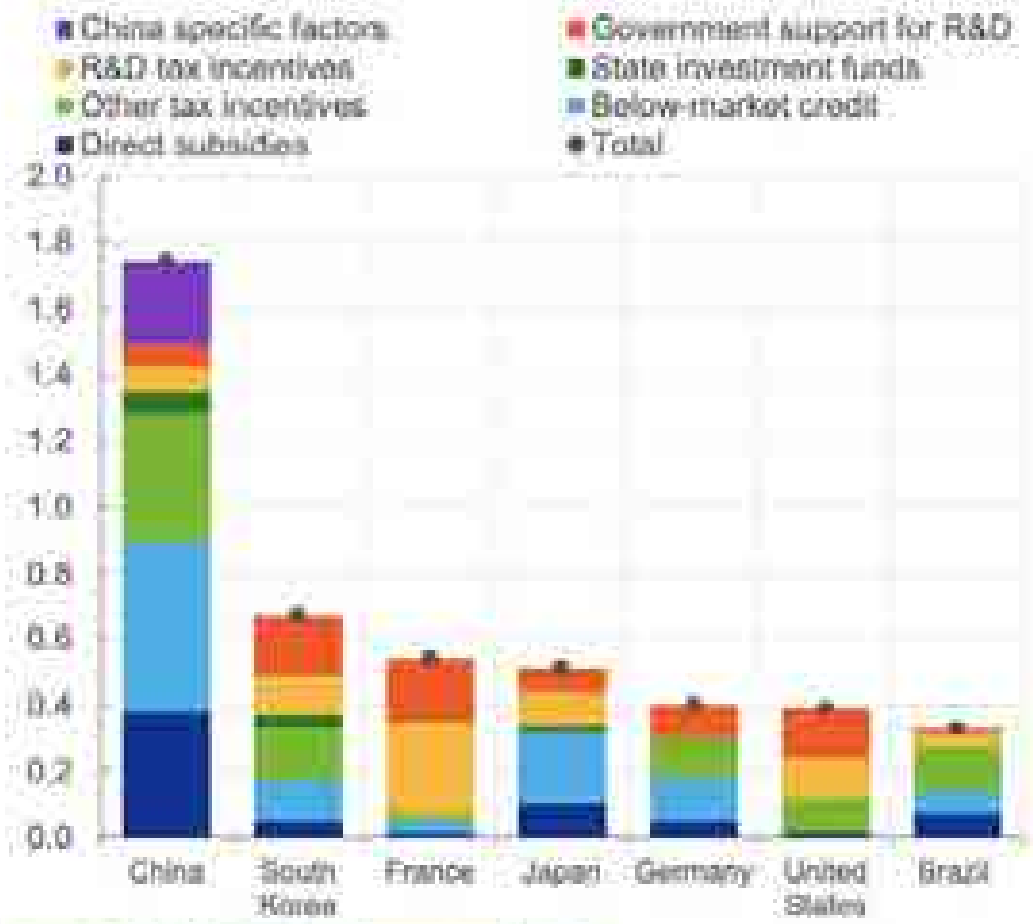
Manufactured Goods Surpluses

UN Comtrade Data with SITC Categories, % Global GDP

Industrial policy share in GDP

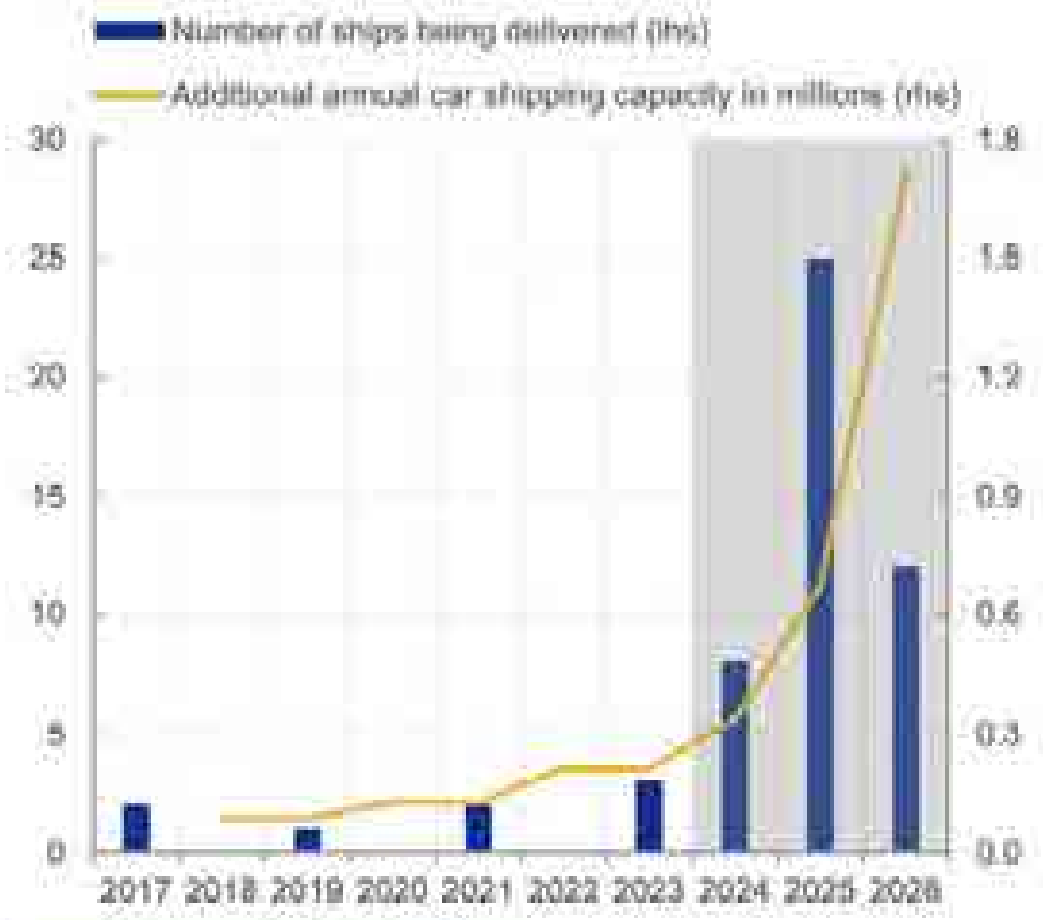
(percentage share and percentage point contributions)



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

China's car shipping capacity plans

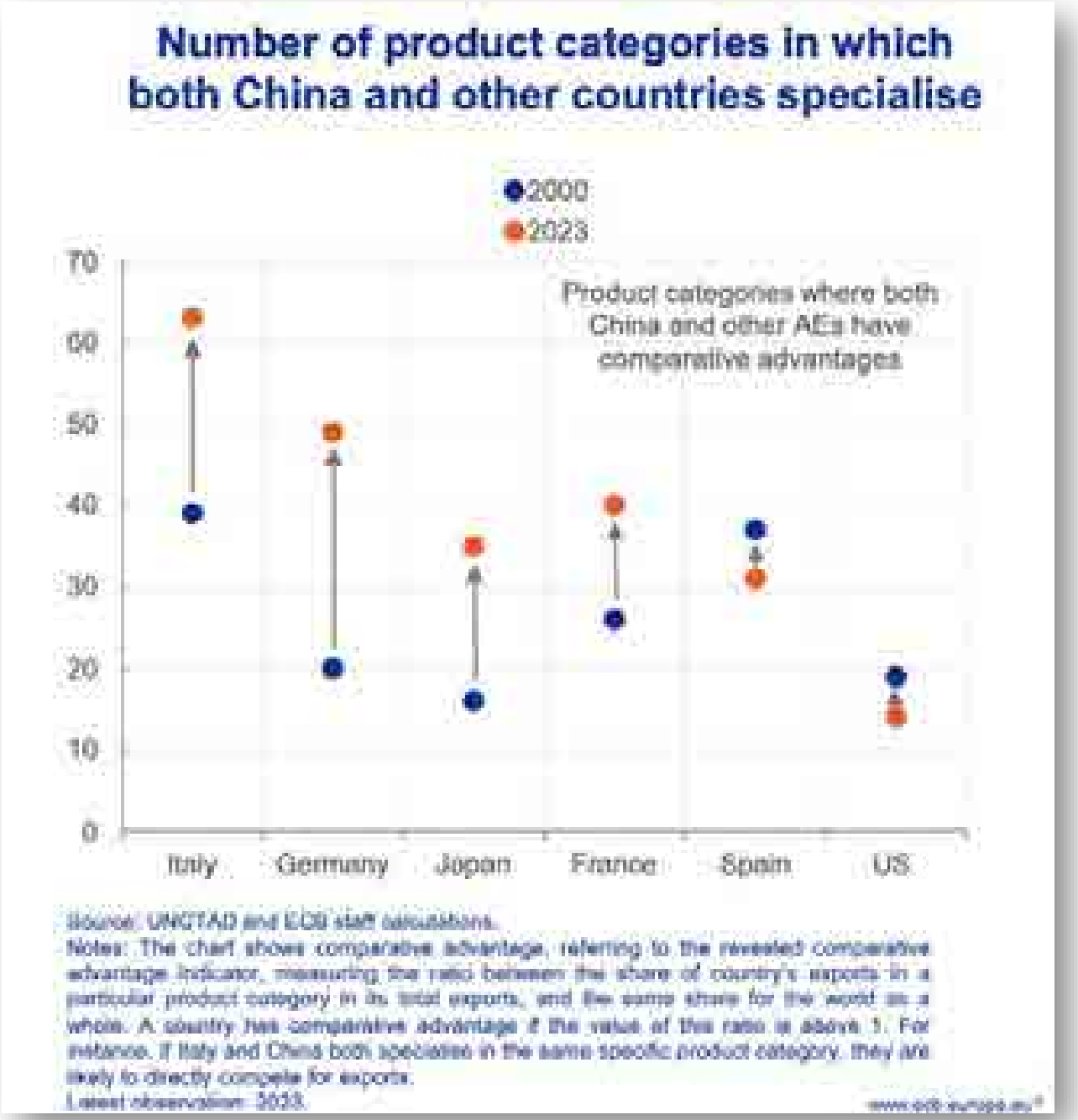
(lhs: number of ships, rhs: millions of cars)



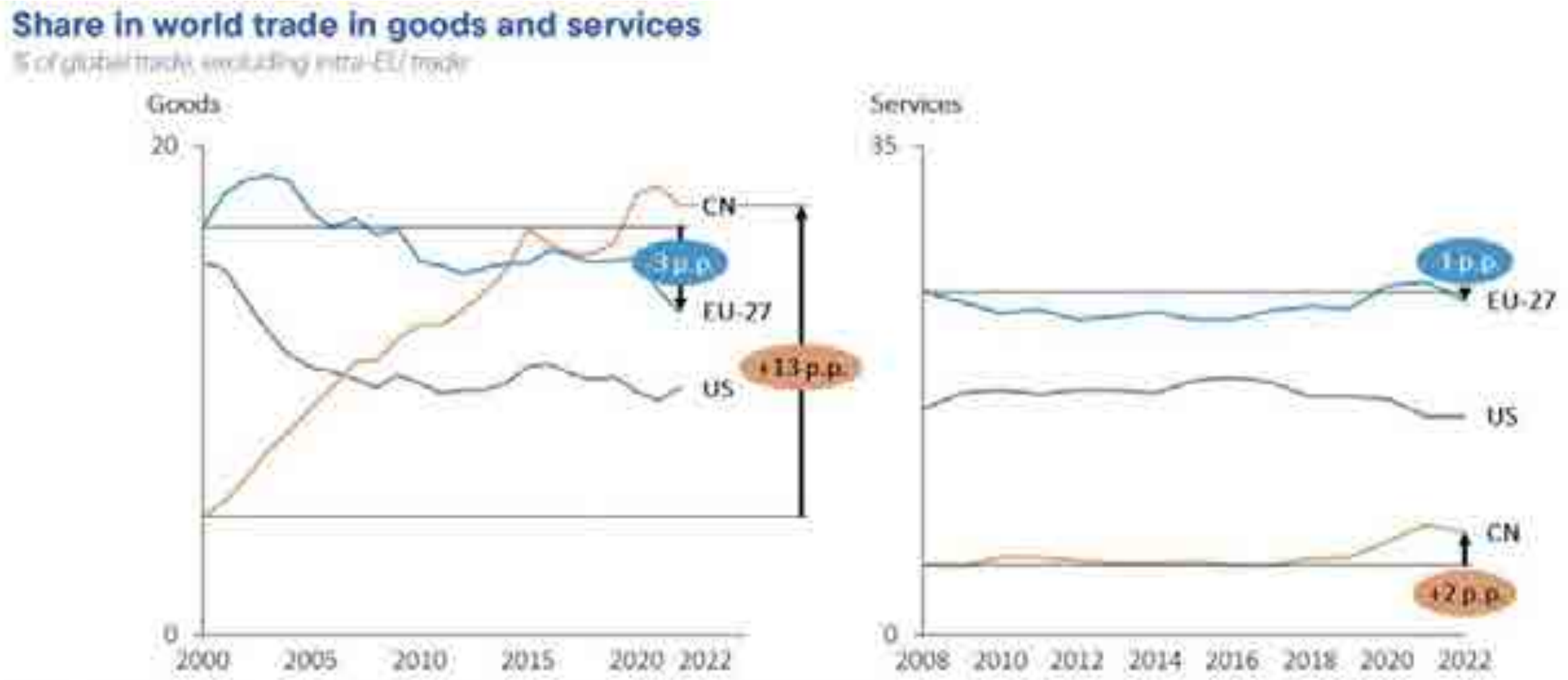
Sources: Rhodium and ECB staff calculations.
Notes: Based on the assumption that each ship can carry 7000 electric vehicles and that it can make 6 trips per year. Shaded area refers to car-carrying ships not yet delivered. It is assumed that ships can be used for shipping of cars a year after being delivered.

