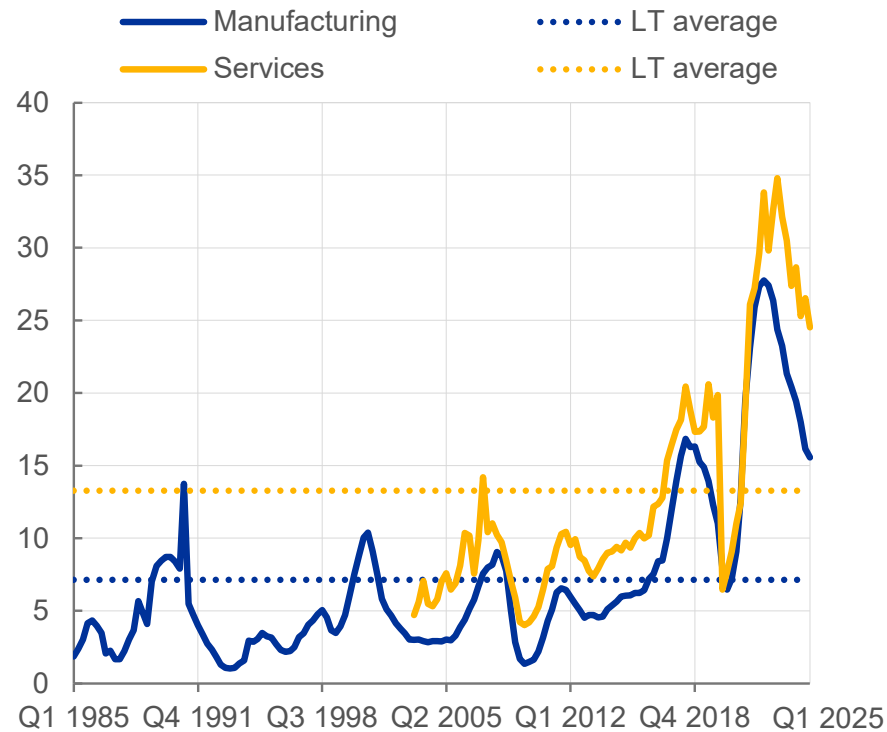
(as % of total population)



Sources: European Commission Europop 2023 and US Census Bureau.
Notes: Baseline scenario. Projections start in 2022.

Labour as factor limiting business

(survey replies, percentage balances)

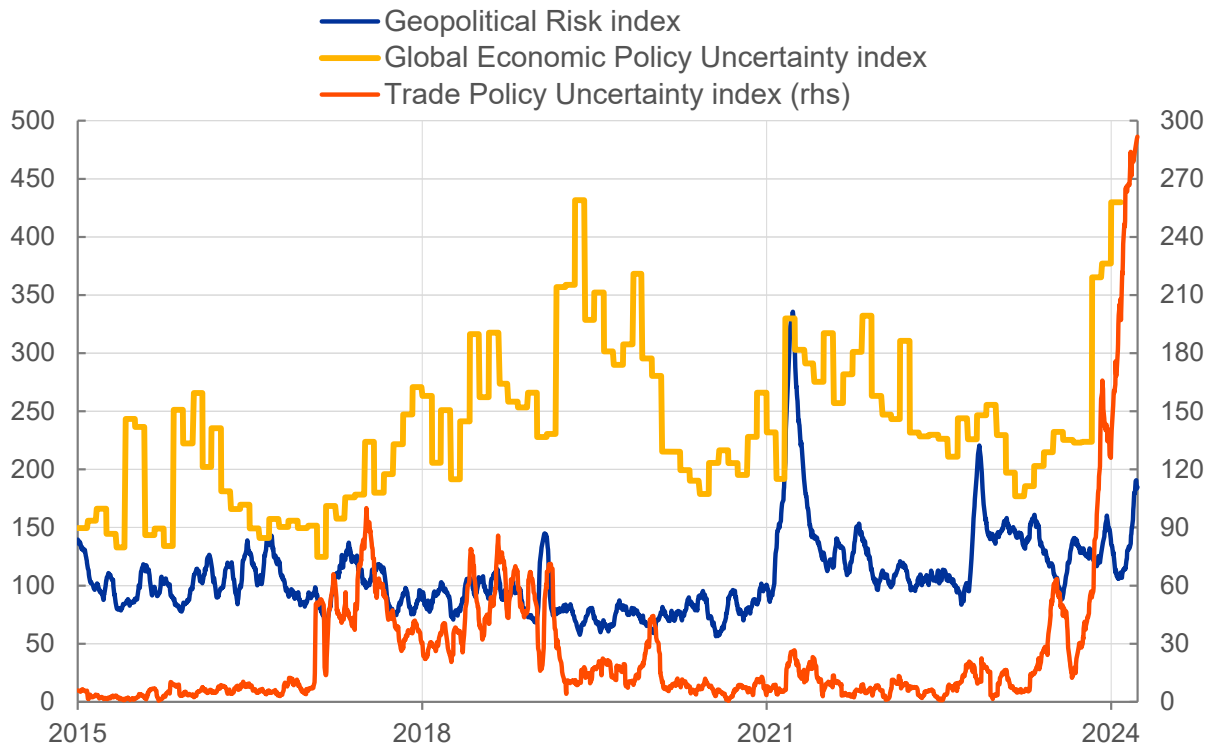


Sources: European Commission and ECB staff calculations.
Latest observation: 2025-Q1.

Uncertainty about geopolitics, protectionism and economic policy has surged

Uncertainty indices

(lhs: index, rhs: percent of 2018 peak)



Sources: Bloomberg, Caldara and Iacoviello (2022) and Goldman Sachs research.

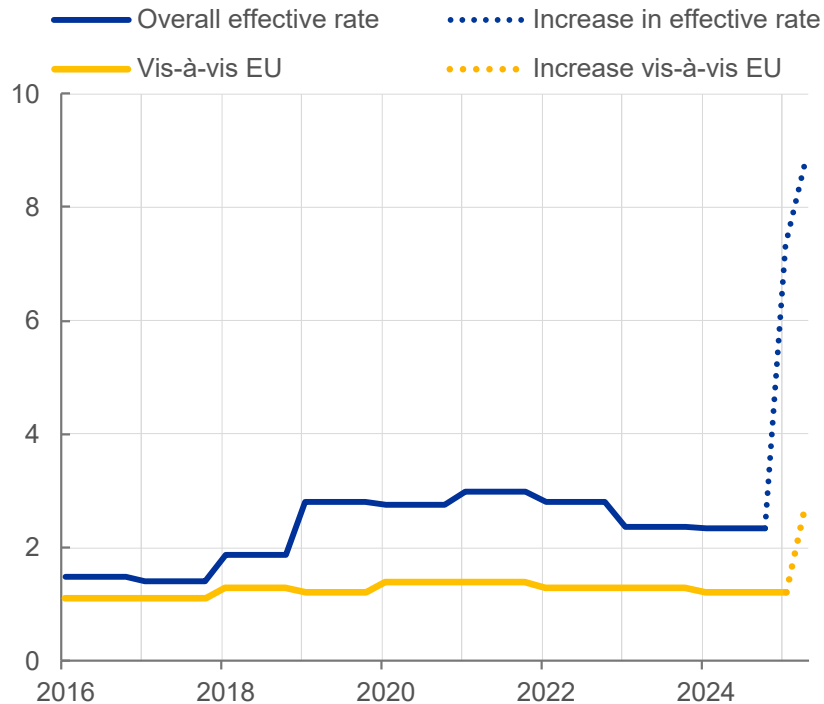
Notes: The GPR index is based on ten newspapers and is constructed by counting the number of articles related to adverse geopolitical events in each newspaper for each month (as a share of the total number of news articles). The TPU index counts the number of articles that contain key TPU words scaled by the total number of articles. The GEPU Index is a GDP-weighted average of national EPU indices for 21 countries

Latest observation: 24 March 2025 (GPR), 11 March 2025 (TPU) and January 2025 (GEPU, monthly data).

