



EUROPEAN CENTRAL BANK

EUROSYSTEM

How to revive growth in Europe

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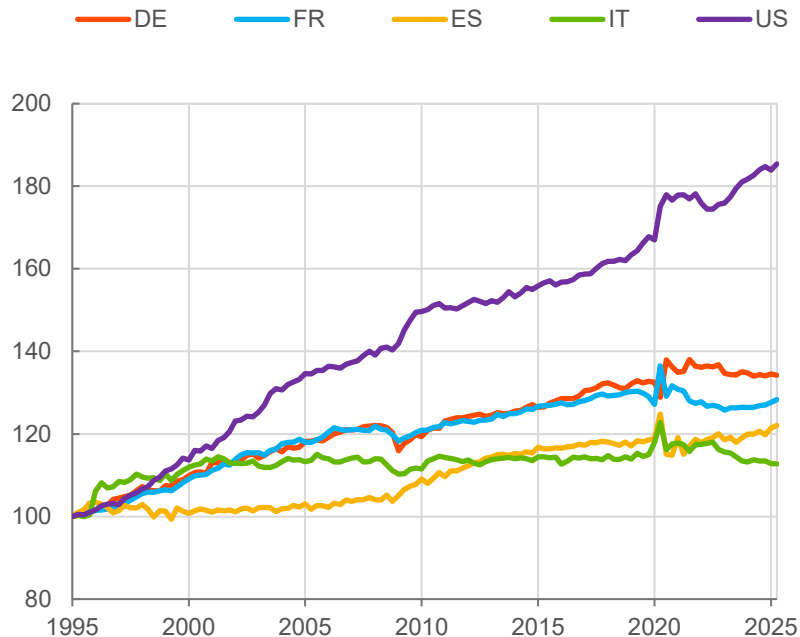


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Frankfurt, 20 October 2025

Euro area has fallen behind on productivity as it missed the digital revolution

Productivity per hour worked

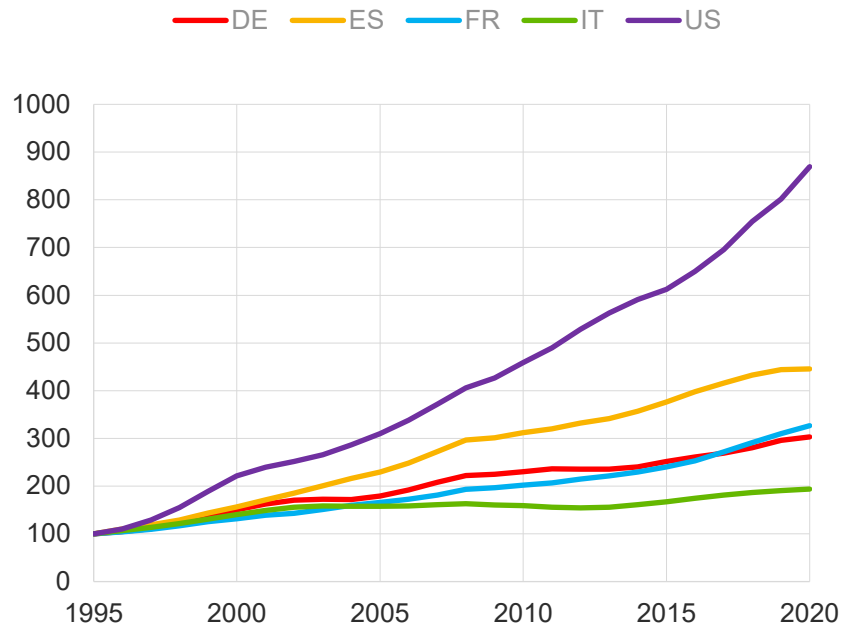
(index: 1995 = 100)



Sources: Eurostat and US Bureau of Labor Statistics.
Latest observation: 2025 Q2.