Fonte: BCE, Ottobre 2024

China has «invaded» tens of European product categories



China: an export giant in goods, a dwarf in services

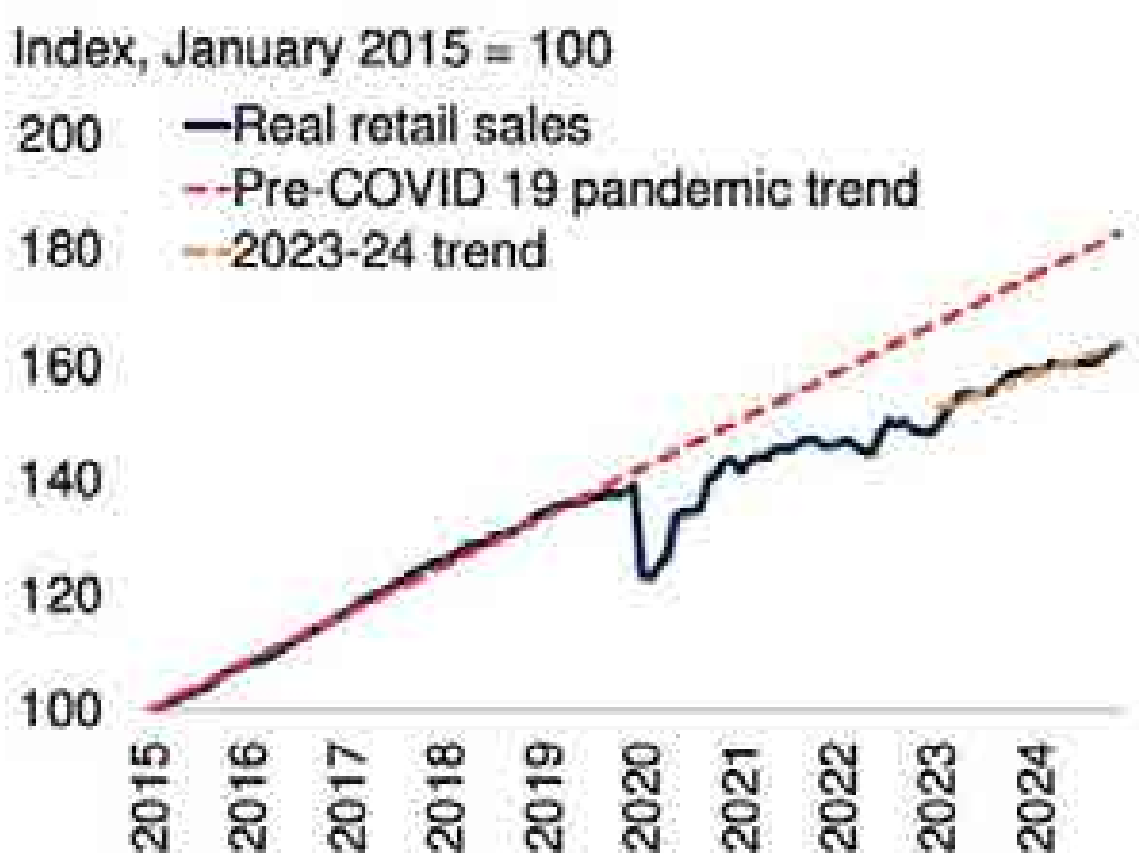


Note: The data refers to goods trade (lhs) and services trade (rhs), excluding intra-EU. The global total is the net of intra-EU trade.

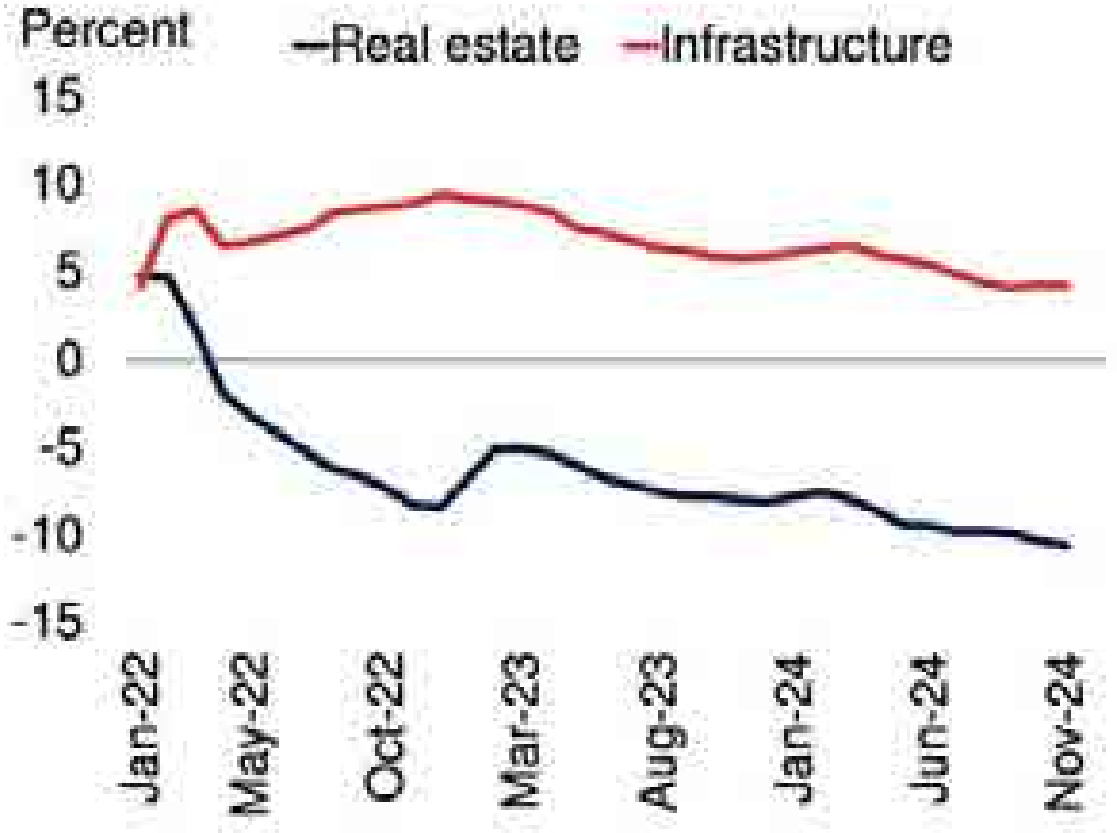
Source: European Commission (JRC); Based on WTO

Manufacturing labour cost in China are now 3x-4x higher than India, Vietnam, Philippines, Thailand, Malaysia

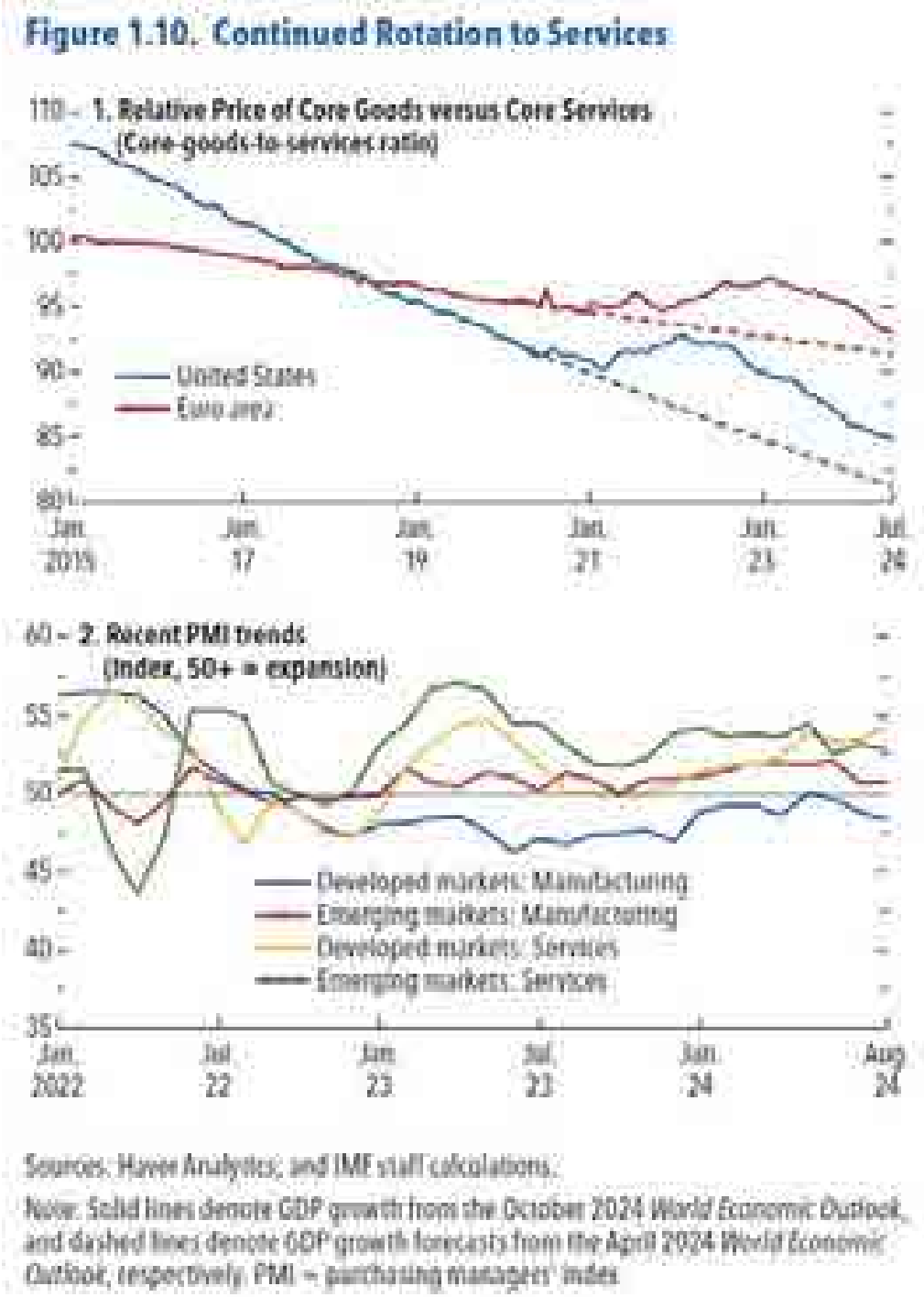
D. Real retail sales in China



E. Fixed-asset investment growth in China



Source: World Bank - Global Economic Prospects, January 2025



The global shift to services

(while the West slides away from manufacturing of goods…)

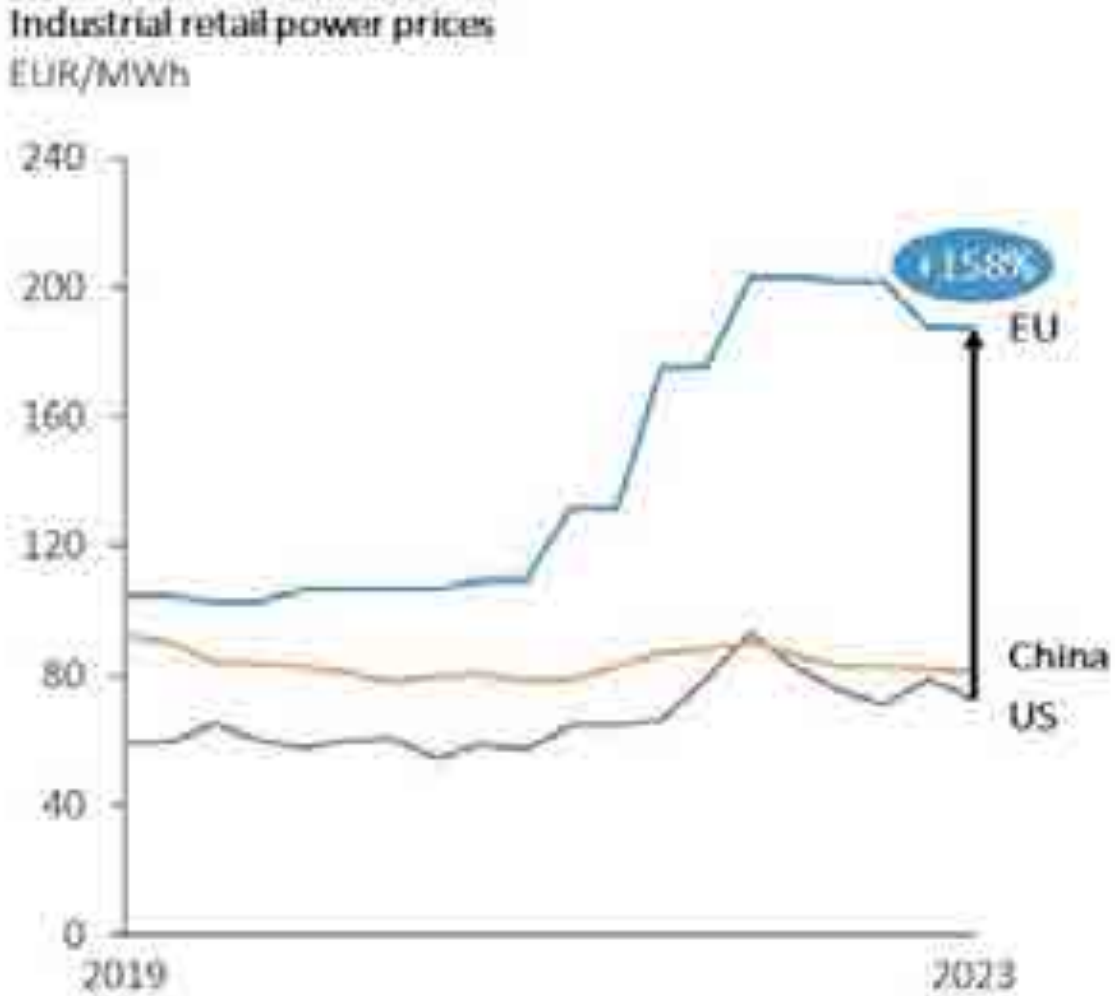
Behind stable growth figures, a global shift from goods to services consumption is underway. This rebalancing is tending to boost activity in the services sector in advanced and emerging markets but is dampening manufacturing. Manufacturing production is also increasingly shifting toward emerging market economies — in particular, China and India—as advanced economies lose competitiveness (Figure 1.10, panel 2).

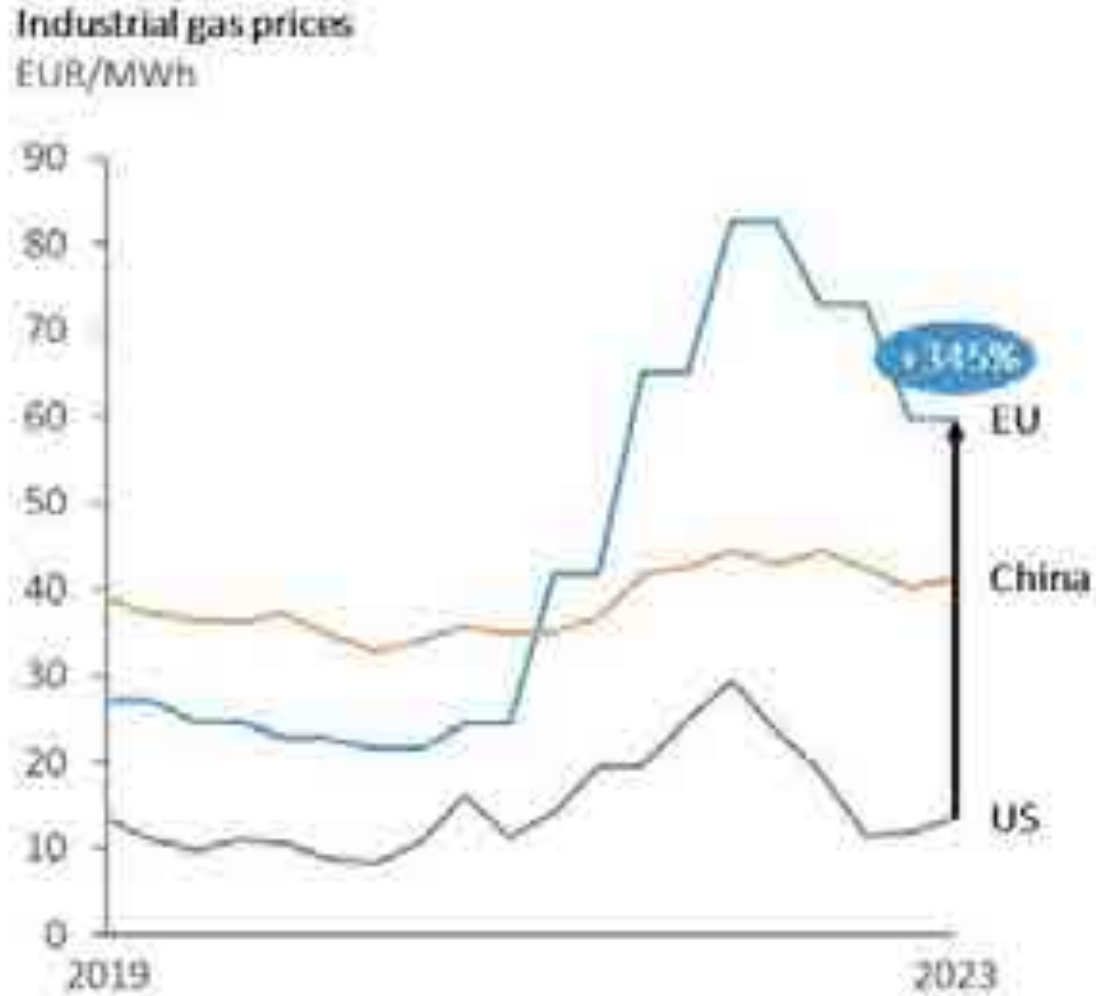
Whatever Europe Takes

:

- Energy
- Innovation
- Defense & Security

Gas and retail price gap for industry





Source: European Commission, 2024. Based on Eurostat (EU), EIA (US) and CEIC (China), 2024.