Sharp rise in tariffs weighs on stocks in affected sectors, with US underperforming

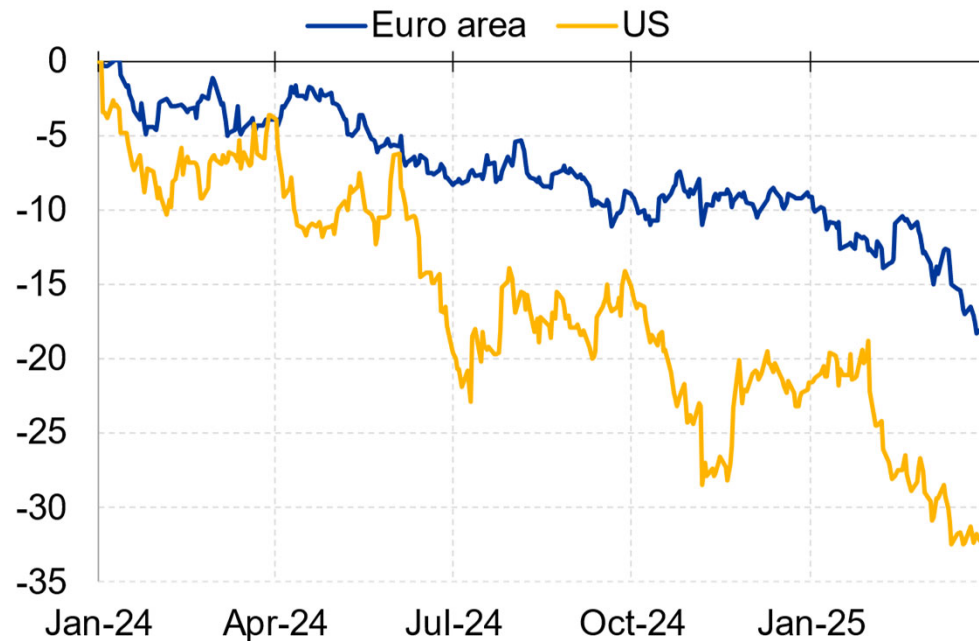
US overall effective tariff rate

(percent)



Performance of tariff-sensitive stocks

(compared to broad index in percentage points)



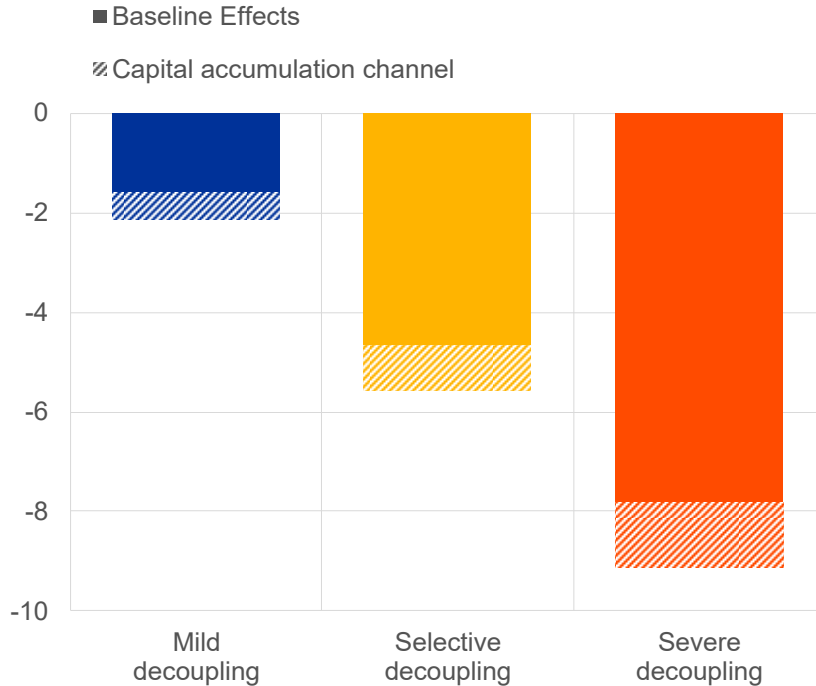
Sources: Haver Analytics, OECD TIVA, Trade Data Monitor and ECB staff calculations.
Notes: Historical effective tariffs (2016-2024) are calculated using the revenue approach – dividing total nominal custom proceeds by total nominal imports. Increases in the effective rate that have already materialised (dotted parts of the line) are calculated as the product of nominal import value of targeted flows and its tariff rate increase. This includes country-specific tariffs for China, Canada and Mexico, and product-specific tariffs for steel and aluminium. Latest observation: March 2025.

Sources: Bloomberg, UBS.
Notes: Returns of basket of stocks deemed to be sensitive to tariffs (selected by UBS Research, but adjusted to include only euro area constituents) minus returns of Euro Stoxx 50/S&P 500 since 1 January 2024.
Latest observation: 31 March 2025.

Trade fragmentation is structurally harmful for economic growth and inflation

Global real GDP

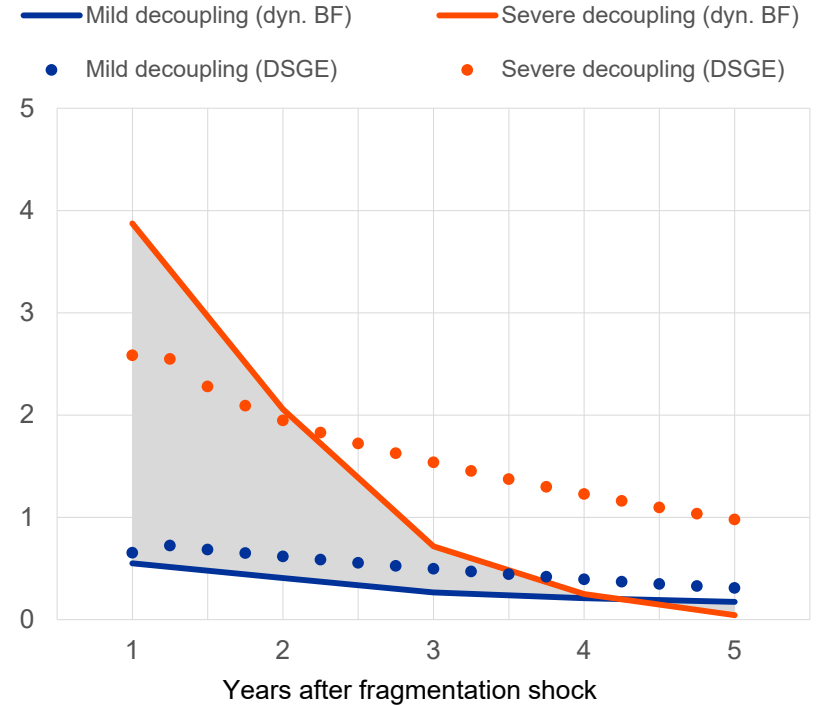
(percentage deviation from steady state)



Sources: Conteduca et al., (2024b), OECD TiVA, EORA, and authors' calculations.
 Notes: Non-linear impact simulated through 25 iterations of the log-linearised model. The additional impact from capital accumulation is based on Quintana (2024a). Effects of the capital accumulation channel for Selective decoupling (not feasible in Quintana, 2024a) are interpolated from mild and severe decoupling. In the mild decoupling scenario, partial trade restrictions are imposed between the East and West bloc on all products. The selective decoupling scenario assumes a full trade ban between the East and the West on high tech products and critical products. The severe decoupling scenario refers to a full trade ban between the two blocs.

Global inflation

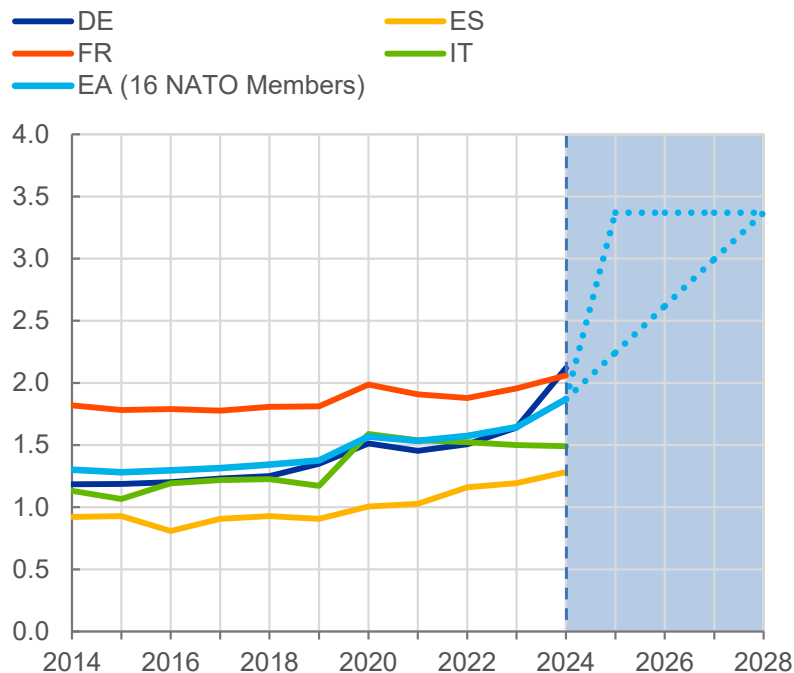
(annual percentage changes, deviation from baseline of no fragmentation)



Sources: Quintana (2024a), Lechthaler and Mileva (2024), OECD TiVA, EORA and authors' calculations.
 Notes: "Dyn. BF" refers to the dynamic extension of the Baqaee-Farhi model by Quintana (2024a) and "DSGE" refers to the Dynamic Stochastic General Equilibrium model by Lechthaler and Mileva (2024).