Real IT-related capital stock

(index: 1995 = 100)



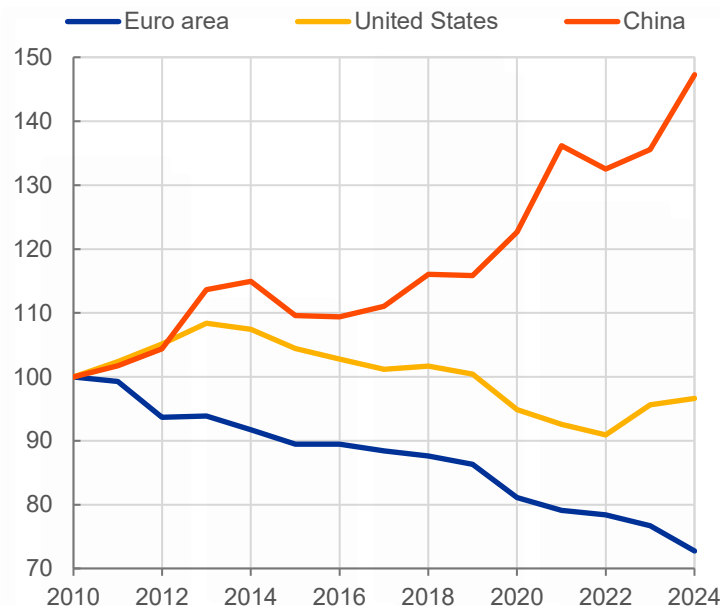
Source: EUKLEMS.

Note: IT-related capital stock is the sum of computing equipment and computer software & databases for all NACE industries. See Schivardi, F. and Schmitz, T. (2020), "The IT Revolution and Southern Europe's Two Lost Decades", Journal of the European Economic Association, Vol. 18(5), pp. 2441–2486.

Competitiveness is under threat with China as key competitor and elevated energy prices

Global export market shares of non-energy goods volumes

(index: 2010 = 100)



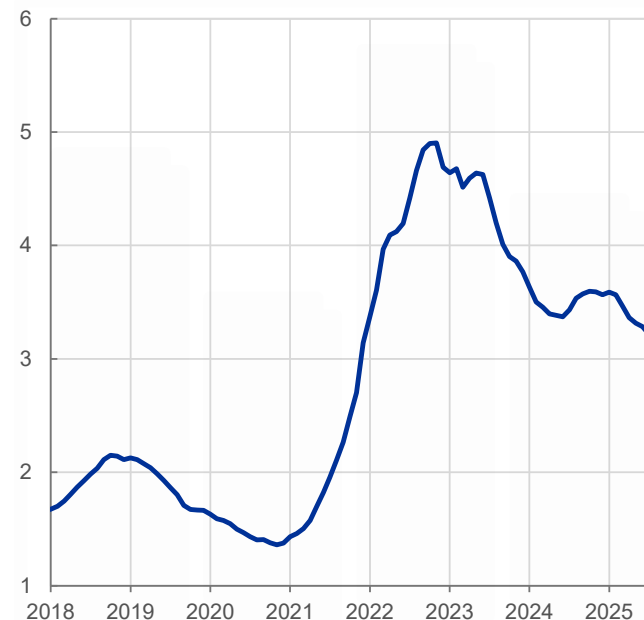
Sources: CPB, TDM and ECB staff calculations.

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.

Energy prices in the euro area relative to the United States

(ratio)