Electricity wholesale and retail prices across Member States for industry

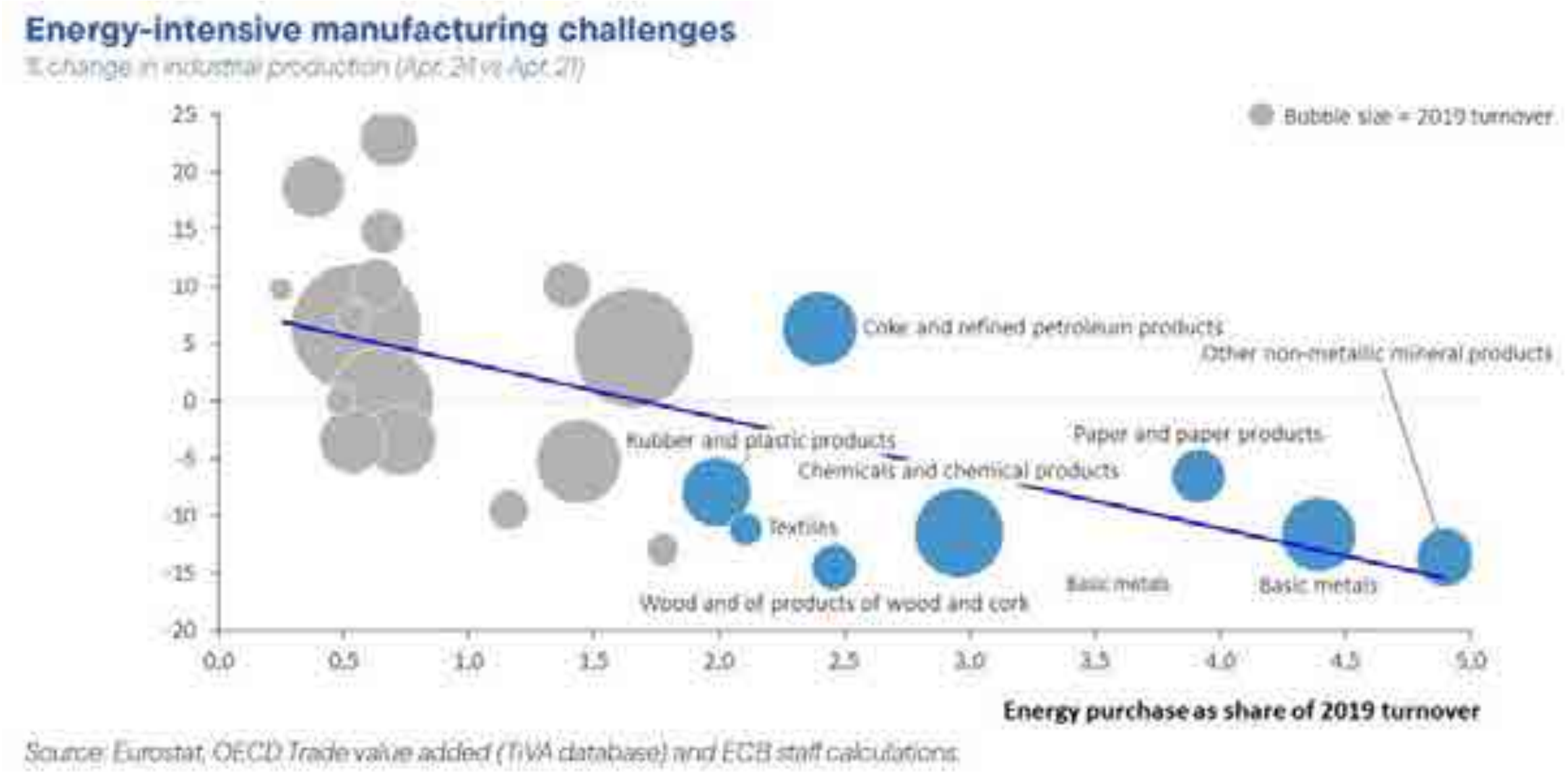
EUR/MWh, 2023

Wholesale electricity prices

Retail electricity prices

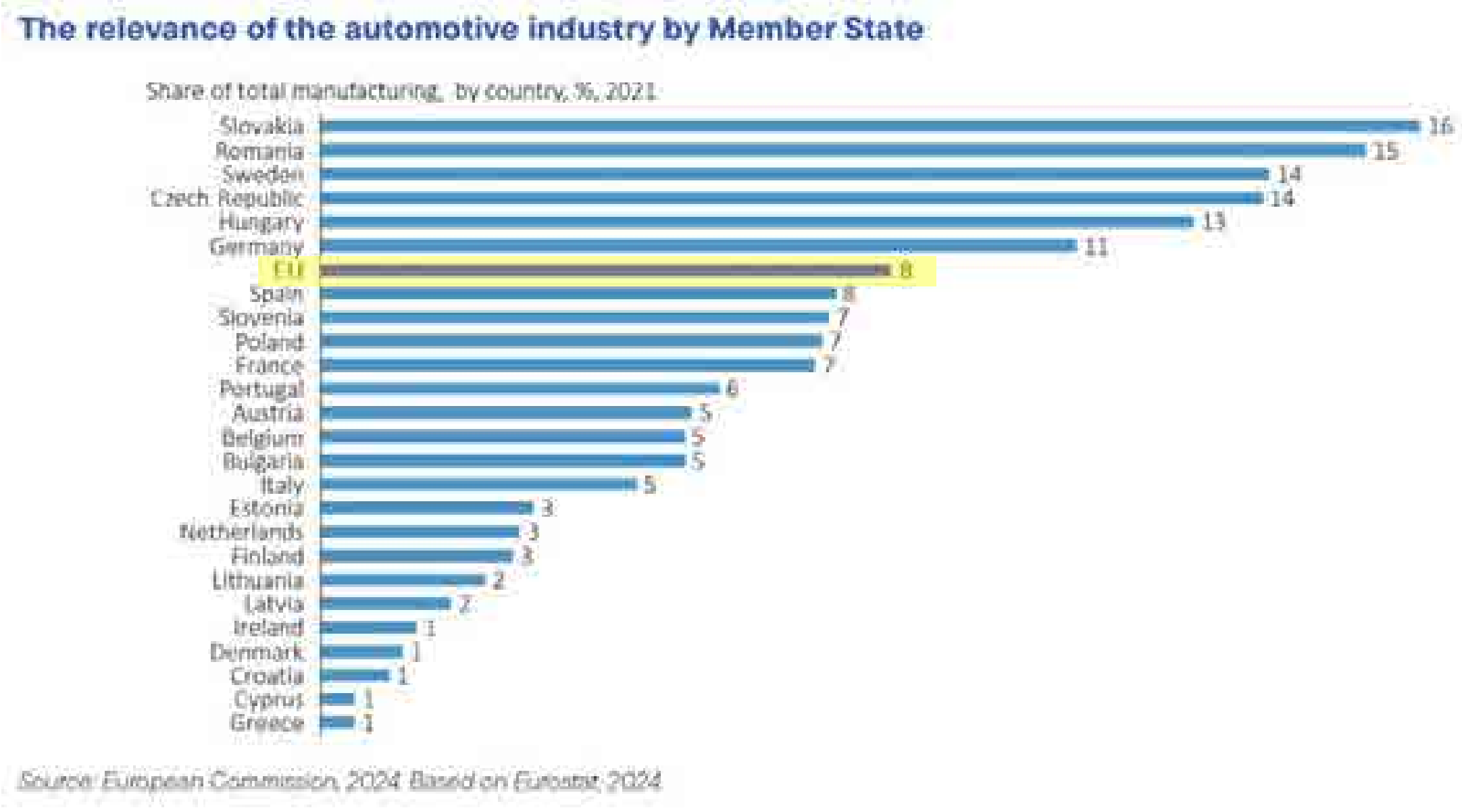
Source: European Commission, 2024. Based on Eurostat, S&P Global, and ENTSO-E, 2024

Energy costs explain the crisis in energy-intensive manufacturing sectors

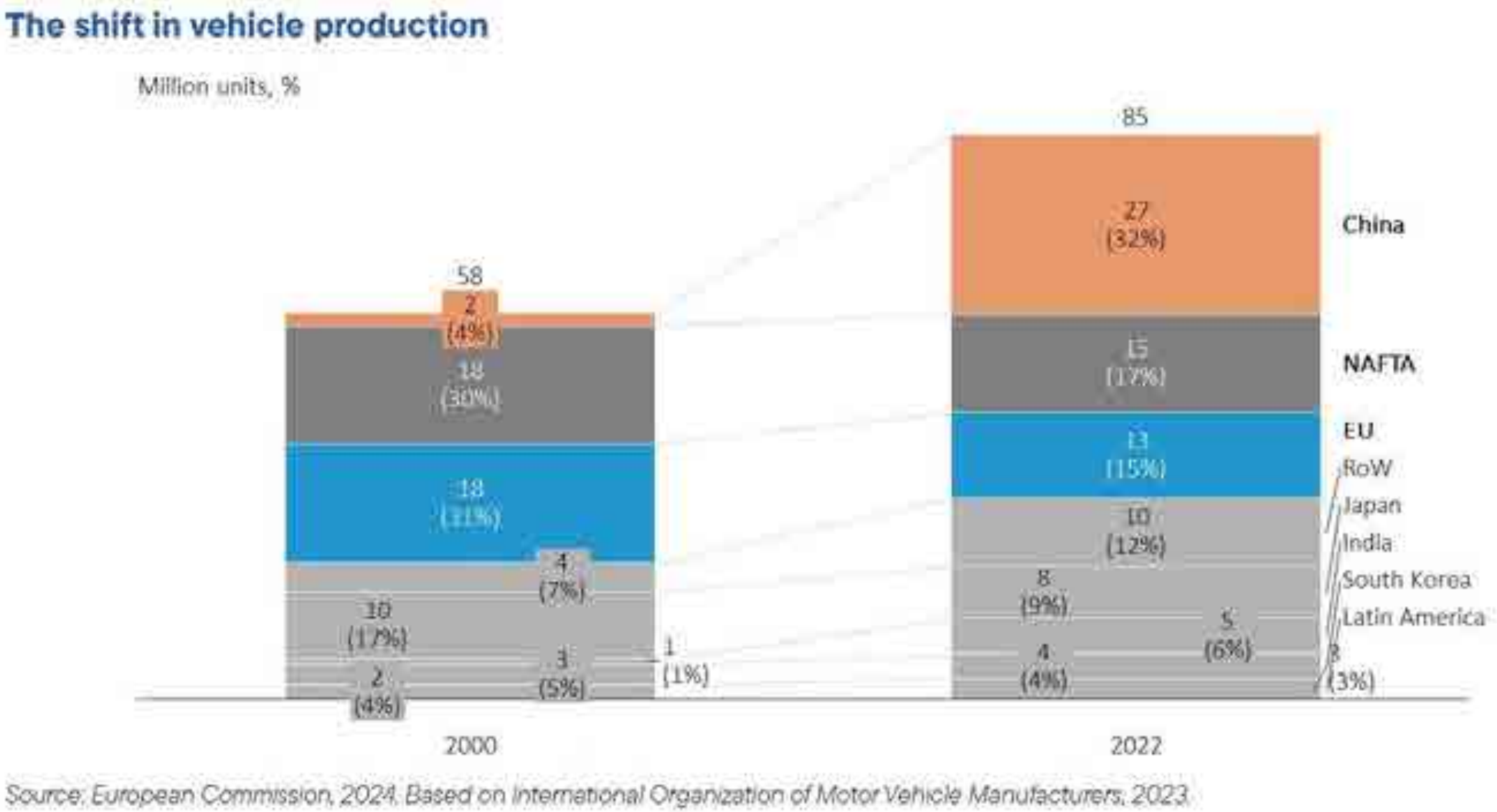


Source: Eurostat, OECD Trade value added (TiVA database) and ECB staff calculations.