Defence spending and SGP national escape clause flexibility 2025-2028

(share of GDP)

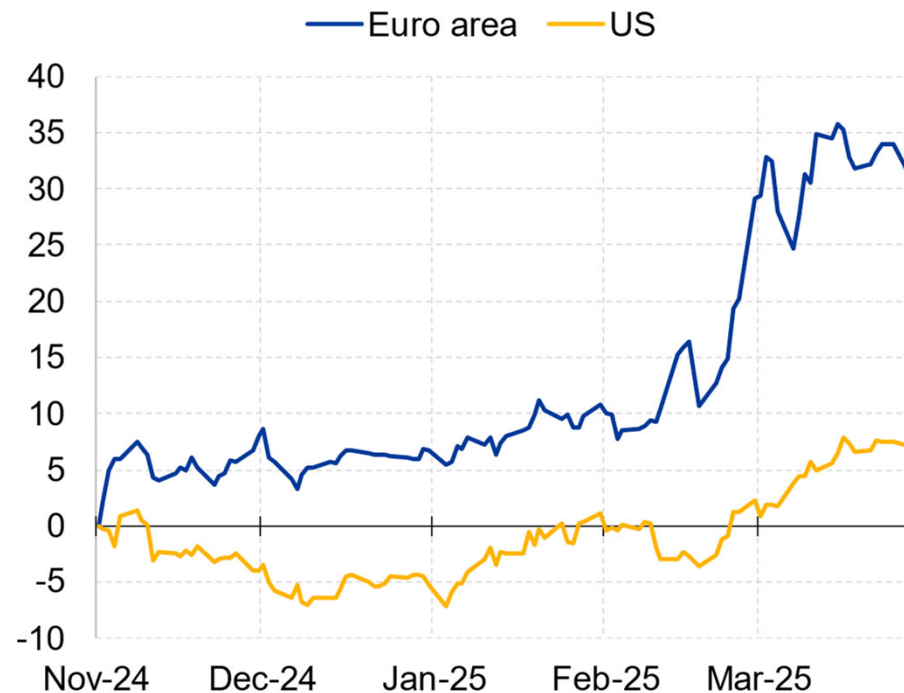


Source: NATO.

Notes: 2025-2028 shows the flexibility under an activated national escape clause which is 1.5% of GDP; if a Member State requests activation, the time profile of the increase of up to 1.5% of GDP is flexible over the four years. EA aggregate does not include the four non-NATO euro area Member States AT, CY, IE and MT.

Performance of defence stocks

(compared to broad index in percentage points)



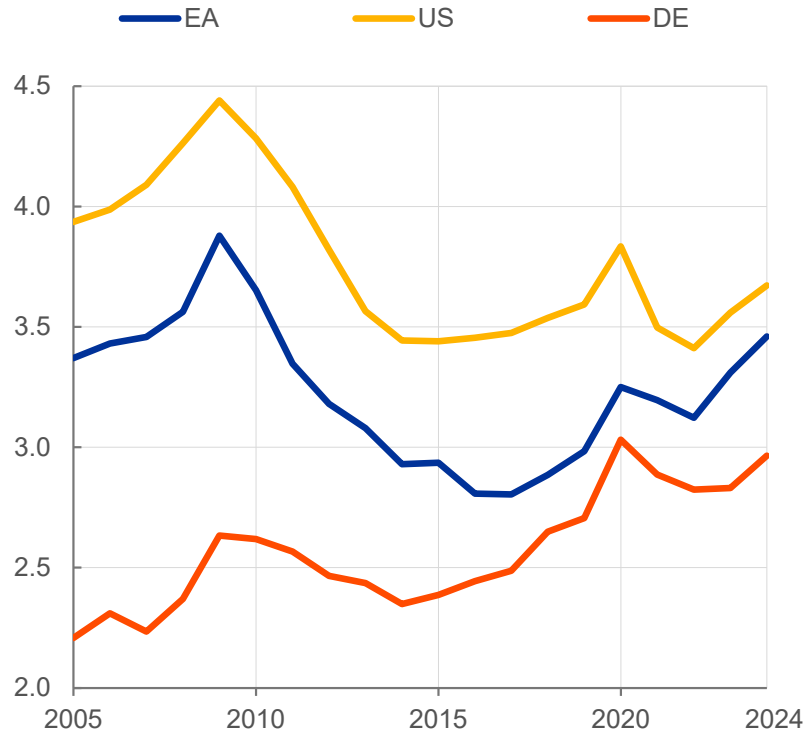
Source: Bloomberg

Notes: S&P 500/Stoxx Europe Aerospace & Defense indices, adjusted to include only euro area constituents. Defence index returns minus broad index returns since 5 November 2024. A positive value indicates outperformance of defence stocks versus the broader market, a negative value underperformance.

Latest observation: 31 March 2025.

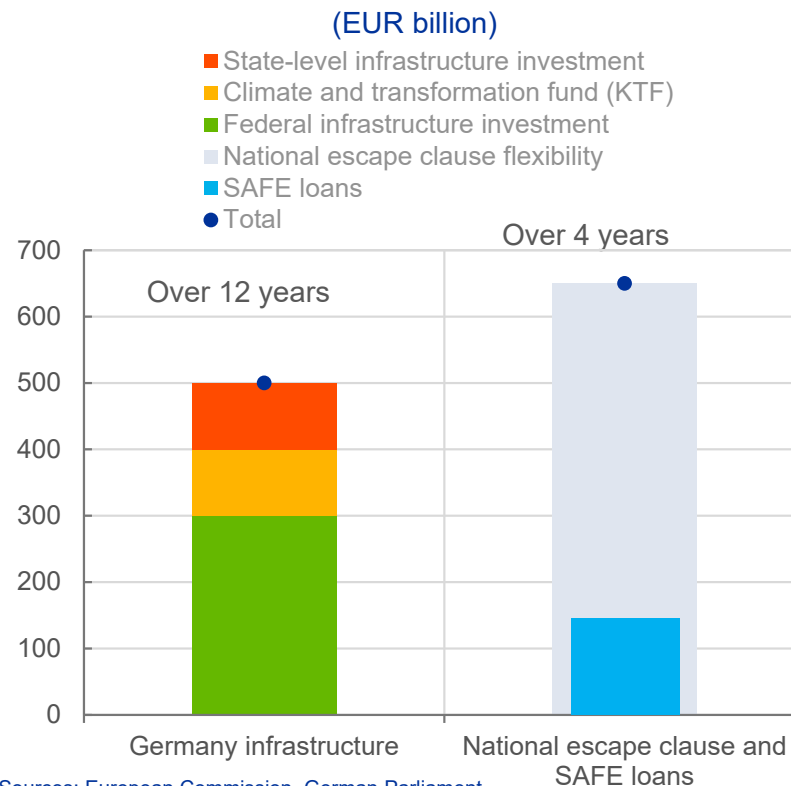
After years of low public investment, large increase in public spending is expected

Public investment (share of GDP)



Sources: European Commission (AMECO) and ECB staff calculations.
Latest observations: 2024.

Additional fiscal expenditures in Germany and the EU



Sources: European Commission, German Parliament

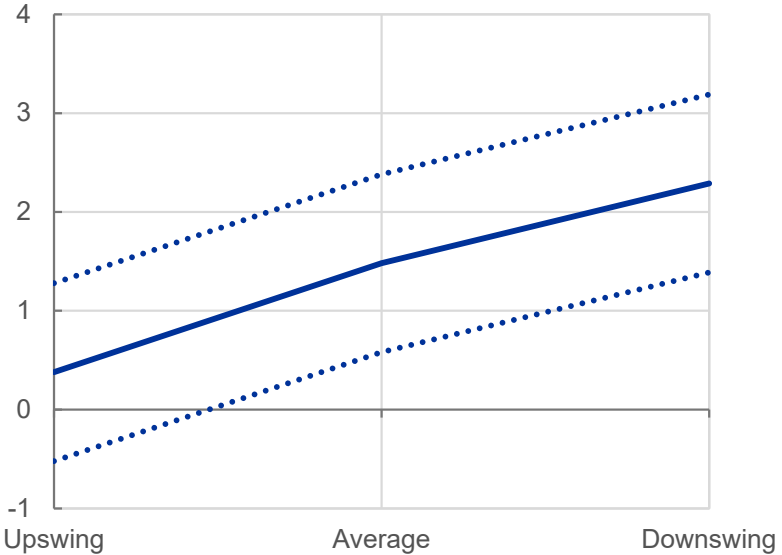
Notes: German basic law amendment (18 March 2025) to allow for up to € 500 bn infrastructure investment and additional investment in defence for which spending above 1% of GDP is exempt from the debt brake (not shown in chart). EU ReArm/Readiness 2030 provides under the SGP's national escape clause flexibility for up to 1.5% of GDP of additional defence spending until 2028 (around € 650 bn). SAFE is a temporary emergency instrument by the European Commission providing loans to Member States to carry out urgent and major public investment in the defence sector.