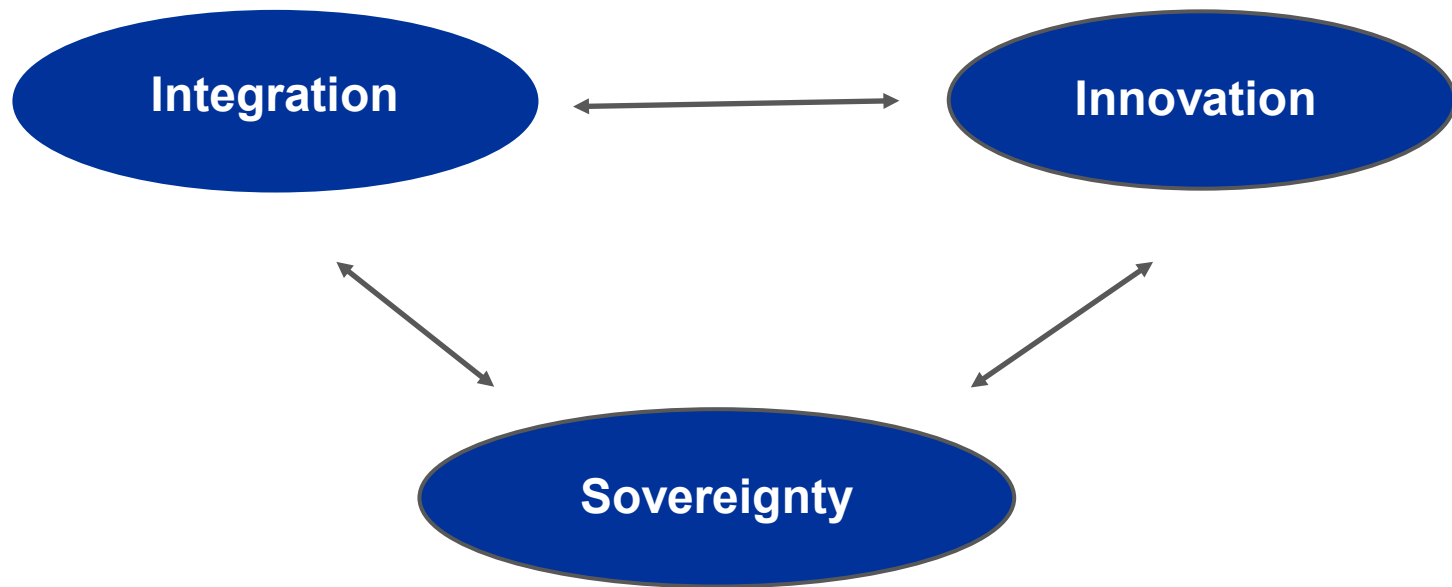


Sources: Trade data monitor, IMF, ADB-MRIO and ECB staff calculations.

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: August 2025.

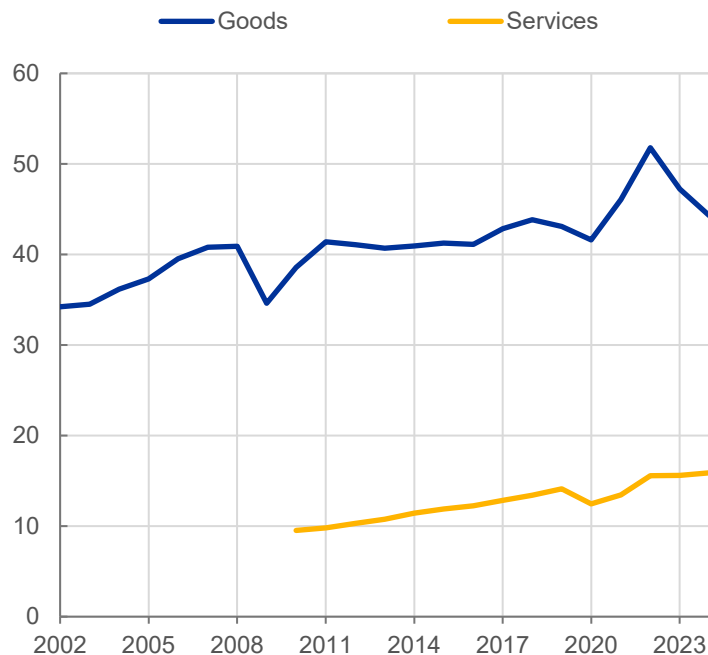
Key pillars of reviving growth in the euro area are closely intertwined



Single market offers large opportunities, but internal barriers are holding back growth

Intra-EU trade in goods and services

(annual, in percent of GDP)



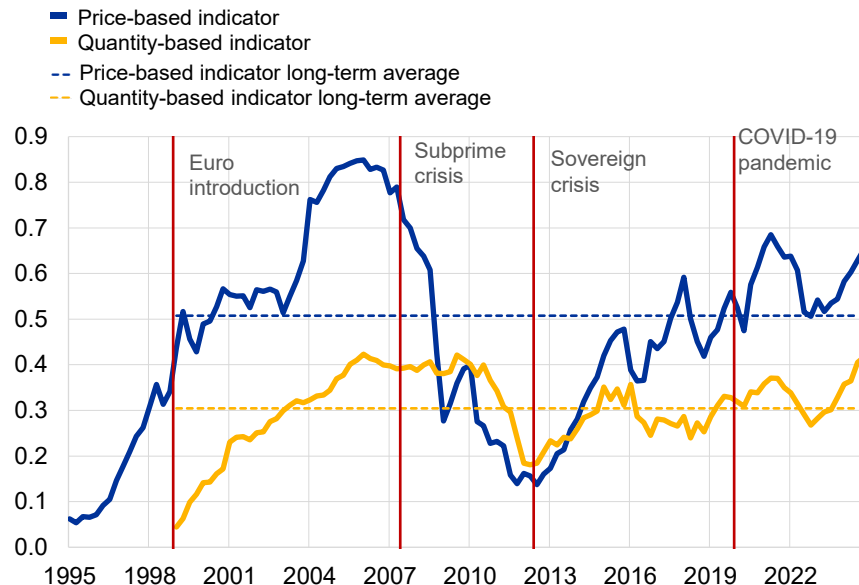
Sources: Eurostat and ECB staff calculations.