Car-centric economies

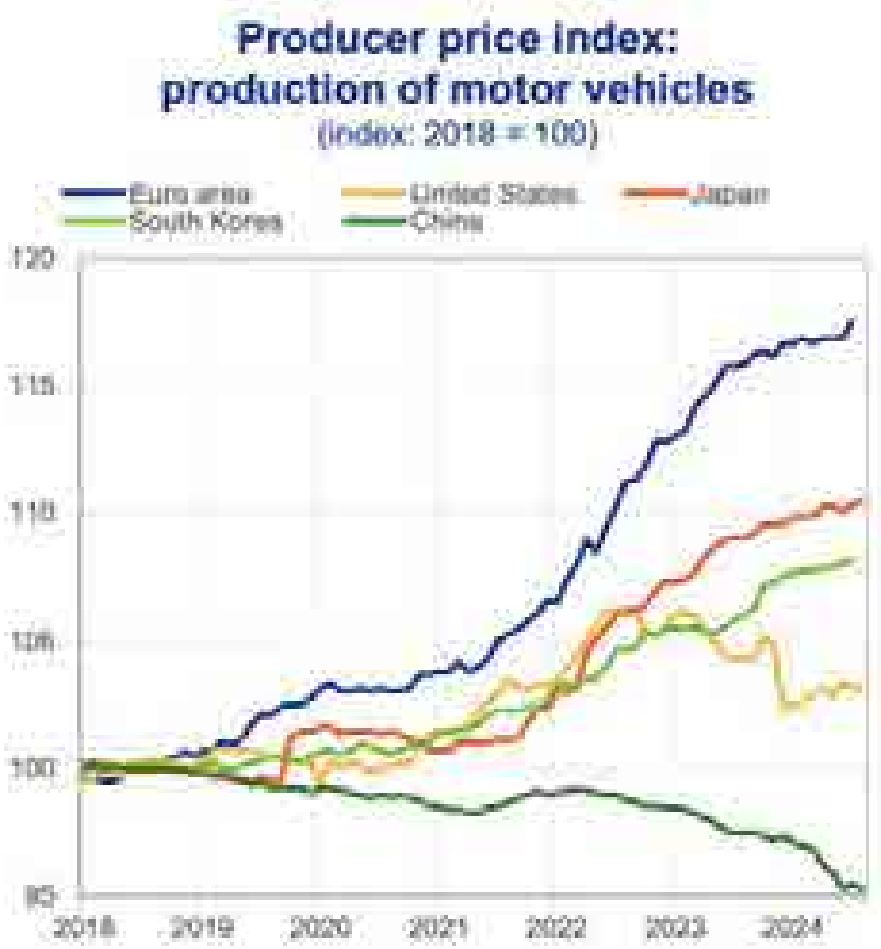


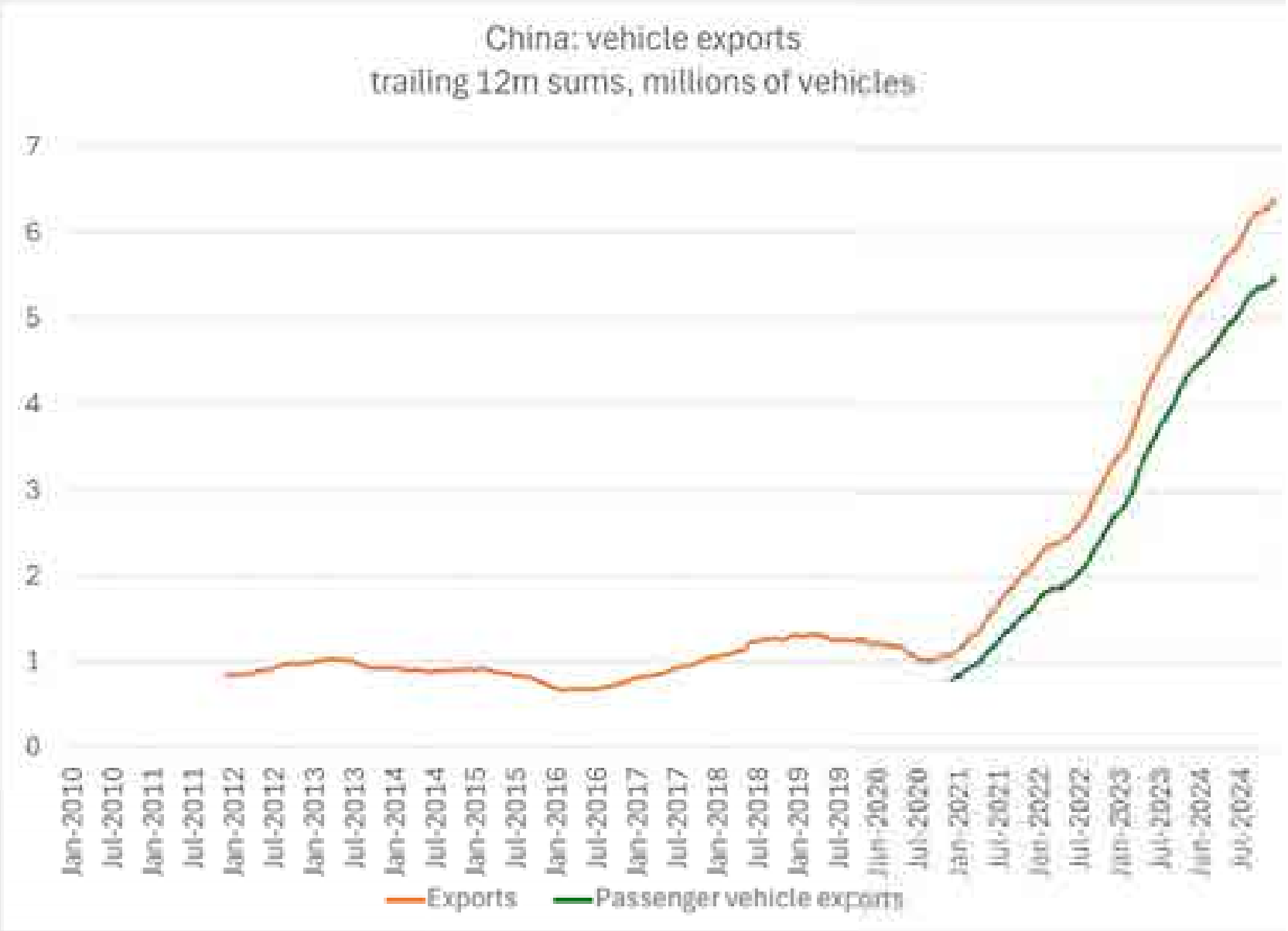
EU car manufacturers have lost half of global market share. China has gained 8x, twice as EU



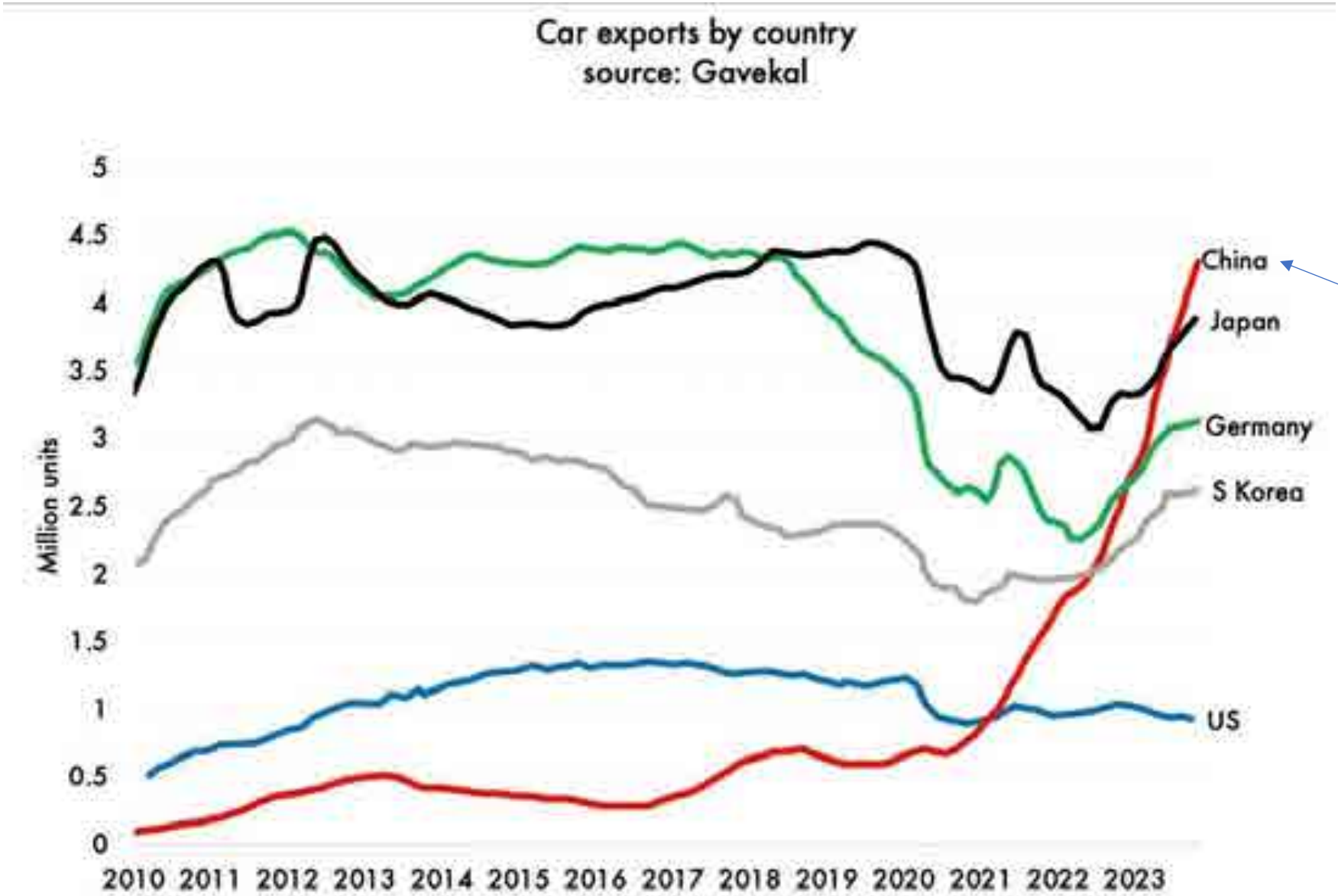
Source: European Commission, 2024. Based on International Organization of Motor Vehicle Manufacturers, 2023.

EU car exports: -20% volumes, +20% prices
(China: -5% prices, 10x volumes)

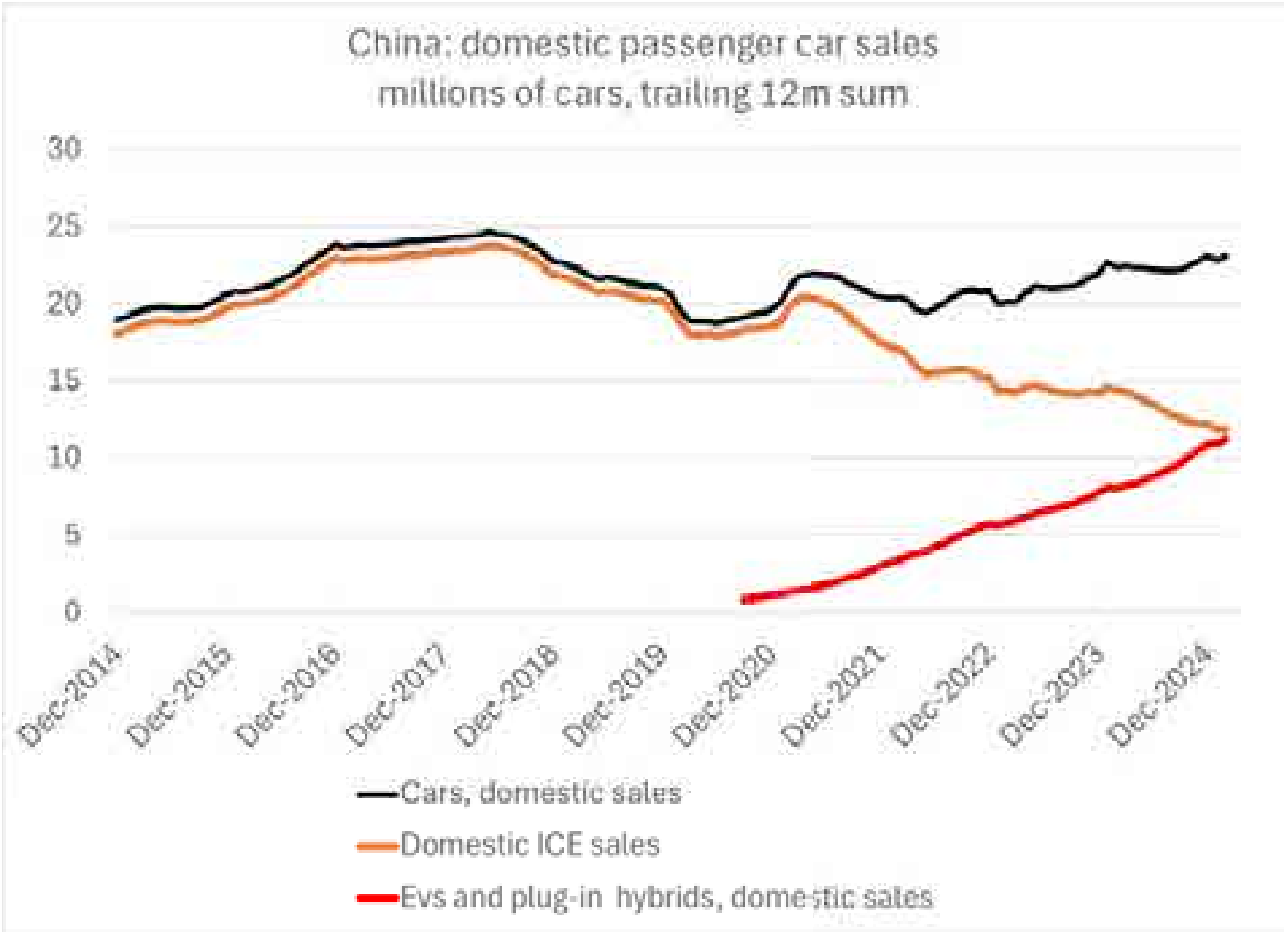




Chinese cars are driving uphill at lightspeed



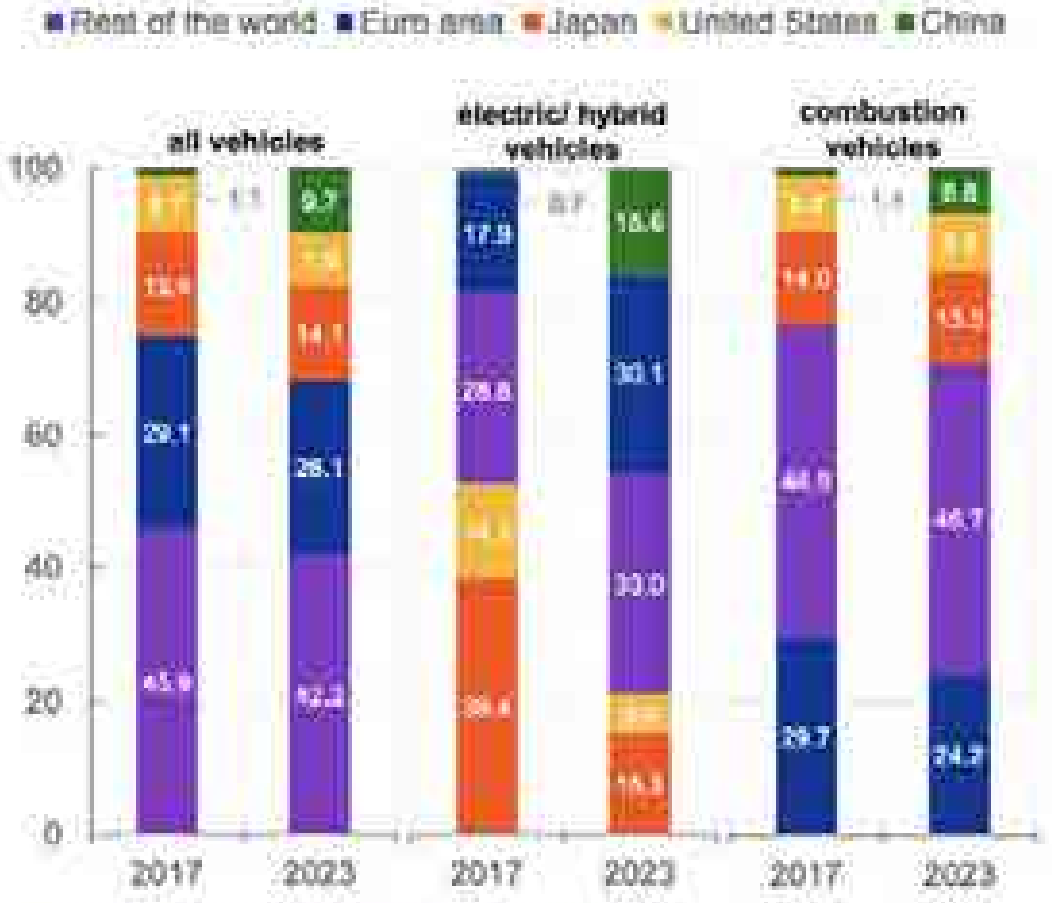
China & Car Export: «From zero to hero» in 3 years



China: Batteries fully charged

Global export market shares by motor vehicle segment

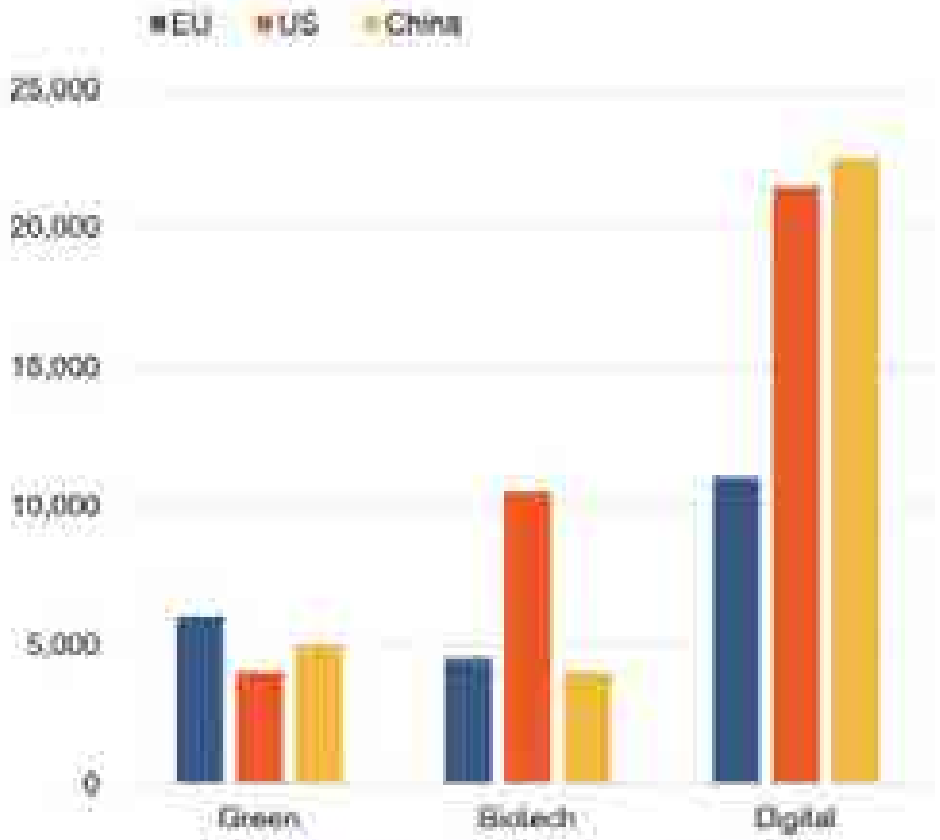
(share of values)



Sources: Trade Data Monitor and ECB staff calculations.
Note: Trade partners are ordered according to the percentage point gains in export market shares between 2017 and 2023. Regions with highest gains are shown on top. Export market share in values as units reporting.