Fiscal multipliers are largest for public investment and during downturns

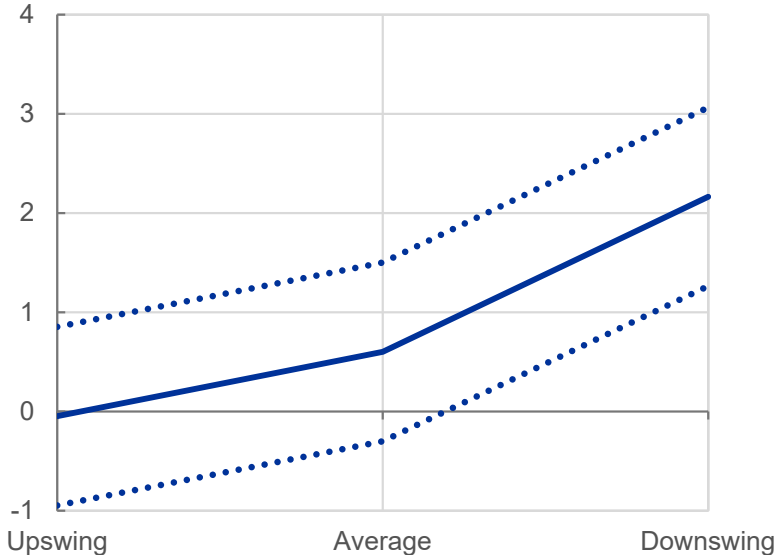
Fiscal multipliers reported in the empirical literature

(y-axis: fiscal multiplier; x-axis: economic state)

Public investment



Military spending

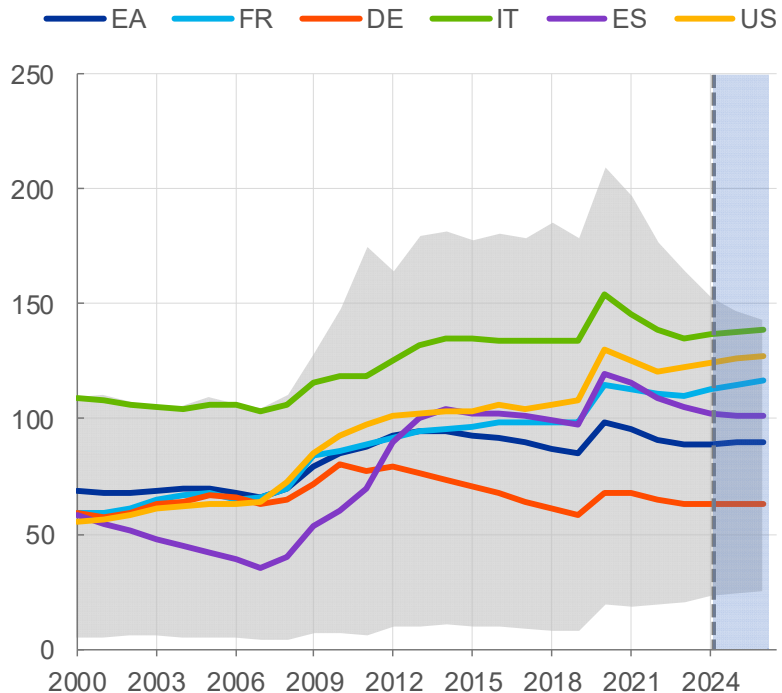


Source: Gechert and Rannenberg (2018).
Notes: Upswing refers to an expansionary regime, downswing to a downturn or crisis regime.

High debt levels and higher interest rates imply rising interest expenditures

Government debt in the euro area and the US

(percent of GDP)



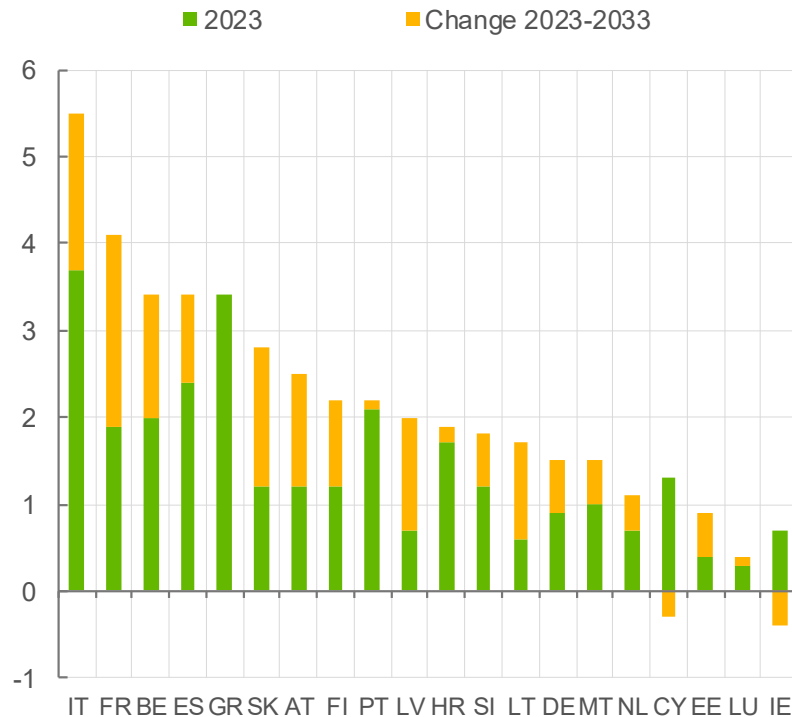
Source: European Commission.

Notes: The range shows the minimum and maximum of all euro area countries. Figures for 2024, 2025 and 2026 refer to the European Commission 2024 Autumn forecast.

Government debt is defined as in ESA 2010. The borrowing on the markets to finance the RRF grants and loans is considered as debt of the EU. The RRF loans to Member States are recorded as Member States' debt towards the EU. The chart does not include the recently announced fiscal packages. Latest observation: 2026 (projection).

Government interest expenditures

(percent of GDP)



Sources: European Commission, Debt Sustainability Monitor (DSM) 2024.

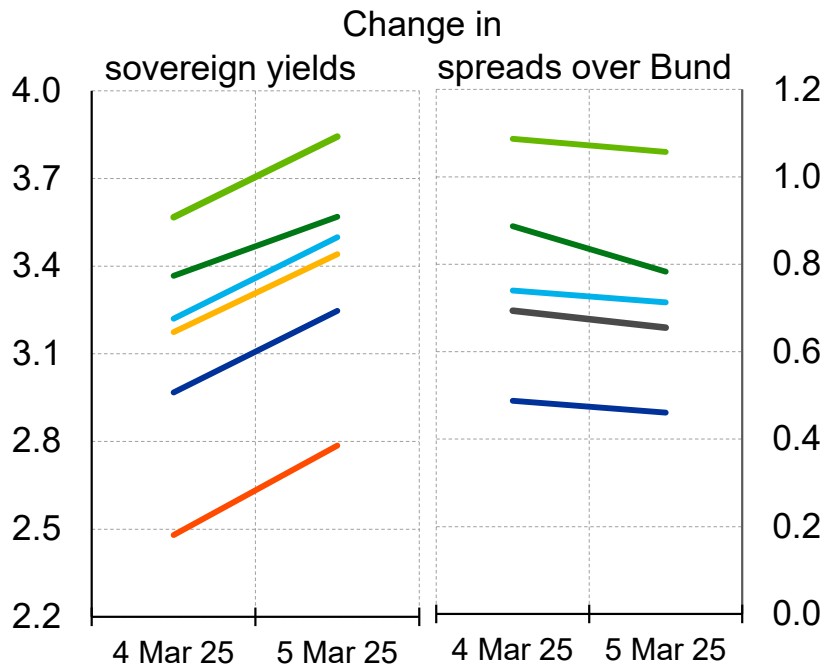
Notes: Annual government interest expenditures in percent of GDP, DSM 2024 is based on the Commission's 2024 autumn forecast. The chart does not include the recently announced fiscal packages.

Fiscal announcement raised sovereign yields but not spreads in line with growth narrative

10-year sovereign yields and 10-year sovereign spreads over German Bund

(percentages per annum)

— EA — DE — FR — IT — ES — GR

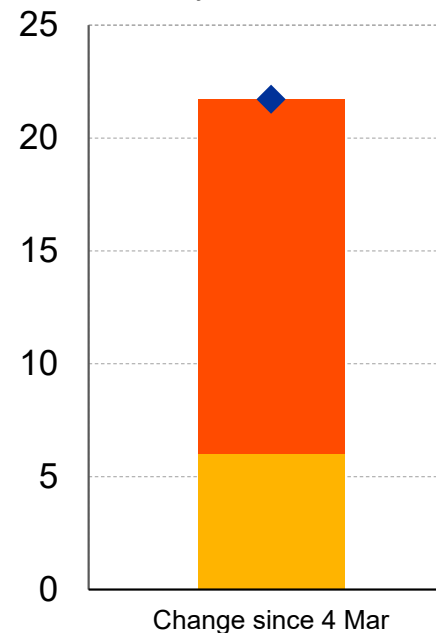


Sources: Bloomberg and ECB calculations.
Latest observation: 5 March 2025.

Decomposition of 10-year EA OIS into inflation compensation and real rates

(basis points)

■ Real rate component
■ Inflation component
◆ 10-year OIS

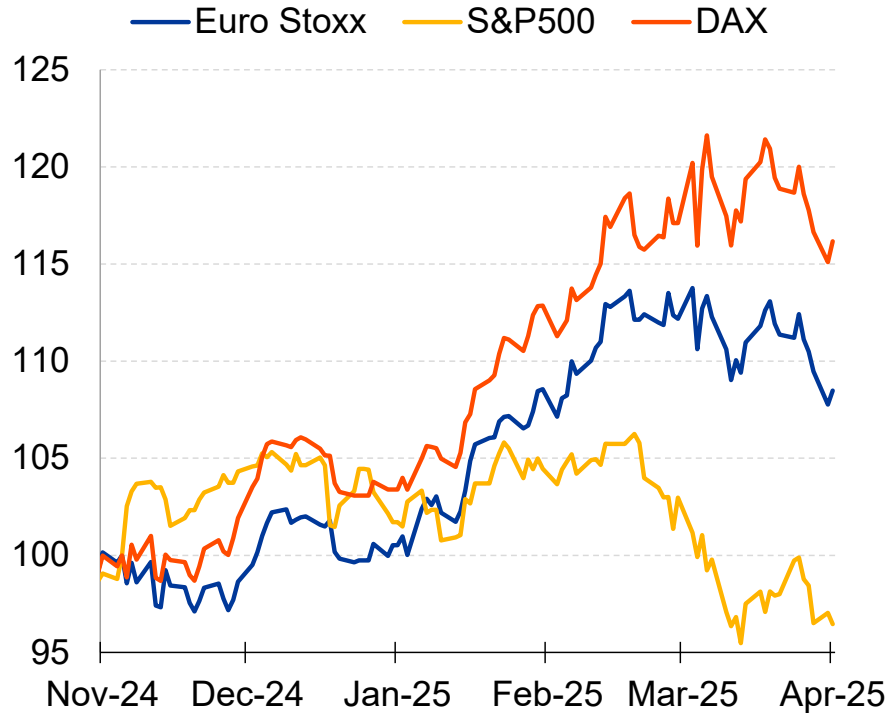


Sources: Bloomberg, LSEG and ECB calculations.
Latest observation: 31 March 2025

Euro area stock markets outperform US as economic prospects diverge

Global equity indices

(index: 5 November 2024 = 100)