Notes: Intra-EU trade is obtained by summing intra-exports and imports as a ratio of GDP, measured in euros.

Latest observation: 2024.

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

(index)



Source: ECB staff calculations.

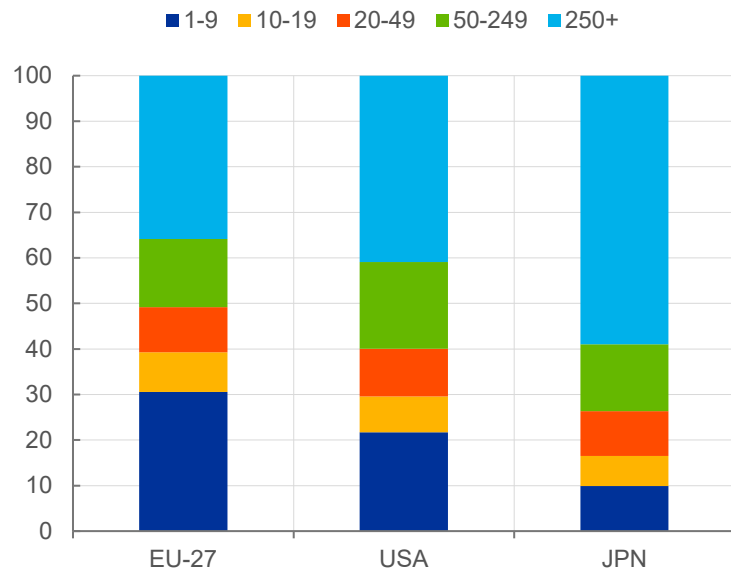
Notes: The price-based composite indicator aggregates ten indicators for money, bond, equity and retail banking markets; the quantity-based composite indicator aggregates five indicators for the same market segments except retail banking. The indicators are bounded between zero (full fragmentation) and 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)



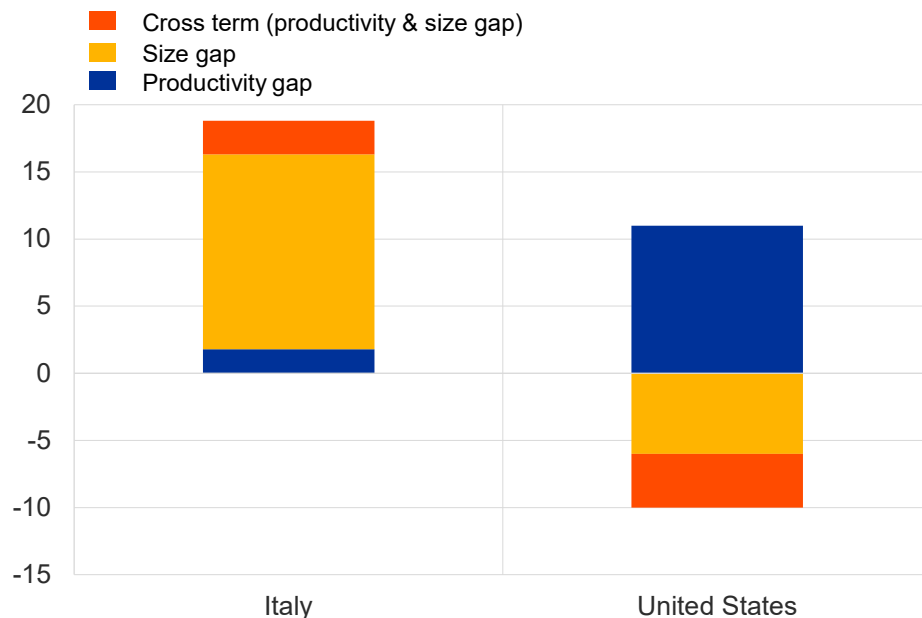
Sources: OECD, Eurostat.