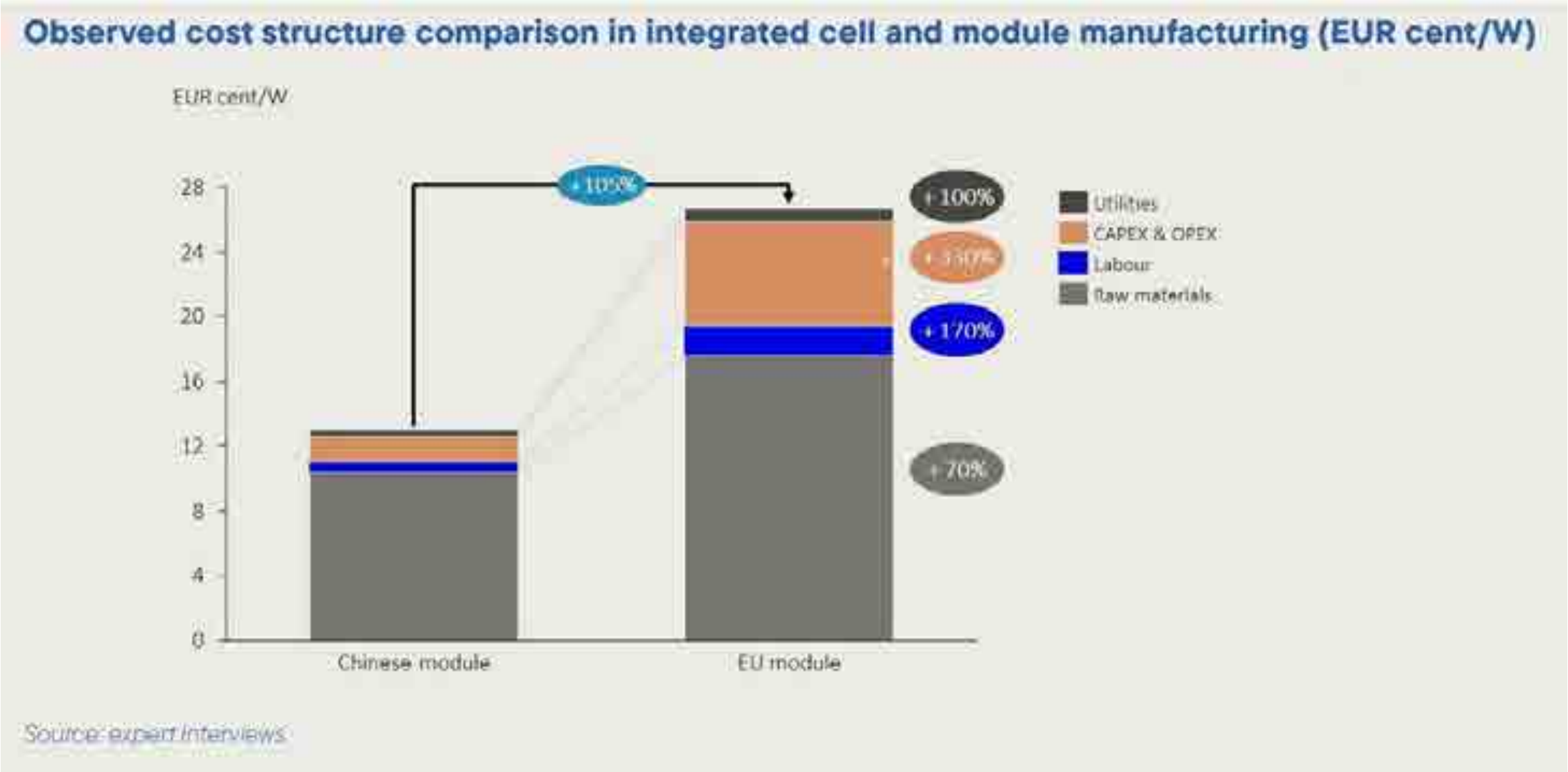
Patents by technology domain

(number of patents issued in 2020)



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

EU manufacturing costs of integrated cells: +105% vs China



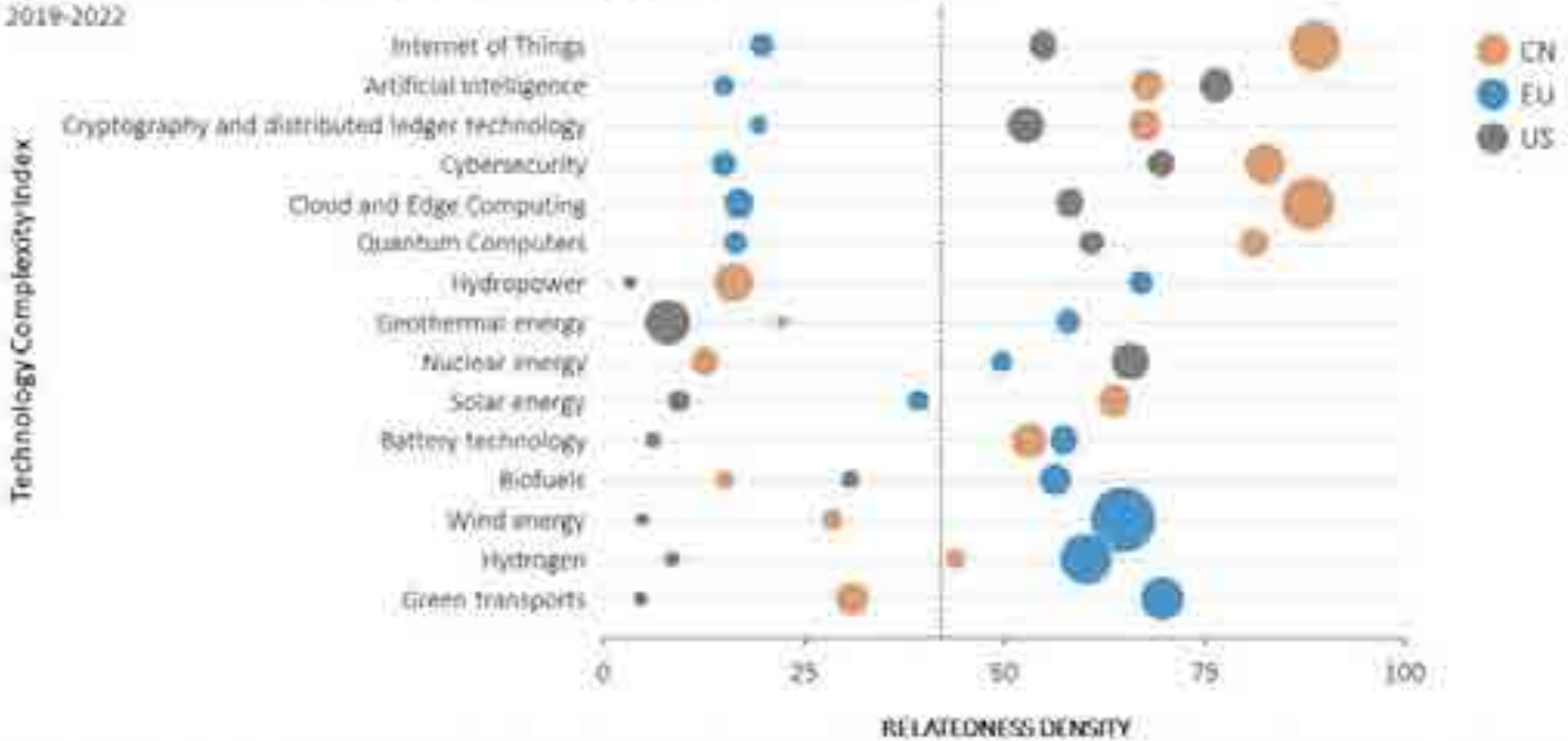
EU vs USA? Mid-tech vs High-tech

Top-three R&D spenders and their industries in the EU and the US

Top 3 R&D spenders and their industries in the EU and the US			
	2003	2012	2022
US	Ford (auto)	Microsoft (software)	Alphabet (software)
	Pfizer (pharma)	Intel (hardware)	Meta (software)
	GM (auto)	Merck (pharma)	Microsoft (software)
EU	Mercedes-Benz (auto)	VW (auto)	VW (auto)
	Siemens (electronics)	Mercedes-Benz (auto)	Mercedes-Benz (auto)
	VW (auto)	Bosch (auto)	Bosch (auto)

Source: Fuest et al. (2024). Based on the EU Industrial R&D Investment Scoreboard

The EU's position in complex (digital and green) technologies

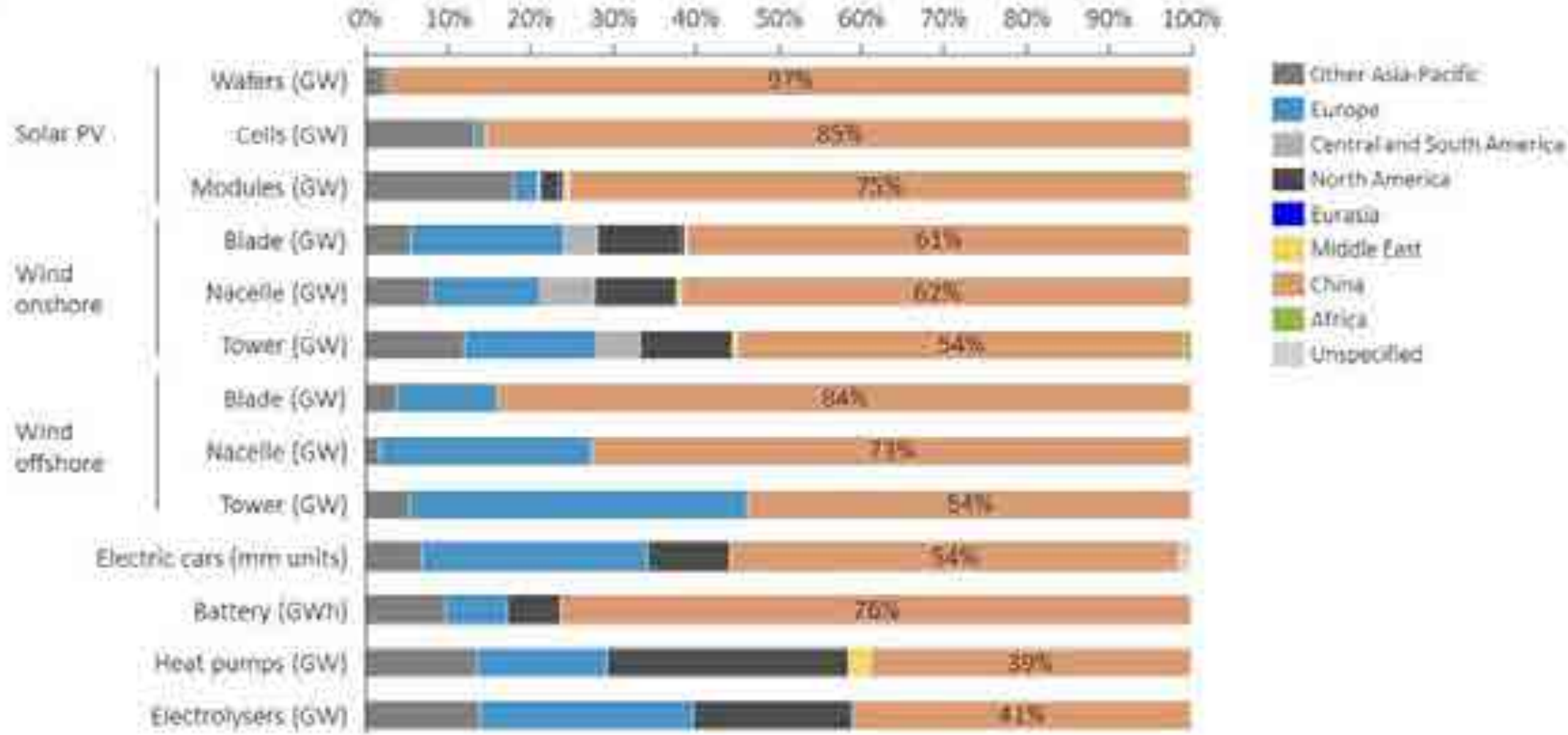


Notes: The results are based on an analysis of patent data to understand the complexity and potential for specialisation in different technology areas. On the y-axis, technologies are ranked according to how advanced or complex they are, with scores ranging between 0 (less complex) and 100 (more complex). The x-axis (showing the relatedness density) represents how easily a country can build comparative advantage in a particular technology, depending on how closely related it is to other technologies the country is already strong in. The size of the bubbles shows how much each country has already specialised in a technology, using a measure of "revealed comparative advantage" (RCA), which reflects their competitive strenght in that field.