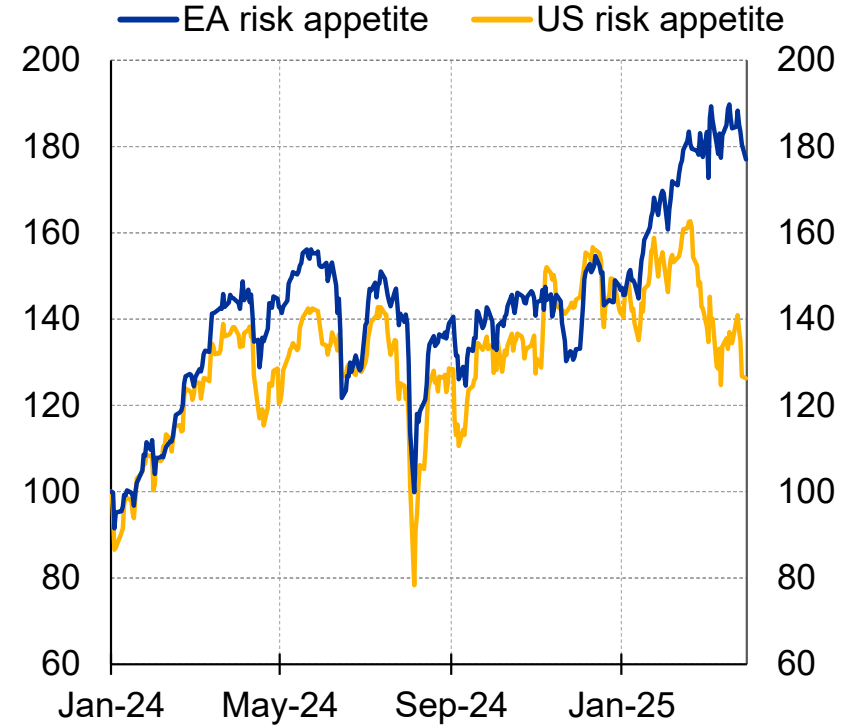
Source: Bloomberg.

Notes: The series are indexed to 100 on the 5 November 2024, the date of the US election.

Latest observation: 01 April 2025.

Risk appetite

(index 1 January 2024 = 100)



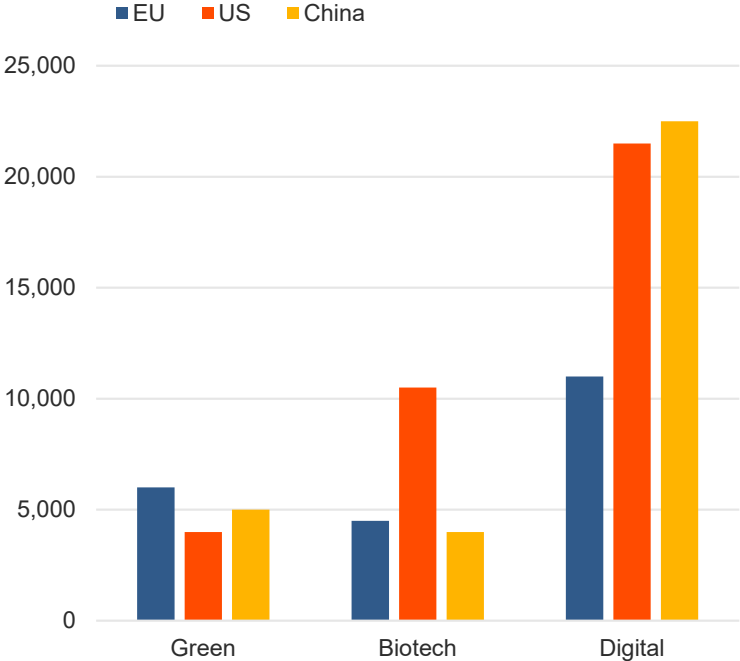
Sources: ICE, Moody's, LSEG, Bloomberg and ECB calculations.

Notes: EA and US risk appetite risk indicators constructed based on the methodology of Bauer, Bernanke and Milstein (2023). They represent the first principal component of several financial indicators, including equities, volatility, sovereign and corporate credit spreads, and exchange rates. Latest observation: 31 March 2025.

Green innovation and technological leadership can be an engine of growth

Patents by technology domain

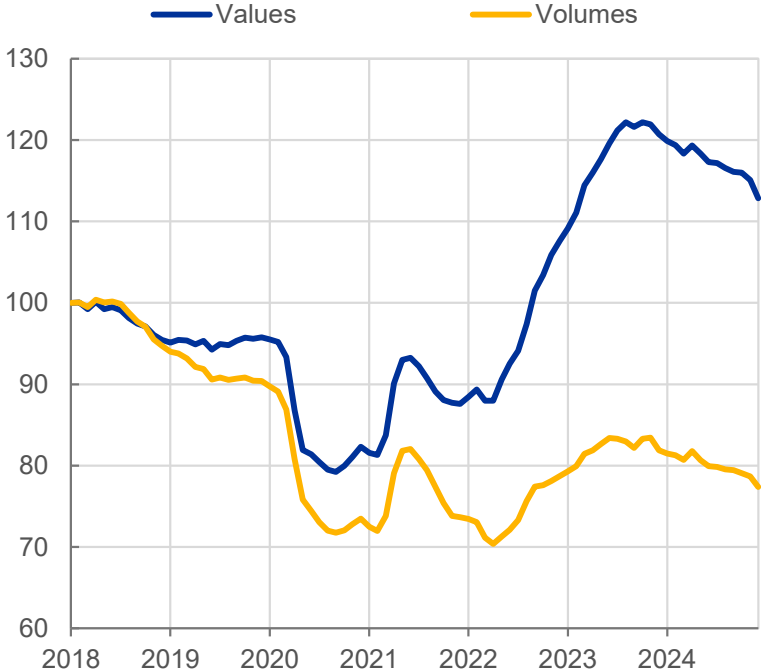
(number of patents issued in 2020)



Sources: EU Industrial R&D Investment Scoreboard and Patstat.

Euro area export of cars

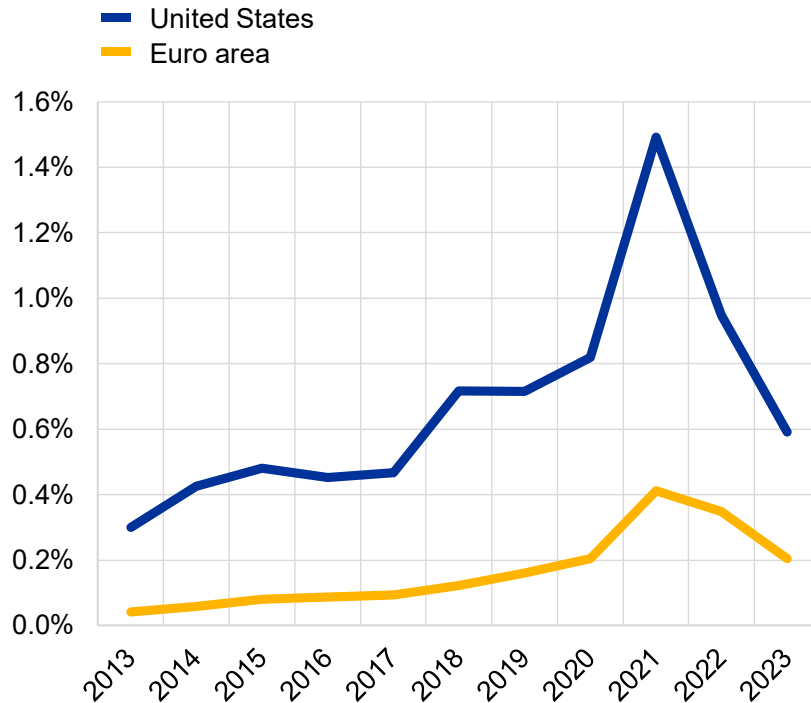
(12-month moving average; index: 2018 = 100)



Sources: Trade Data Monitor and ECB staff calculations. Latest observation: December 2024.