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.

Rise in manufacturing sector productivity if firms were as productive and large as firms at the global frontier?

(percentages)



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.

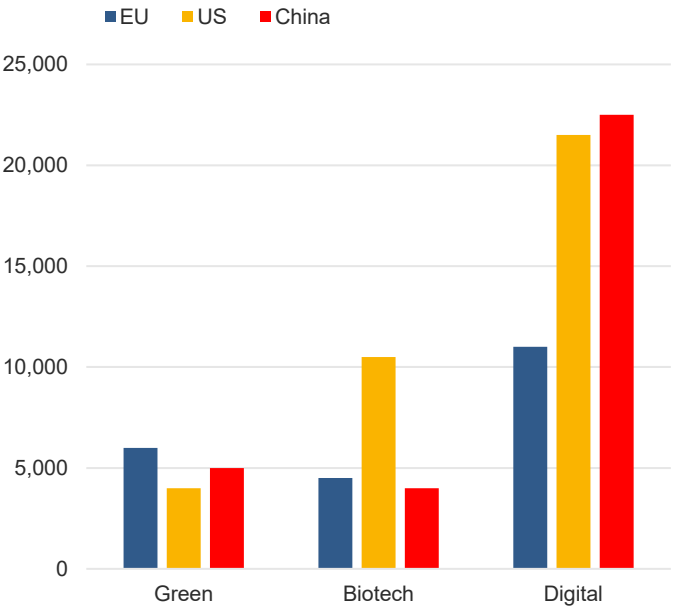
- *Idea:* **EU-wide legal form** for businesses that allows firms to easily scale up across the EU
- *Critical components:* Corporate law, insolvency law, tax law, labour law
- Special focus on **innovative companies** (start-ups/scale-ups)
- *Main advantages:*
 - Reduction of regulatory and administrative burdens
 - Increased mobility of labour and capital
 - Higher legal certainty

→ **Greater scalability of firms**

Innovation is essential to foster potential growth, which requires risk capital

Patents by technology domain

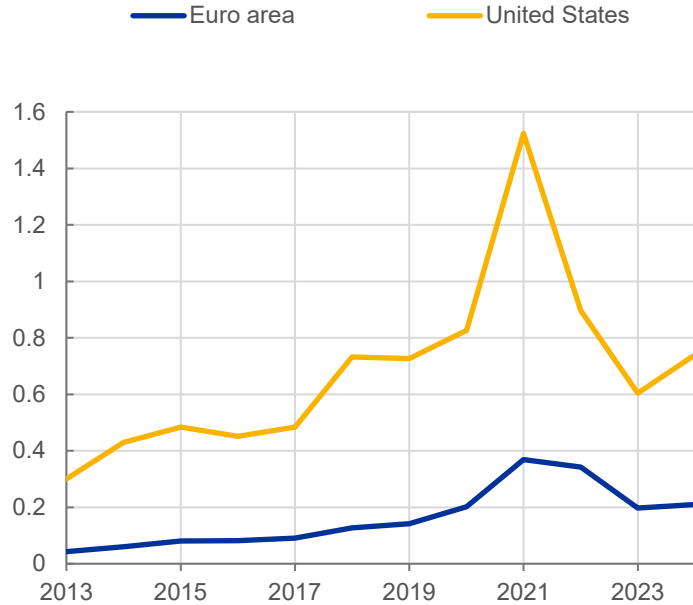
(number of patents issued in 2020)



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

Venture capital investment

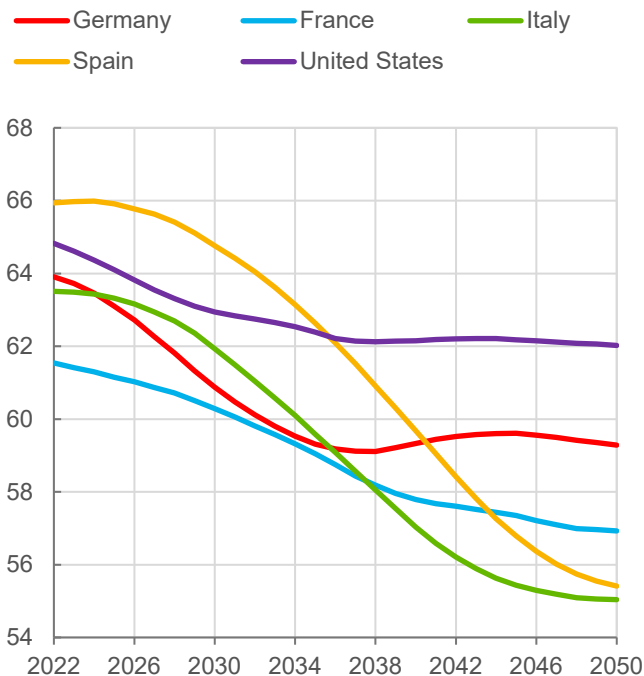
(percent of nominal GDP)