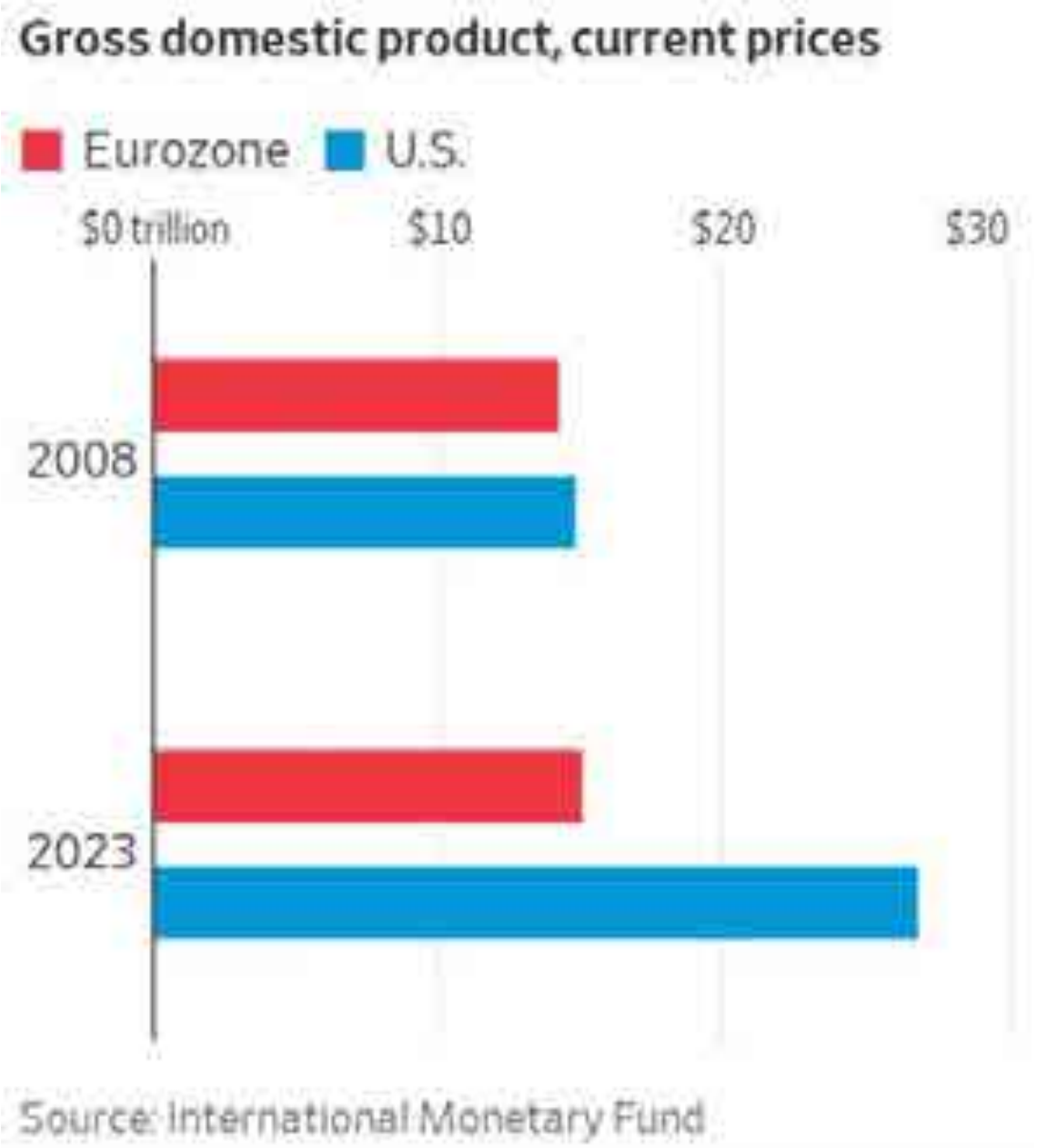
Source: European Commission, DG RTD.

Clean technology manufacturing capacity by region

In 2021

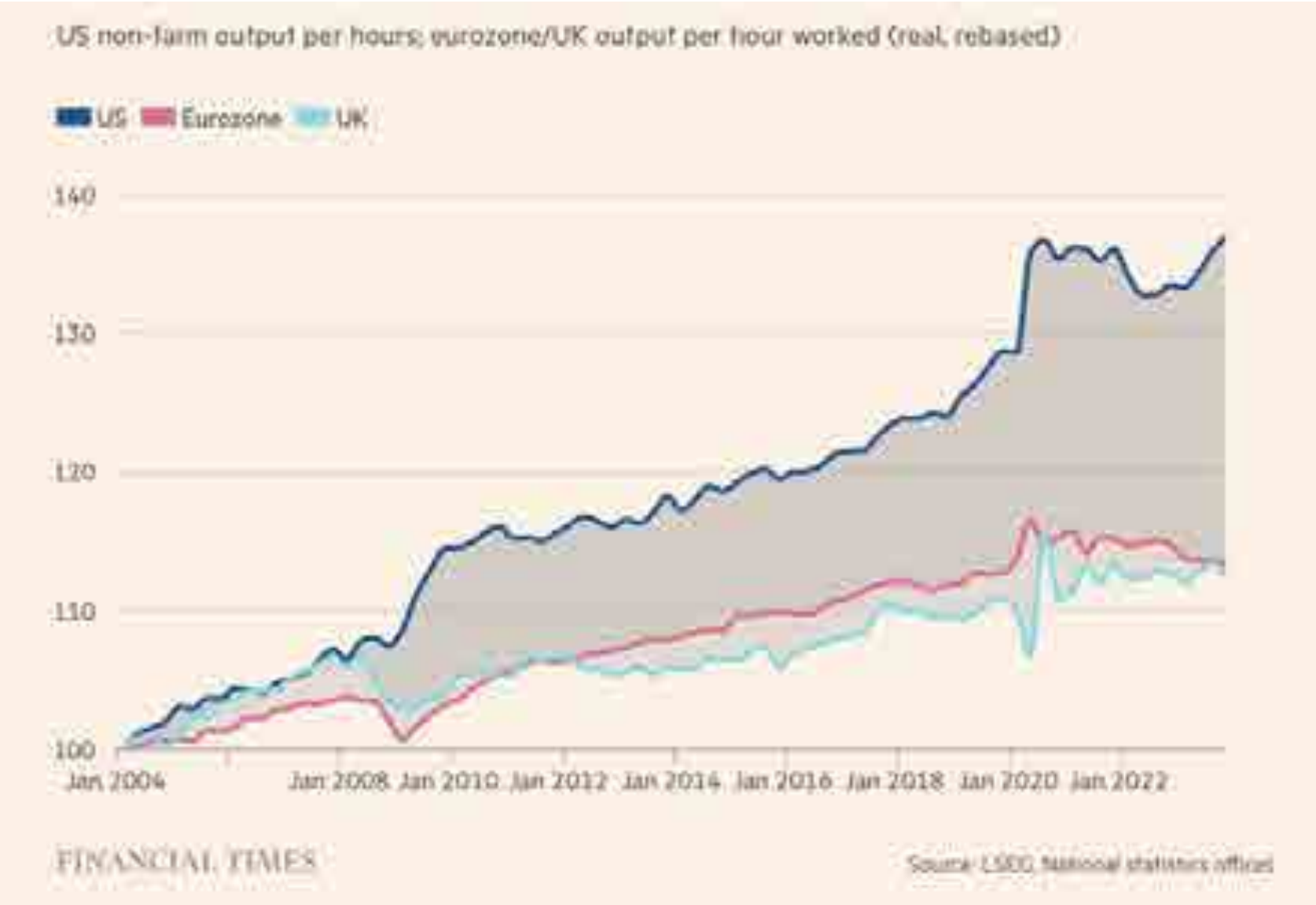


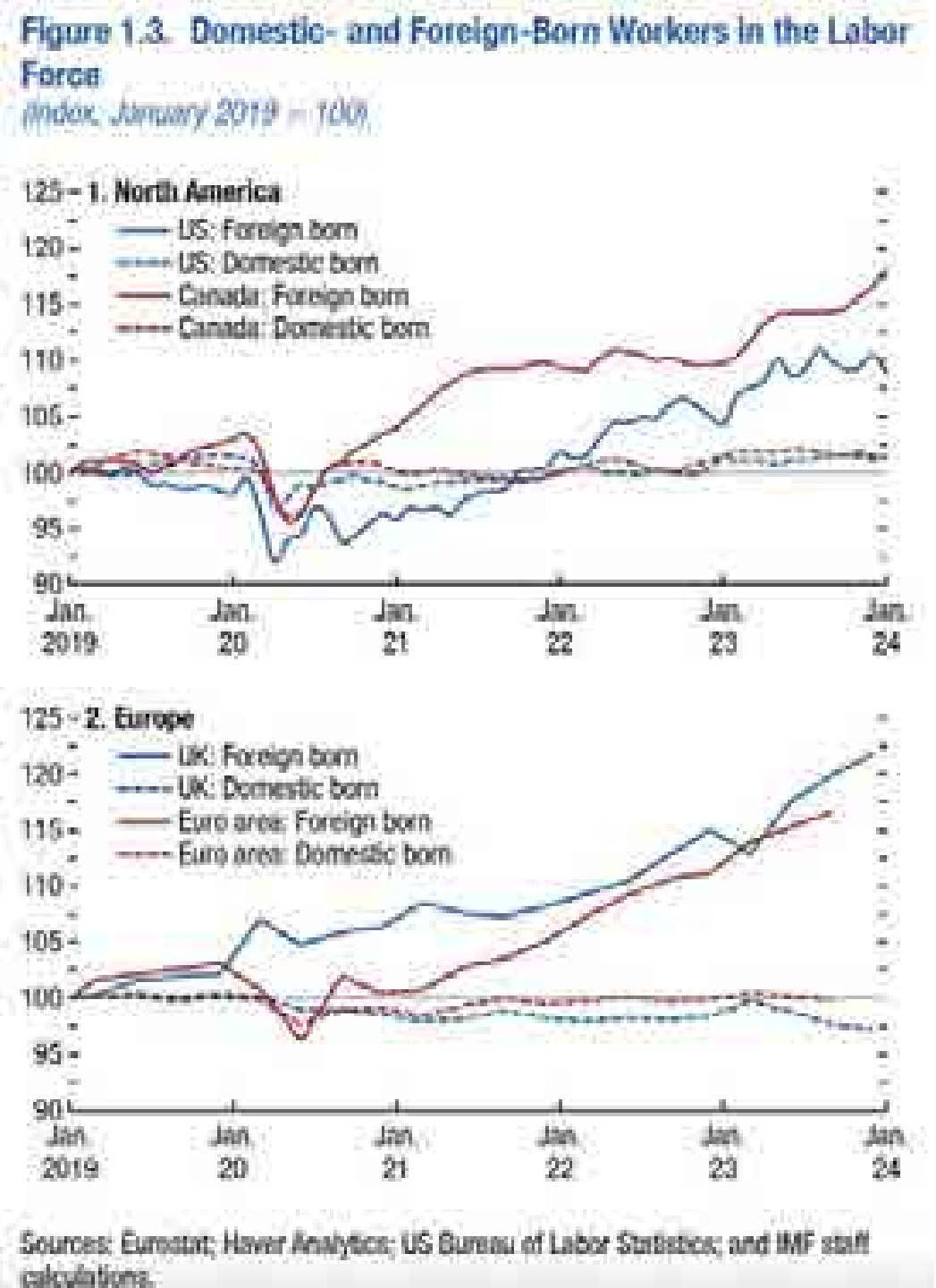
Source: European Commission, 2024. Based on IEA, Bruegel.



15 years ago, Eurozone & USA had the same GDP levels

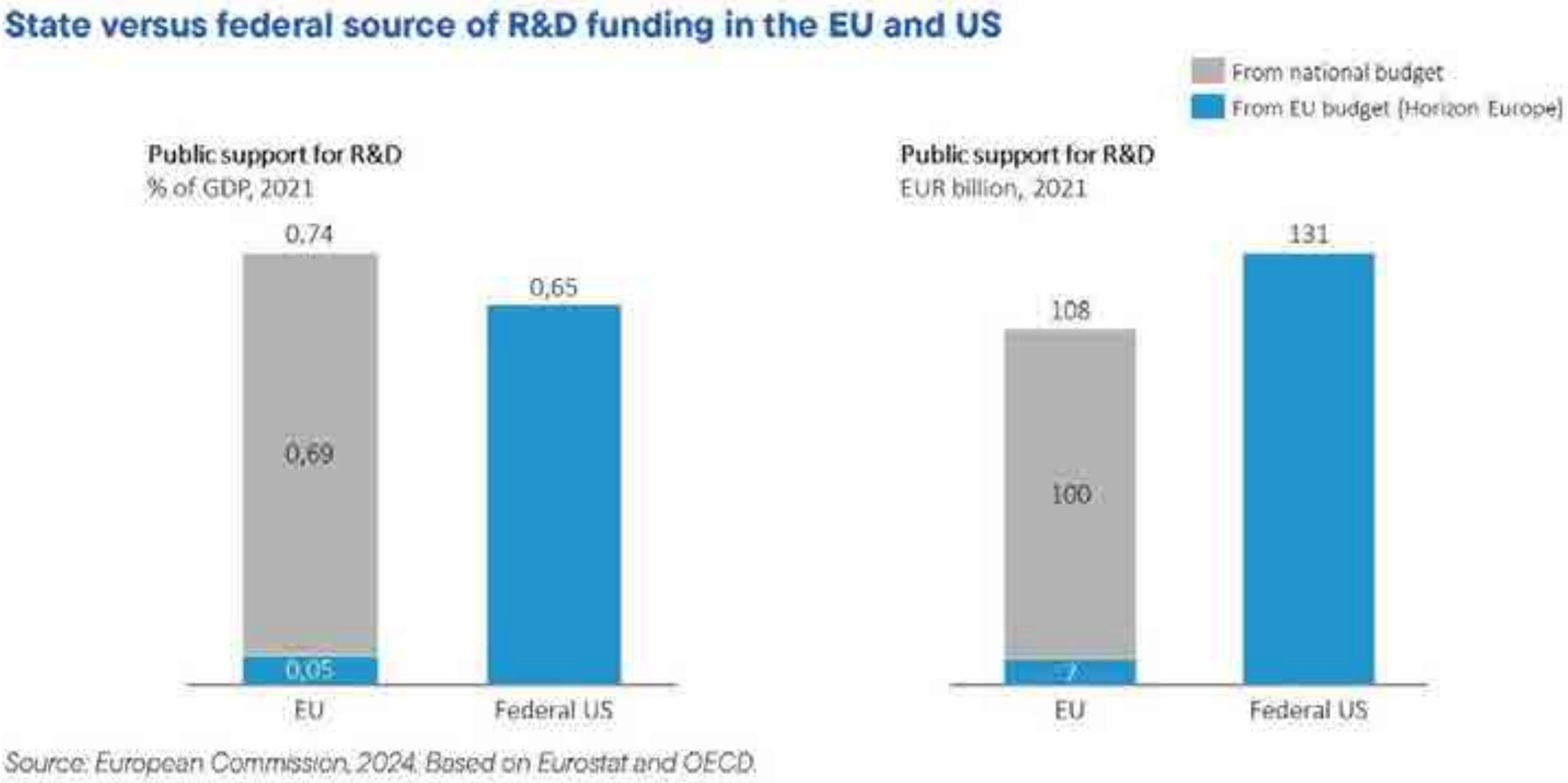
Europe and the «productivity syndrome»