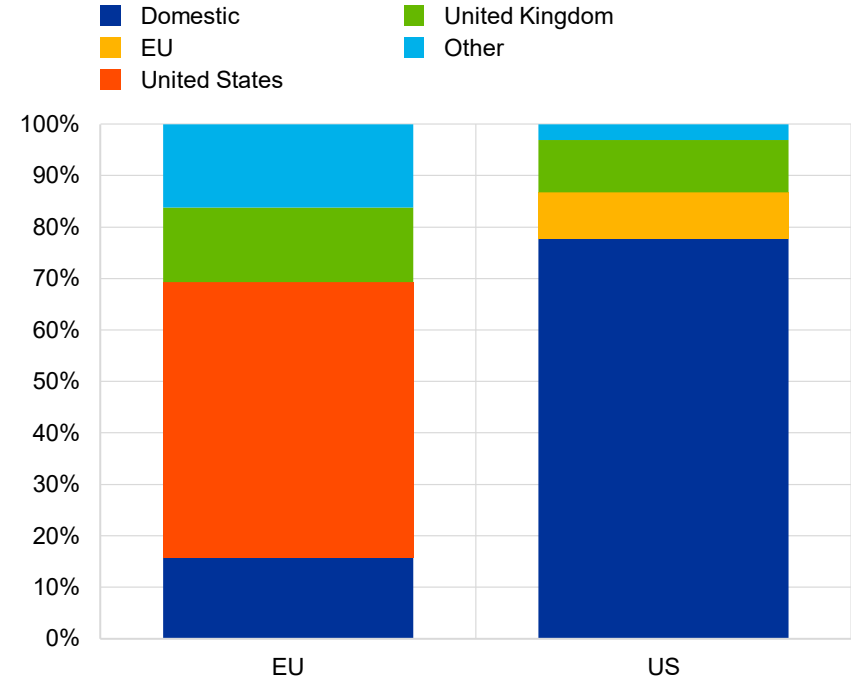
Europe needs higher venture capital investments, also from domestic investors

Venture capital investment (percent of nominal GDP)



Source: ECB calculations on Pitchbook data.

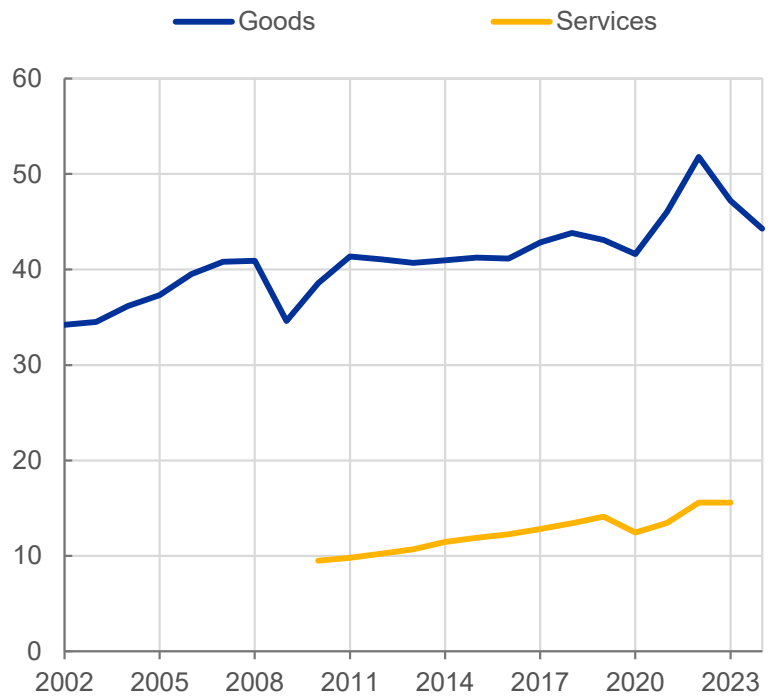
Venture capital investment in tech sector (percentage, 2023)



ECB calculations on Pitchbook data. Sectors considered as technology include 3D Printing; AdTech; AgTech; Artificial Intelligence & Machine Learning; AudioTech; Augmented Reality; B2B Payments; Big Data; CleanTech; Climate Tech; CloudTech & DevOps; Cryptocurrency/Blockchain; Cybersecurity; Digital Health; E-Commerce; EdTech; Esports; FemTech; FinTech; FoodTech; Gaming; HealthTech; HR Tech; InsurTech; Internet of Things; Legal Tech; Marketing Tech; Mobility Tech; Mortgage Tech; Nanotechnology; Real Estate Technology; Ridesharing; Robotics and Drones; SaaS; Supply Chain Tech; TMT; Virtual Reality; Industries: Information Technology; Keywords: digitalisation technology. Only completed deals considered.

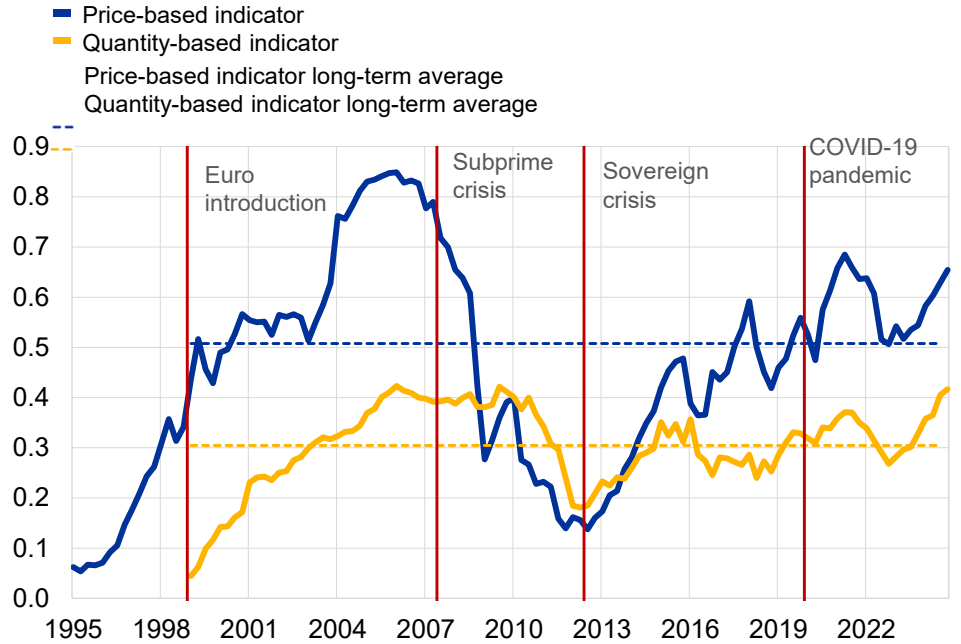
Single market offers large opportunities, especially in services and capital

Intra-EU trade in goods and services (annual, in percent of GDP)



Sources: Eurostat and ECB staff calculations.
 Notes: Intra-EU trade is obtained by summing intra-exports and imports as a ratio of GDP, measured in euros.
 Latest observation: 2024 for goods and 2023 for services.

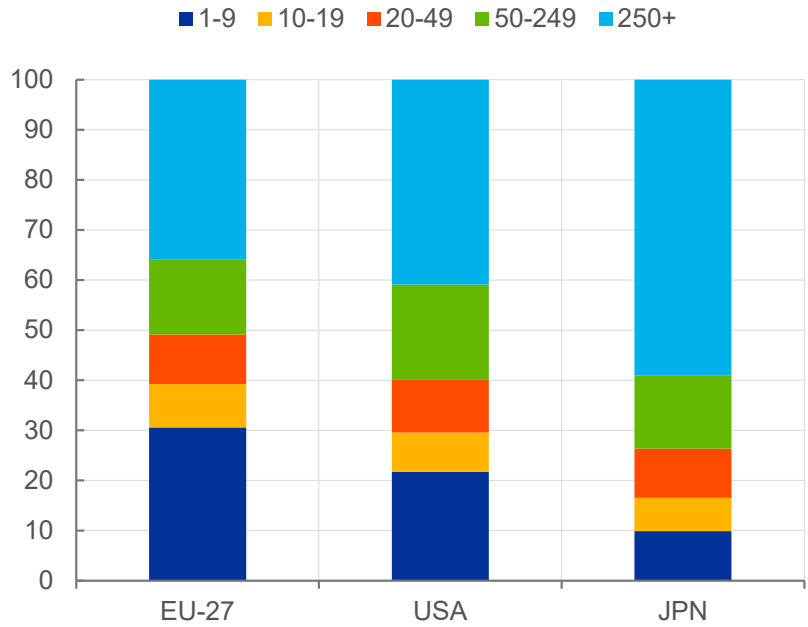
Price- and quantity-based indicators of financial integration in the euro area (index)