Sources: ECB calculations on Pitchbook data.
Latest observation: 2024.

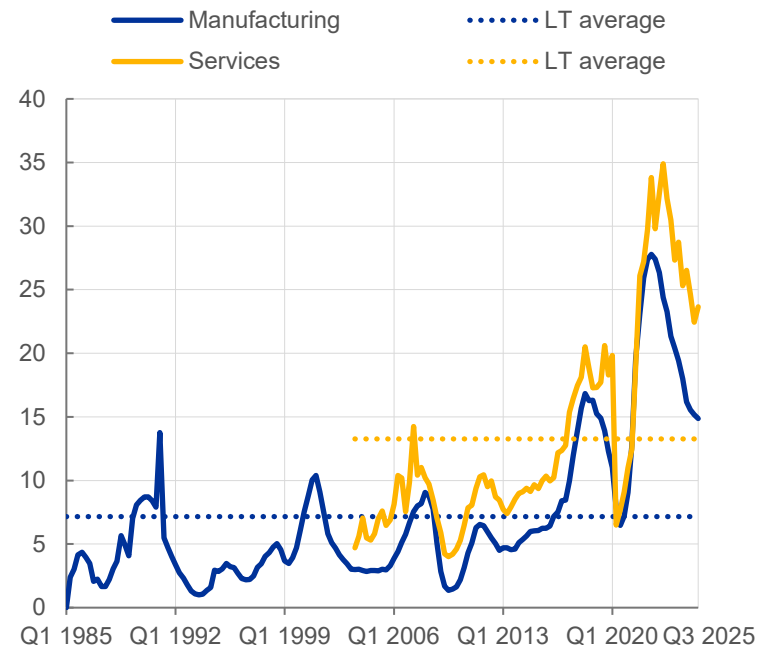
Ageing populations constrain production & innovation, increasing the need for immigration

Working-age population projections (as % of total population)



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

Labour as factor limiting business (survey replies, percentage balances)

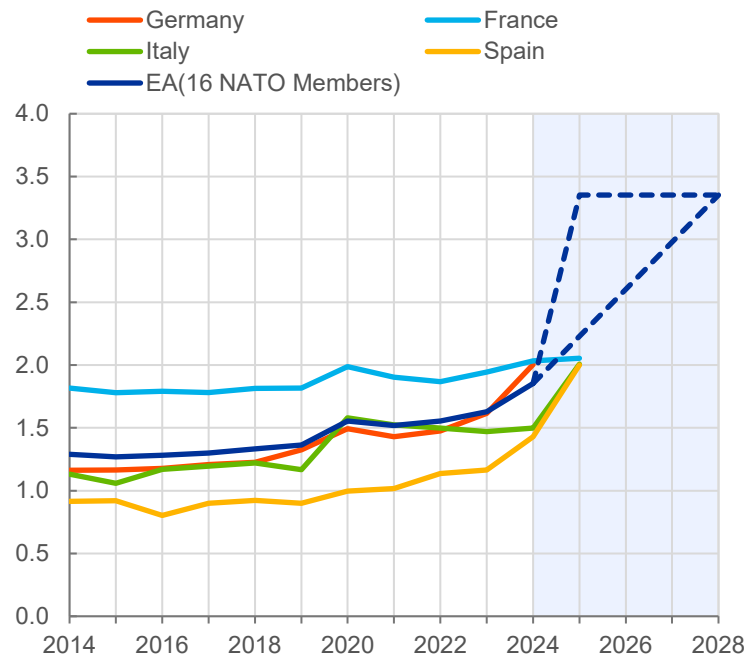


Sources: European Commission and ECB staff calculations.
Notes: The long-term (LT) average for the manufacturing sector is calculated on data between 1985 Q1 and 2025 Q3. The LT average for the services sector is calculated on data between 2003 Q3 and 2025 Q3.
Latest observation: 2025 Q3.