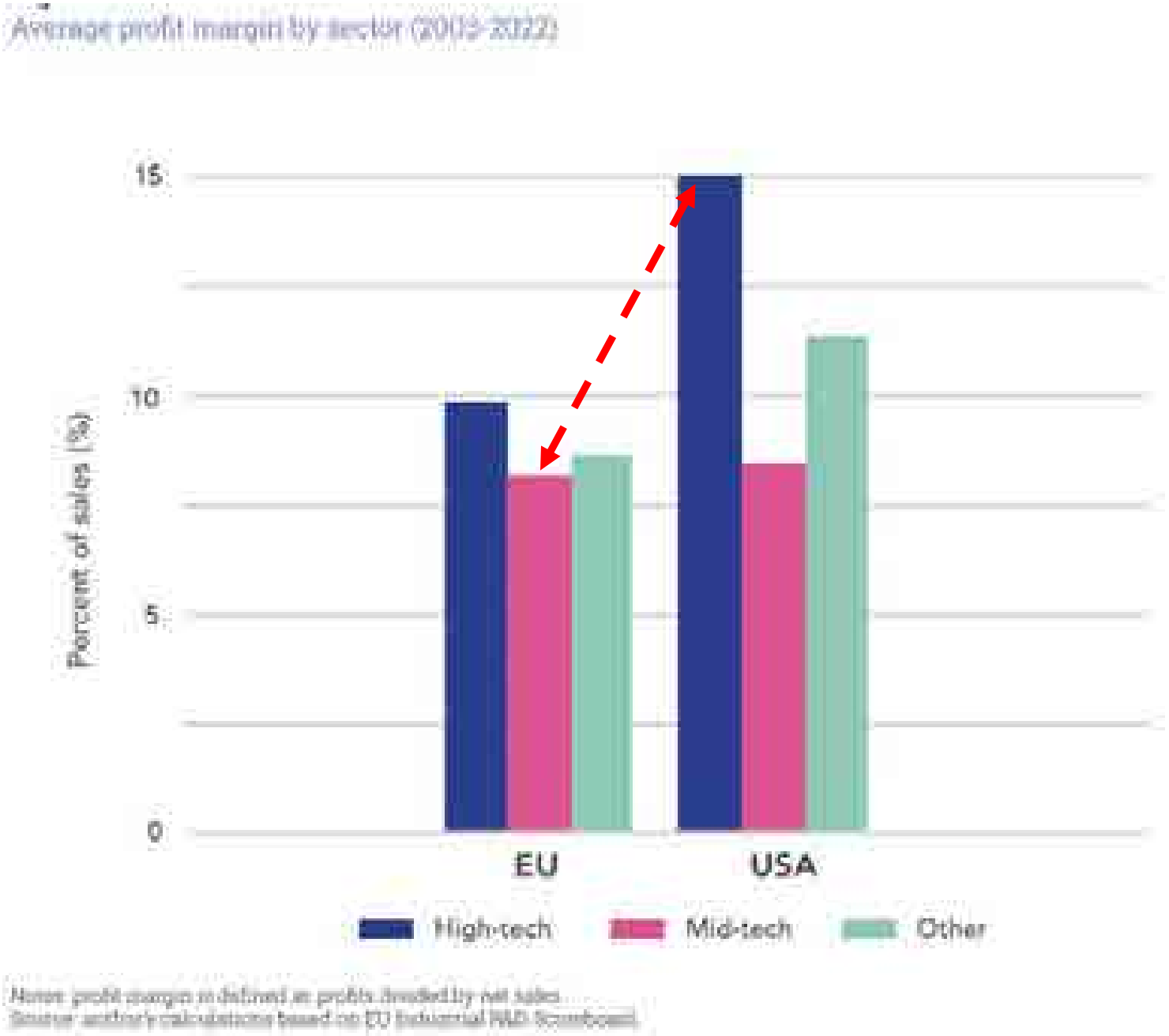


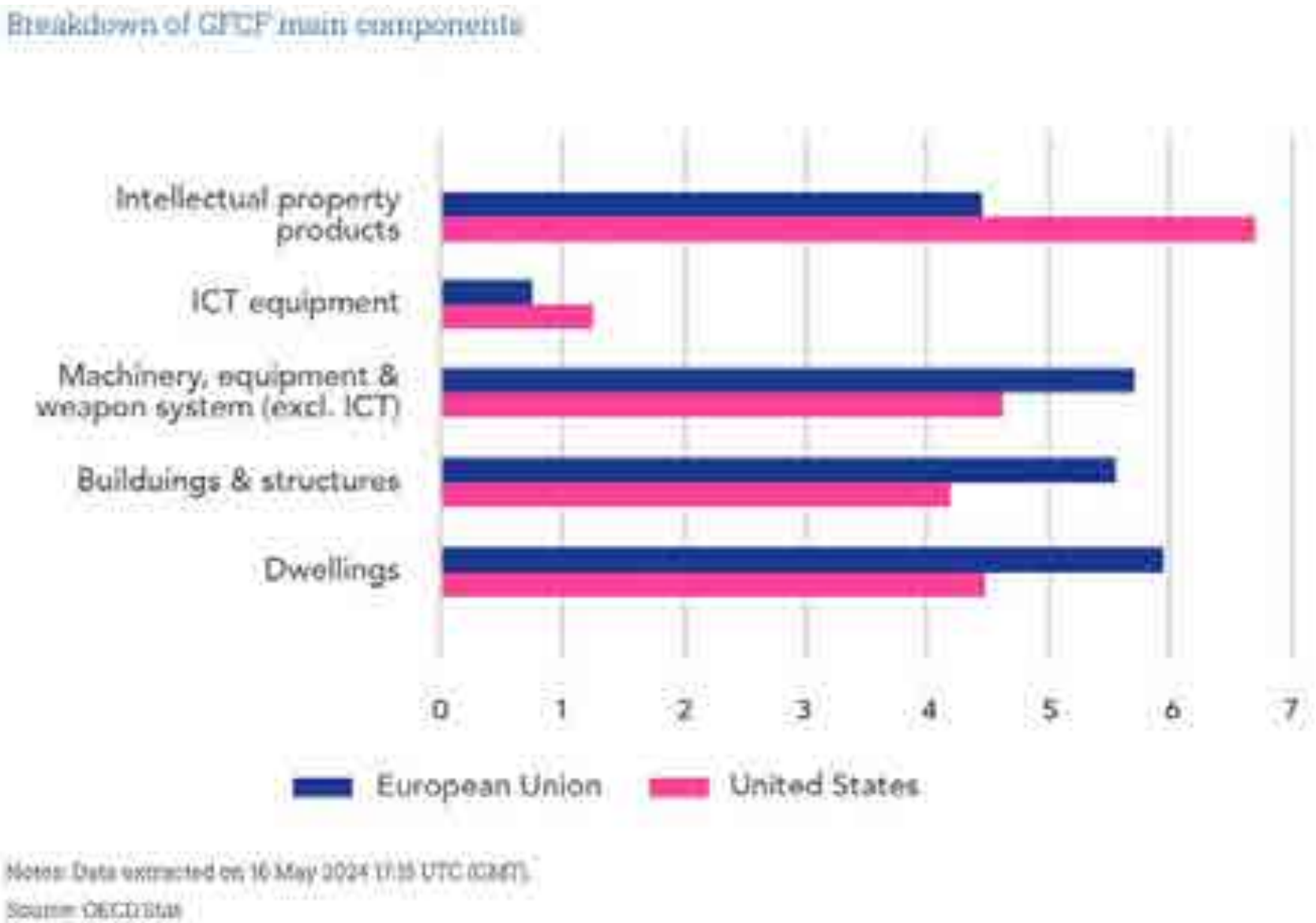
Workers from all the world, come join us…

R&D: the limits of EU fragmentation



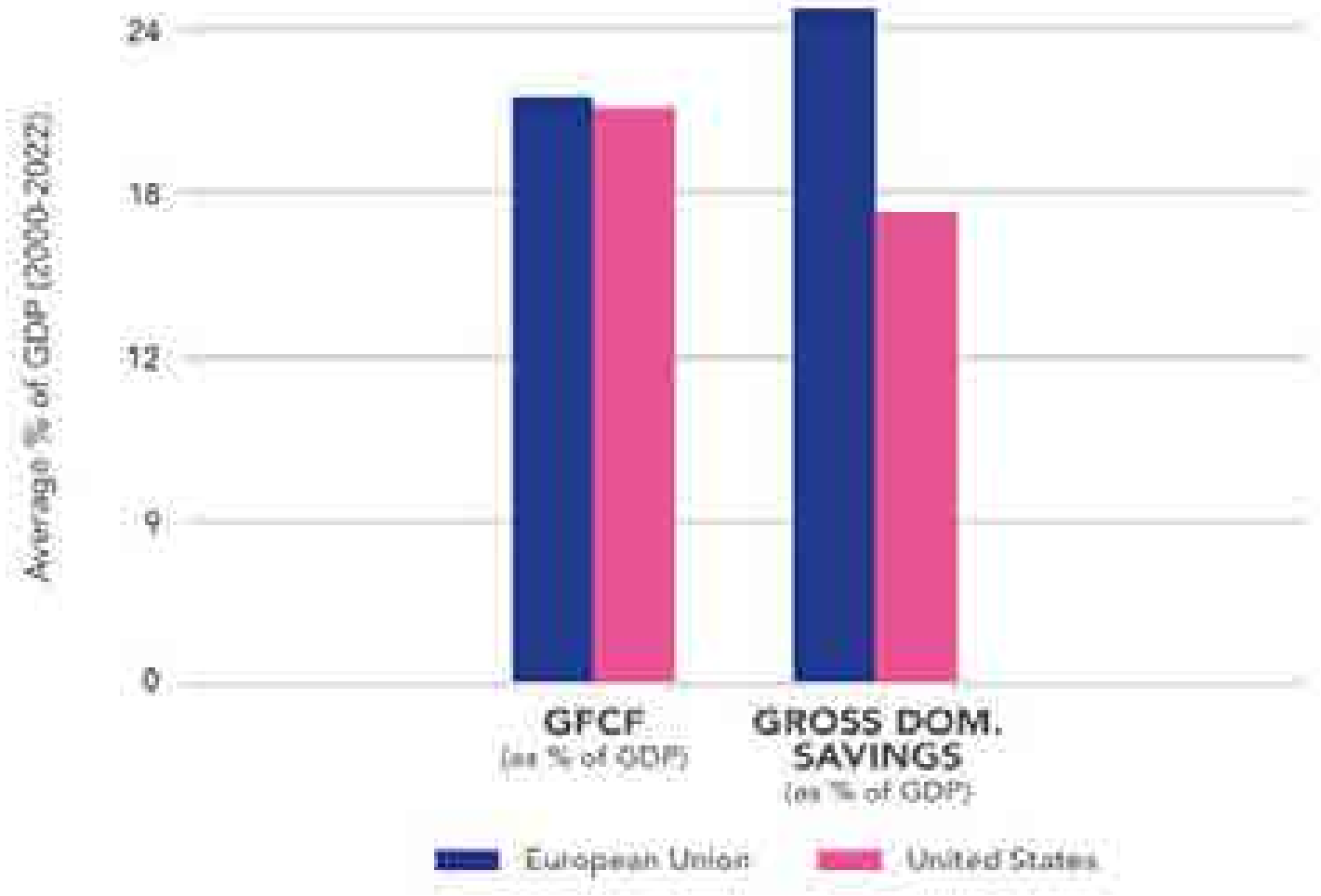
EU vs USA? Mid-tech vs High-tech





EU vs USA? Bricks vs Clicks

Investment & savings as percent of GDP (2000-2022)

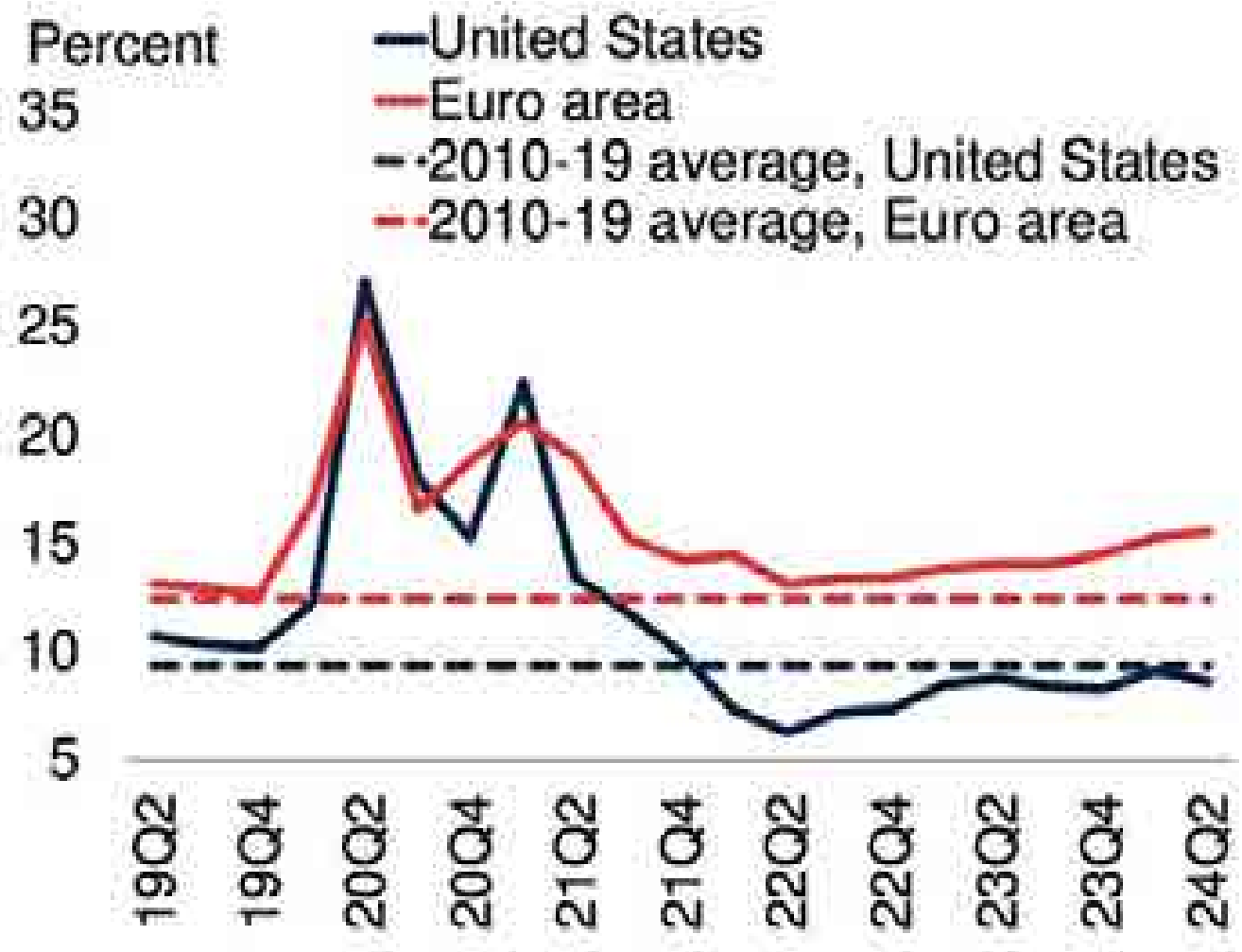


Notes: Data extracted on 16 May 2024 17:31 UTC (GMT).