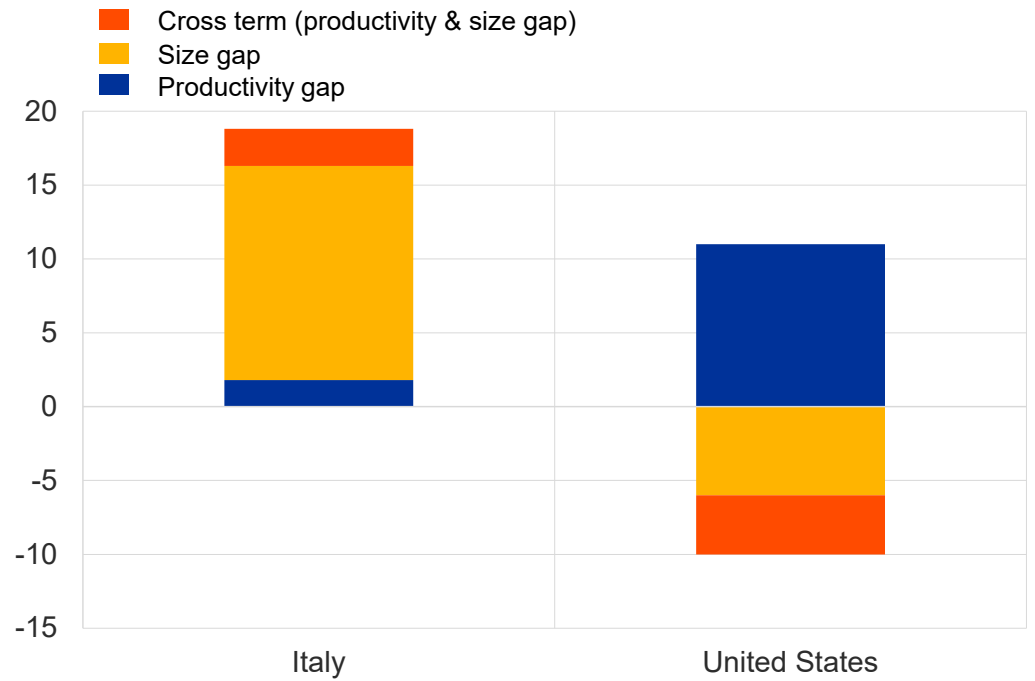
Source: ECB staff calculations.
 Notes: The price-based composite indicator aggregates ten indicators for money, bond, equity and retail banking markets; the quantity-based composite indicator aggregates five indicators for the same market segments except retail banking. The indicators are bounded between zero (full fragmentation) and one (full integration). Increases in the indicators signal greater financial integration.
 Latest observation: December 2024.

Scaling up firms could measurably increase productivity growth

Employment by enterprise size (percentage of total employment)



How much would overall manufacturing sector productivity rise if firms at the national frontier were as productive and large as firms at the global frontier?



Sources: OECD, Eurostat.

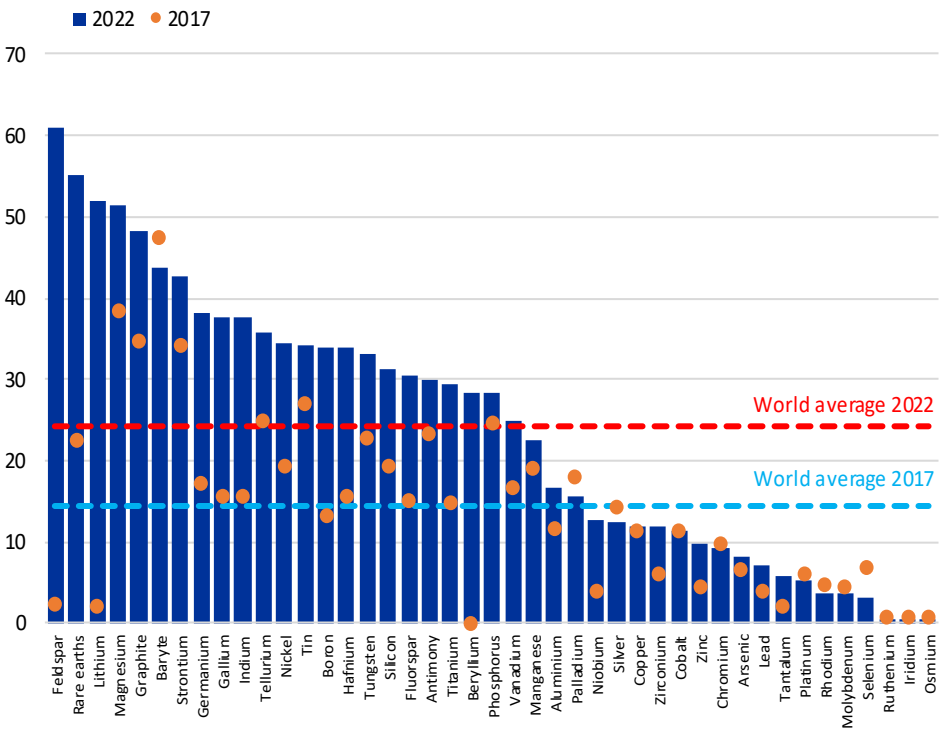
Notes: EU-27 refer to the number persons employed, while the USA and Japan refer to the number of employees.
Latest observation for EU is 2023, for the USA 2015 and for Japan 2016.

Source: Andrews, D., Criscuolo, C. and Gal, P. (2015), "Frontier Firms, Technology Diffusion and Public Policy: Micro Evidence from OECD Countries," OECD Productivity Working Papers. Notes: The productivity (size) gap shows how much higher manufacturing productivity would be relative to baseline if the national frontier firms (NF) were as productive (large) as the global frontier (GF) benchmark. The cross-term shows the impact on aggregate productivity of simultaneously closing the productivity and size gaps. The estimates are constructed by taking the difference between counterfactual labour productivity and actual labour productivity. The counterfactual gaps are estimated by replacing the labour productivity (employment) of the top 10 NF firms with the labour productivity (employment) of the 10th most globally productive firm in each two-digit sector. The industry estimates are aggregated using US employment weights. www.ecb.europa.eu

Firms are de-risking from China to escape weaponisation of critical raw materials

Critical raw materials subject to export restrictions

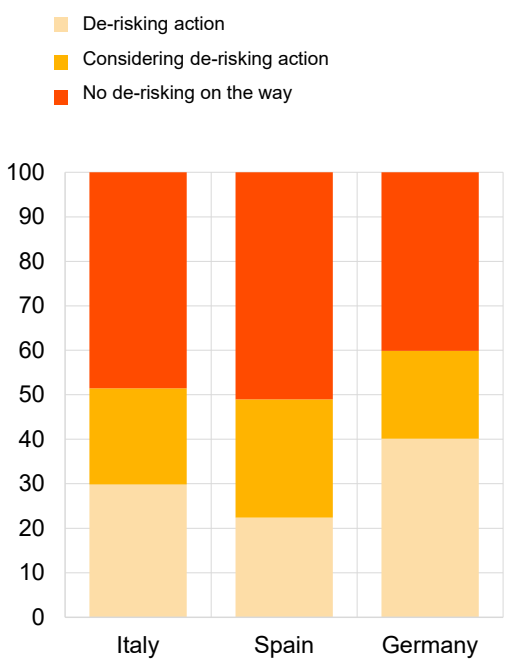
(% of exports)



Source: EBRD Transition Report 2023-24.

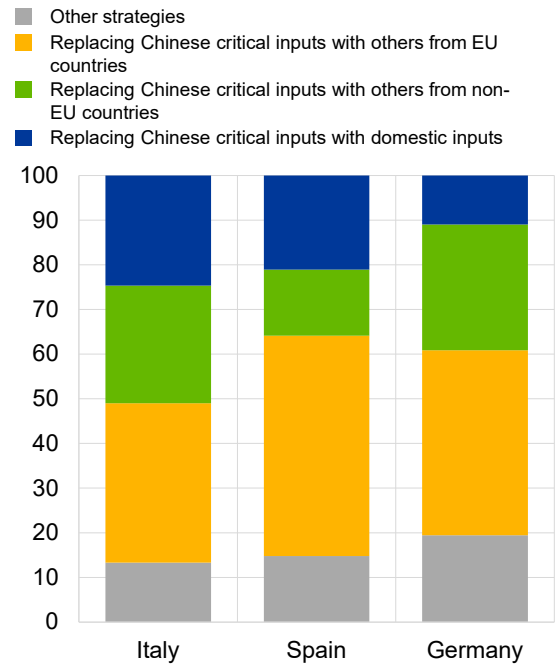
Actions taken to reduce exposure to China

(percentage of firms relying on critical Chinese inputs)



De-risking strategies implemented

(percentage of firms taking de-risking actions)



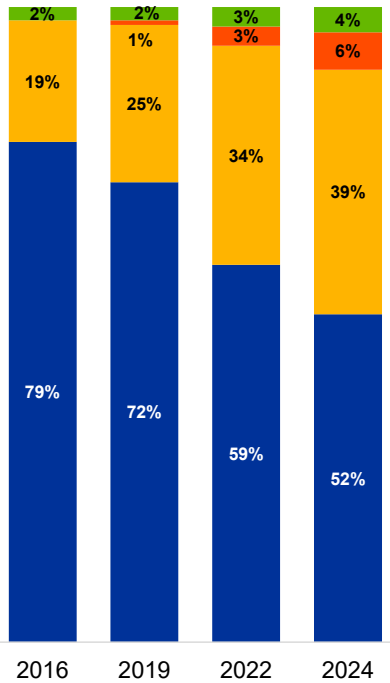
Sources: Banca d'Italia, Deutsche Bundesbank and Banco de España. Manufacturing firms only. See Balteanu et al. (2024) and Bottone et al. (2024).