European sovereignty requires a step-up in defence and technology

Defence spending

(share of GDP)



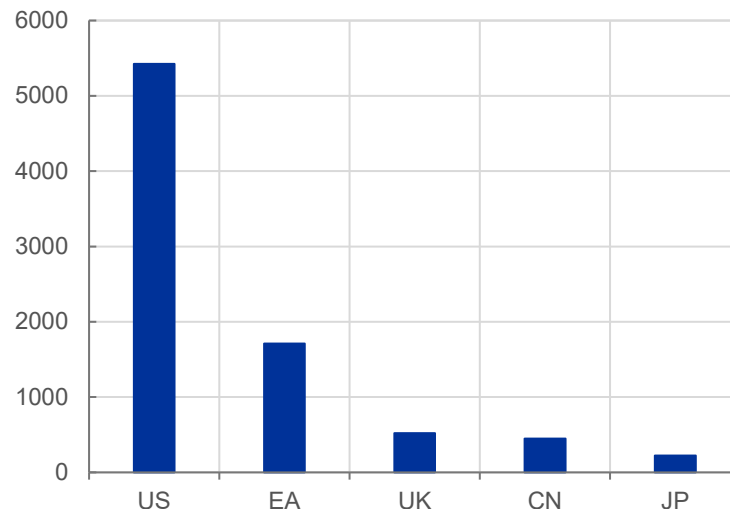
Source: NATO.

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.

Latest observation: preliminary 2025 data for France, Italy and Spain, 2024 for the rest.

Data centres

(number)

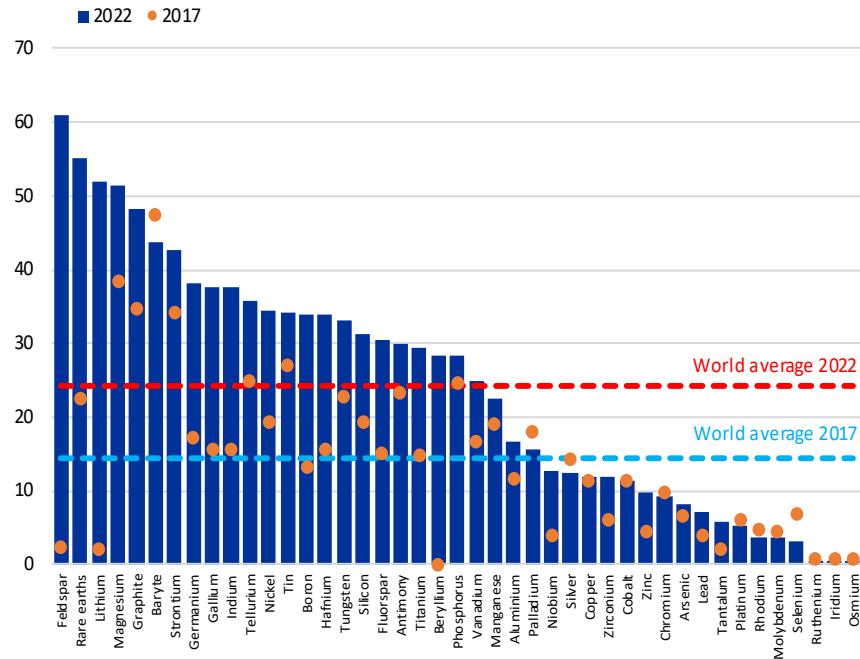


Source: Statista.

Notes: Euro area includes data centres in DE, FR, NL, IT, ES, BE, AU, IE, FN.
Latest observation: March 2025.

Sovereignty requires de-risking of supply chains and payment systems

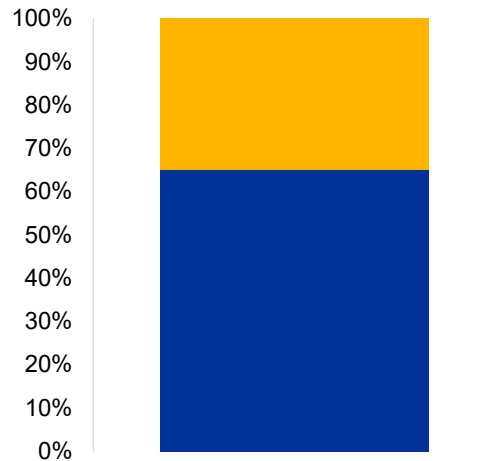
Critical raw materials subject to export restrictions (% of exports)



Source: EBRD Transition Report 2023-24.

Card transactions in the euro area (percent)

■ International card schemes
■ Domestic schemes

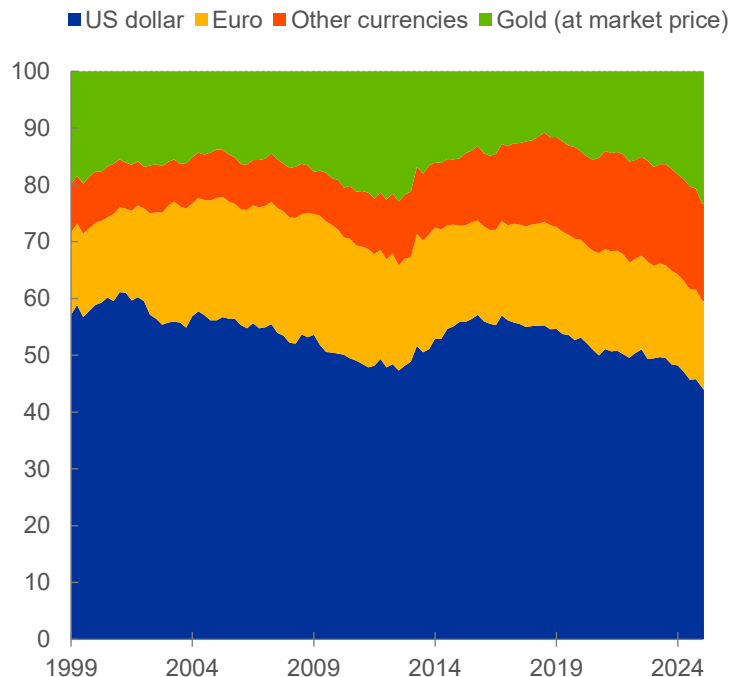


Source: ECB payment statistics.
Latest observation: 2024.

The euro's international role remains strong and should be strengthened further

Shares of currencies and gold in global foreign reserves

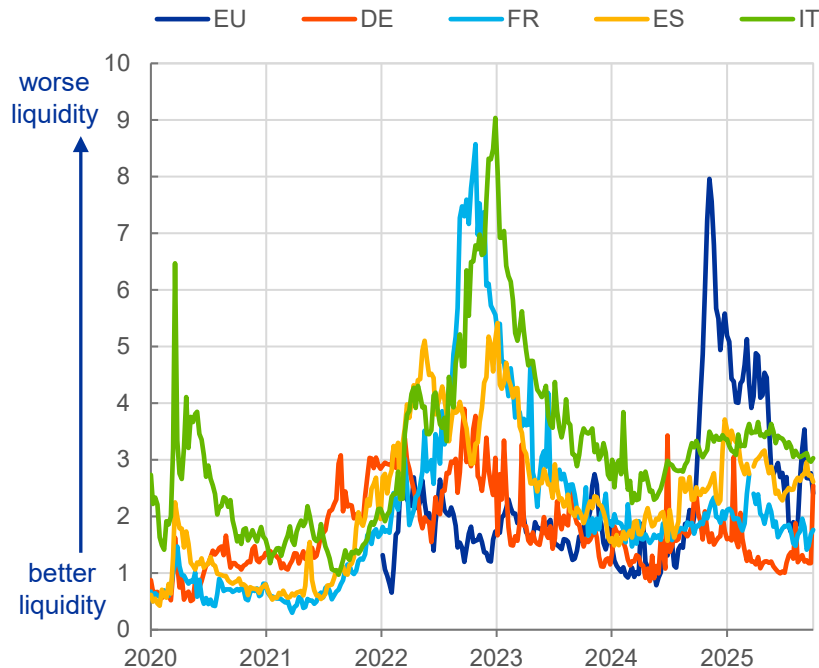
(percent)



Source: Haver Analytics.
Latest observation: Q2 2025.

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. Data is calculated as weekly average.

Latest observation: 5 October 2025.

Thank you very much for your attention!