With cash declining, payments in Europe are increasingly dominated by foreign providers

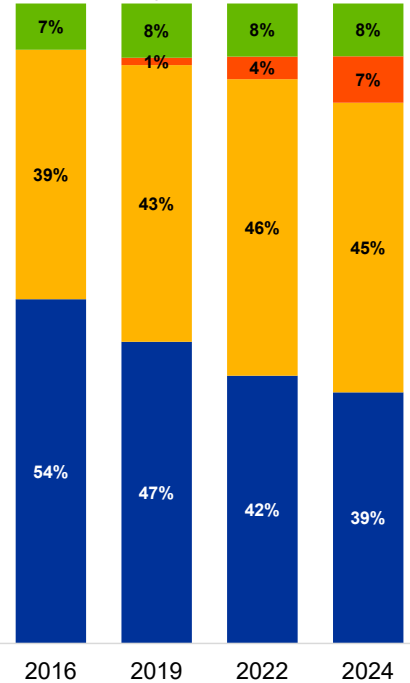
Share of payment instruments in the euro area (percent)

- Cash
- Cards
- Mobile app
- Other

a) Number of payments

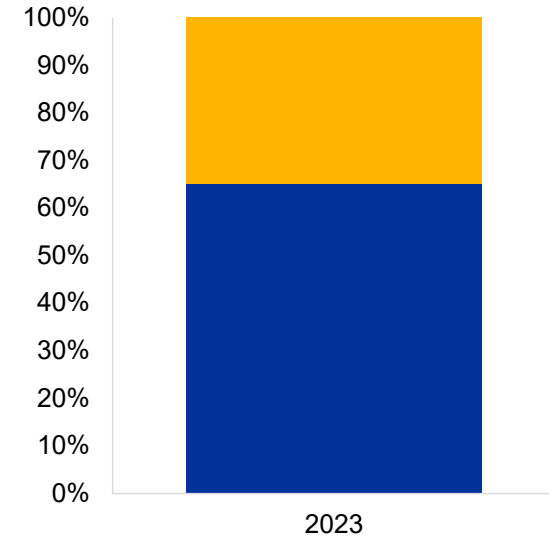


b) Value of payments



Card transactions in the euro area (percent)

- International card schemes
- Domestic schemes

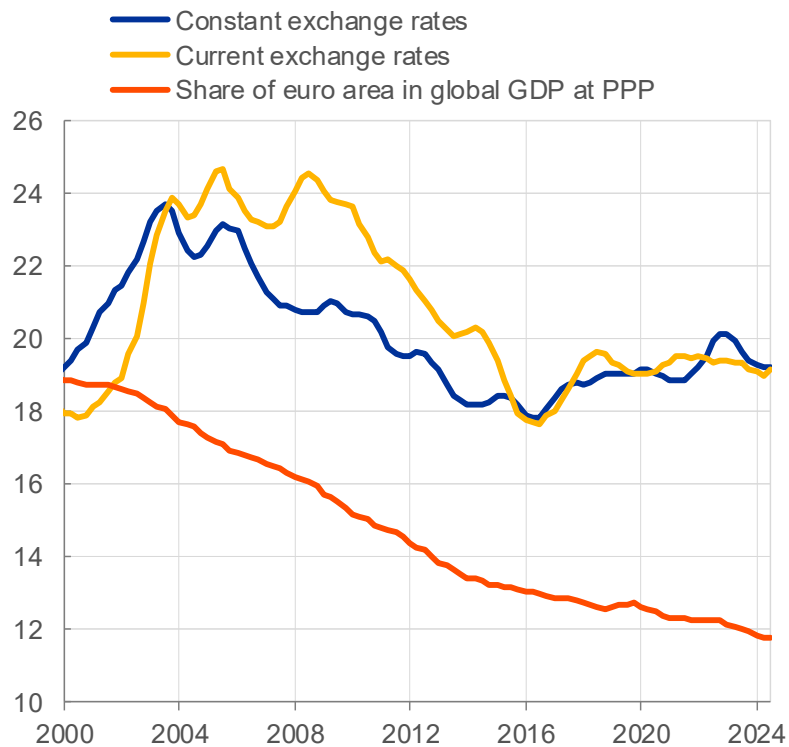


Source: ECB payment statistics.
Notes: Share of payment instruments used at the POS, euro area, 2016-24
Latest observation: 2024

Source: ECB payment statistics.
Latest observation: 2023

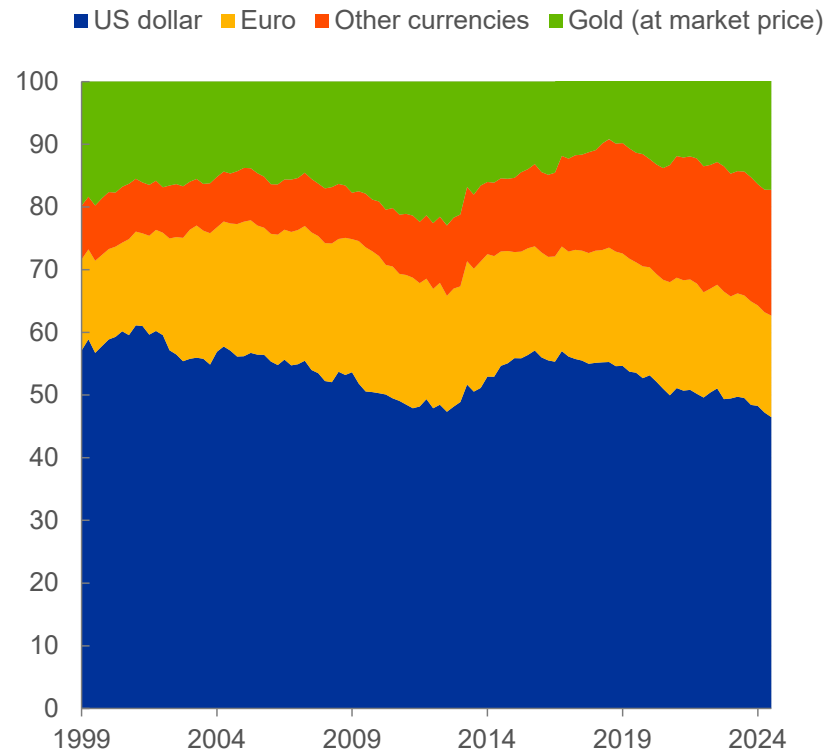
Composite index of international role of the euro and share of euro area in global GDP

(percent)



Shares of currencies and gold in global foreign reserves

(percent)



Sources: BIS, IMF, CLS Bank International, Ilzetzi, Reinhart and Rogoff (2019) and ECB calculations.

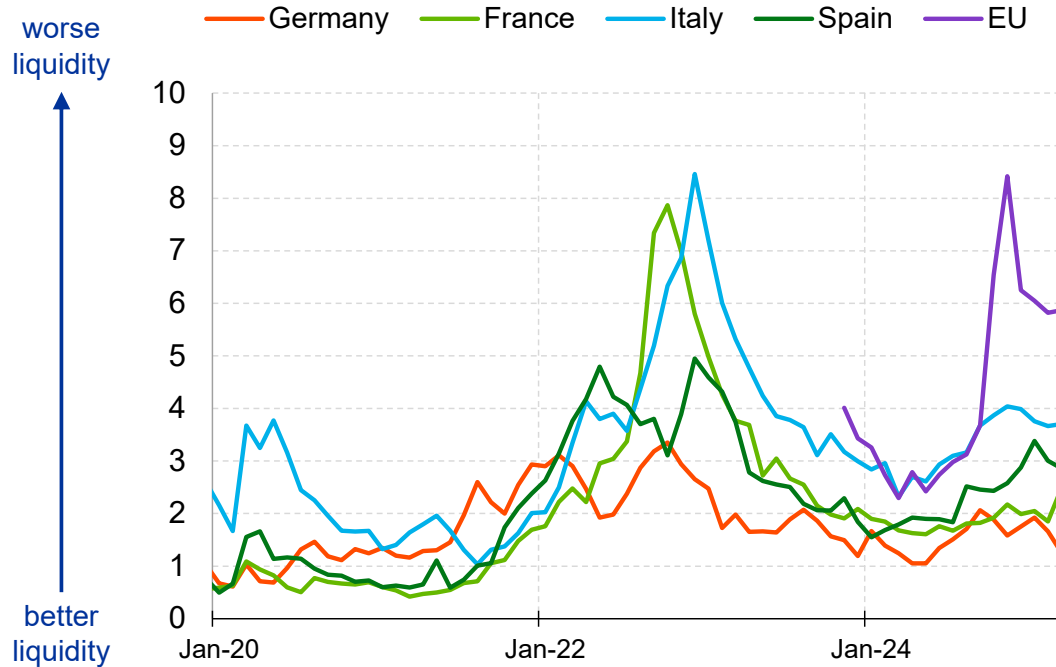
Notes: Arithmetic average of the shares of the euro at constant (current) exchange rates in stocks of international bonds, loans by banks outside the euro area to borrowers outside the euro area, deposits with banks outside the euro area from creditors outside the euro area, global foreign exchange settlements, global foreign exchange reserves and global exchange rate regimes. Since 2010, estimates of the share of the euro in global exchange rate regimes are based on IMF data; pre-2010 shares are estimated using data from Ilzetzi, E., Reinhart, C. and Rogoff, K. (2019). Latest observation: Q3 2024.

Source: Haver Analytics.

Latest observation: Q3 2024.

Liquidity in sovereign bond markets

(basis points)



Source: ECB calculations.

Notes: Spline spreads show the differences in interest rates or yields across maturities by using smooth curves. Higher values indicate worse liquidity.

Latest observation: 28 March 2025.

Thank you very much for your attention!