Source: OECD.Stat

It’s not (all) about the money, darling…

C. Gross personal savings rate in the United States and euro area



Ants and Grasshoppers

Source: World Bank - Global Economic Prospects, January 2025

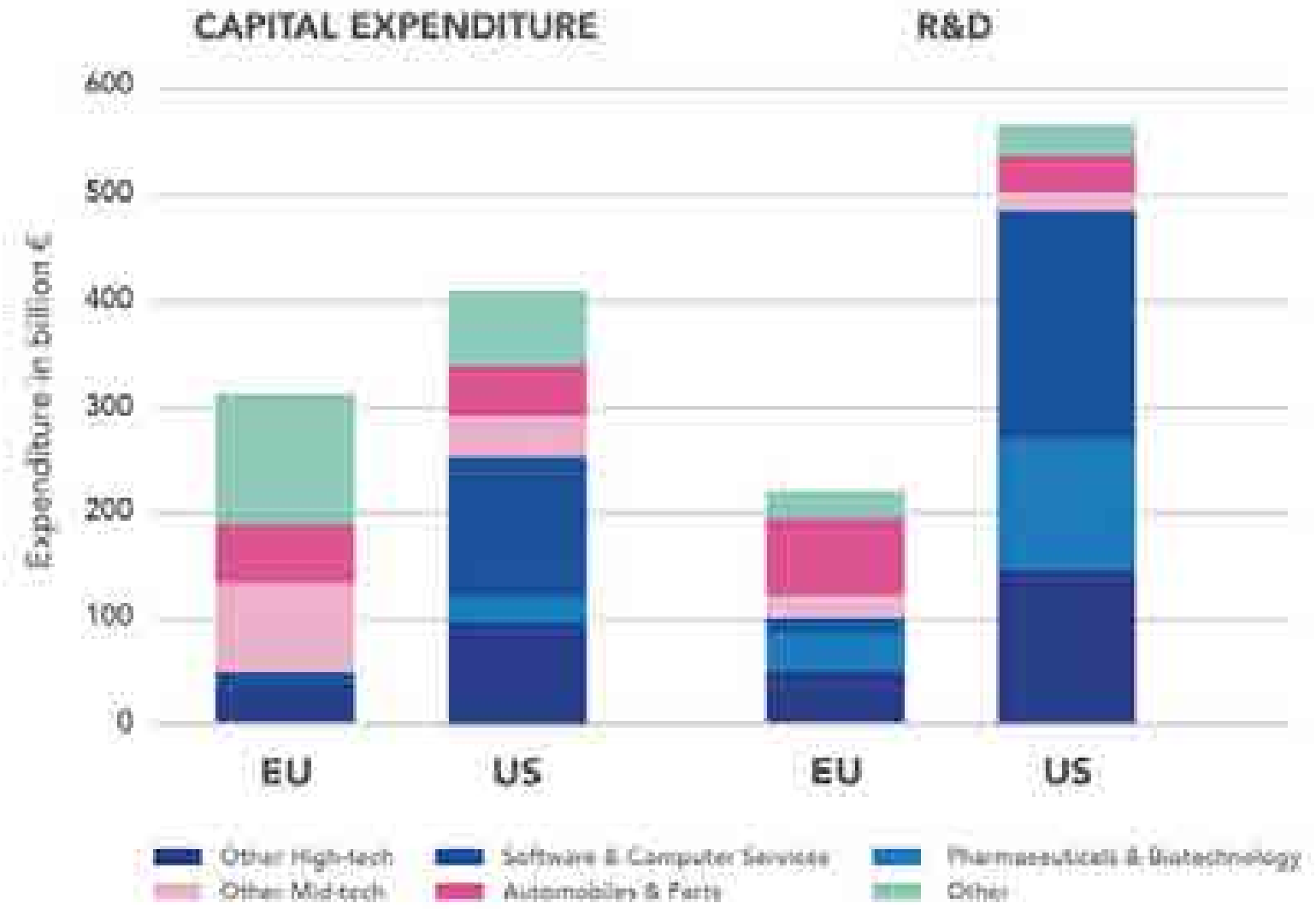
USA vs EU?
Quality vs Quantity

USA vs EU?
Quality vs Quantity

Notes: this figure presents the inverse of the Incremental Capital Output Ratio (ICOR), calculated as GDP growth between years t and t + 5 divided the average value of investment-to-GDP ratio over the same period.

Source: Authors' calculations based on World Economic Outlook 2024

CAPEX and BERD by industry sector



Source: author's calculations based on EU Industrial R&D Scoreboard

USA vs EU? Quality vs Quantity

A new Marshall Plan for Europe.

Annual additional investment needs (2025-2030)

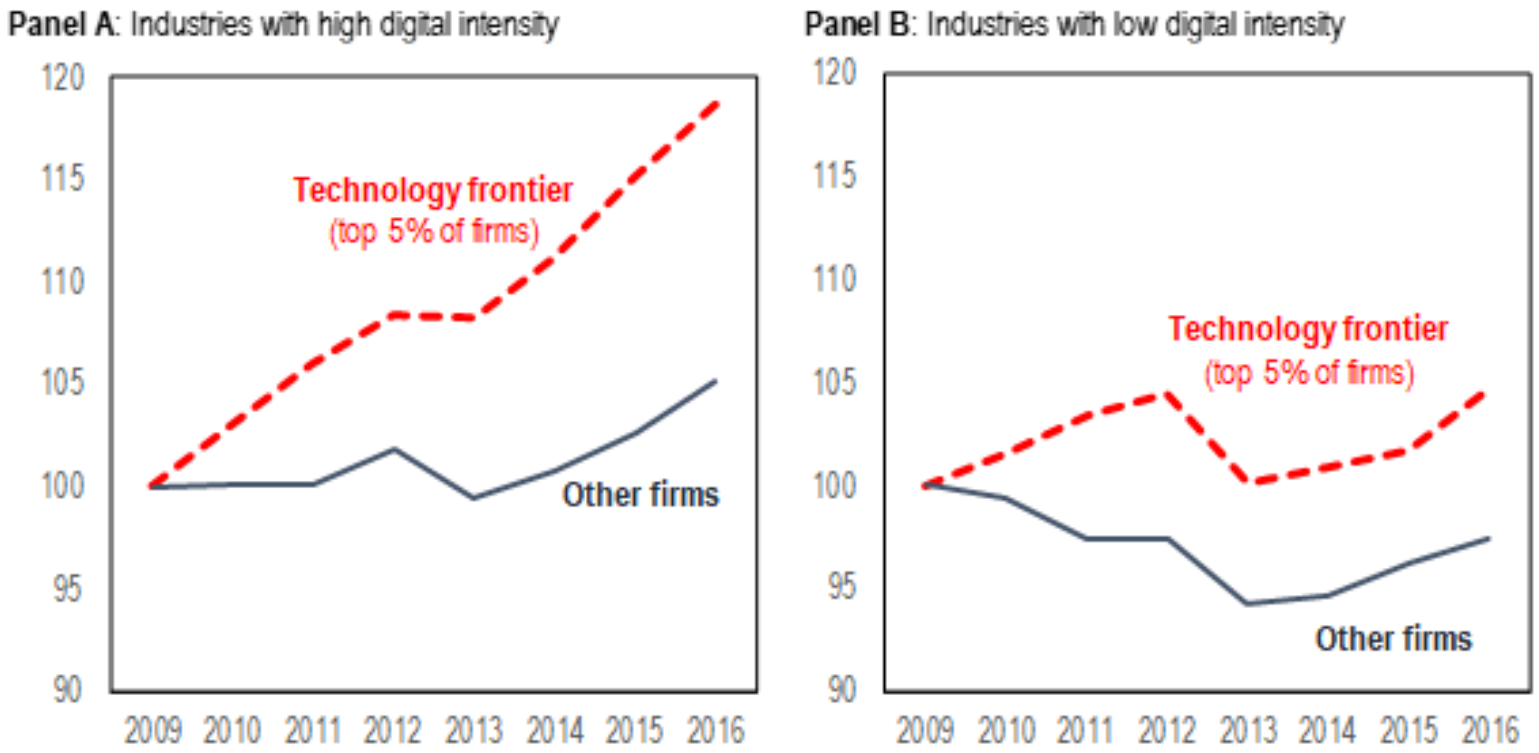
in EUR billion

Investment category		2025-2030
Achieving the energy transition	Energy (including the deployment of clean technologies)	300
	Transport (including charging infrastructure)	150
	Total	450
Becoming a leader in digital technologies		150
Strengthening defence and security capabilities		50
Boosting productivity through breakthrough innovation		100;150
Total annual additional investment needs		**750;800**
ECB estimate		*771*

Source: Own calculations based on Commission estimates

Figure 2: Productivity dispersion across firms has increased, especially in digital intensive sectors

Average multifactor productivity (2009=100)

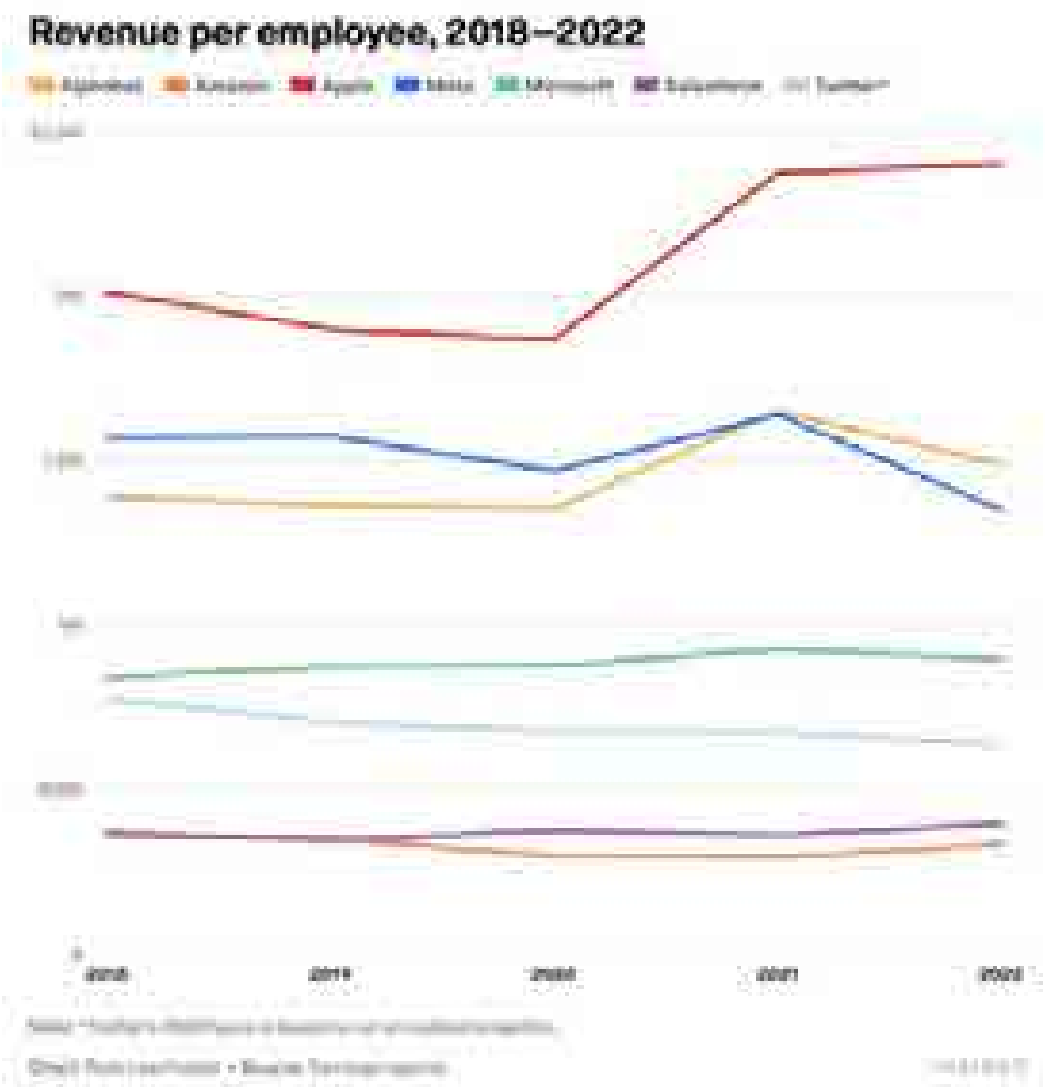


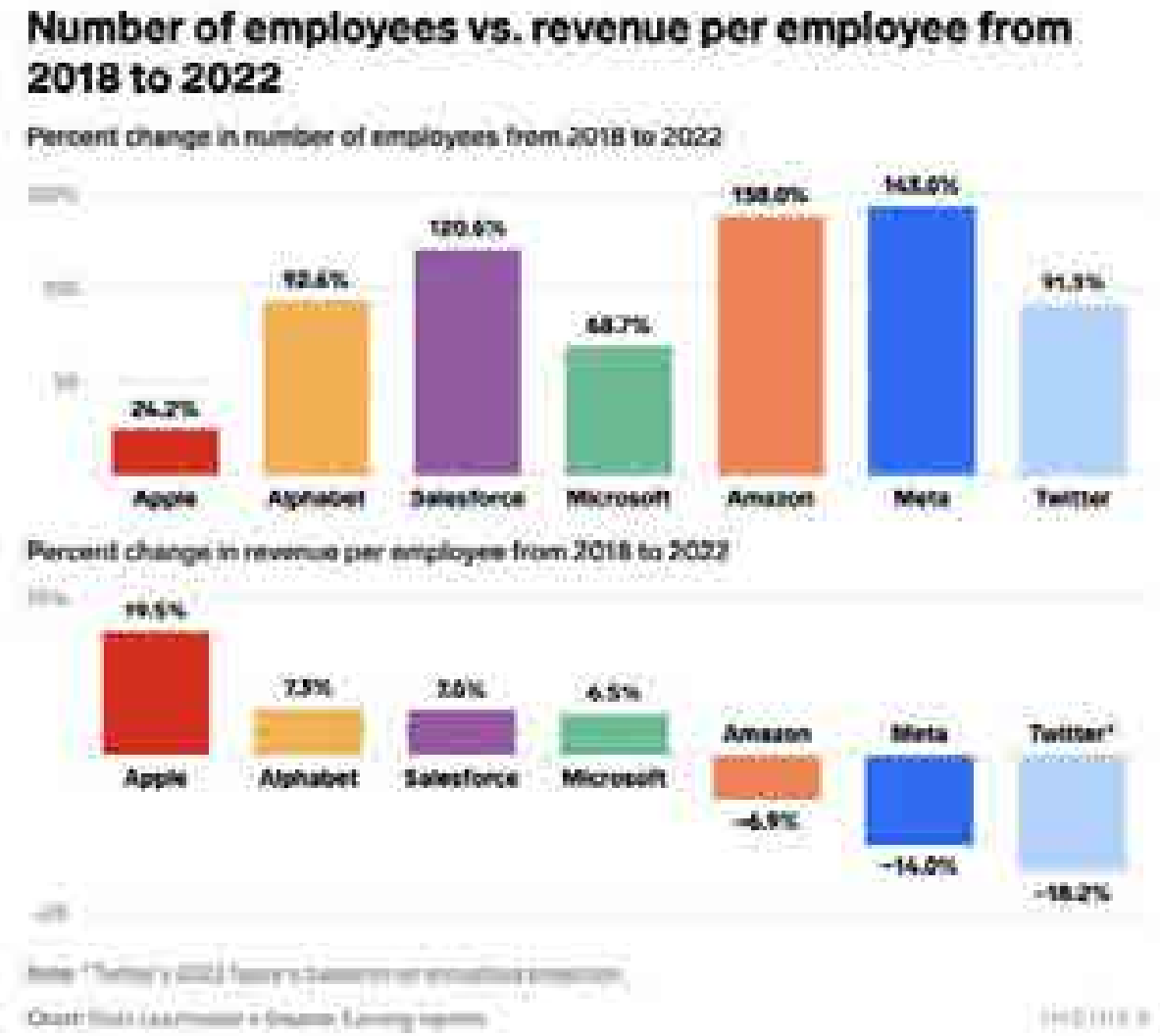
High-tech means higher productivity

Note: The "technology frontier" is measured by the three-year moving average of log multifactor productivity on average among the top 5% of companies with the highest productivity levels in each industry and year, across 25 OECD countries. The "other firms" lines correspond to the average of the same variable among all firms excluding the top 5% in each industry and year.

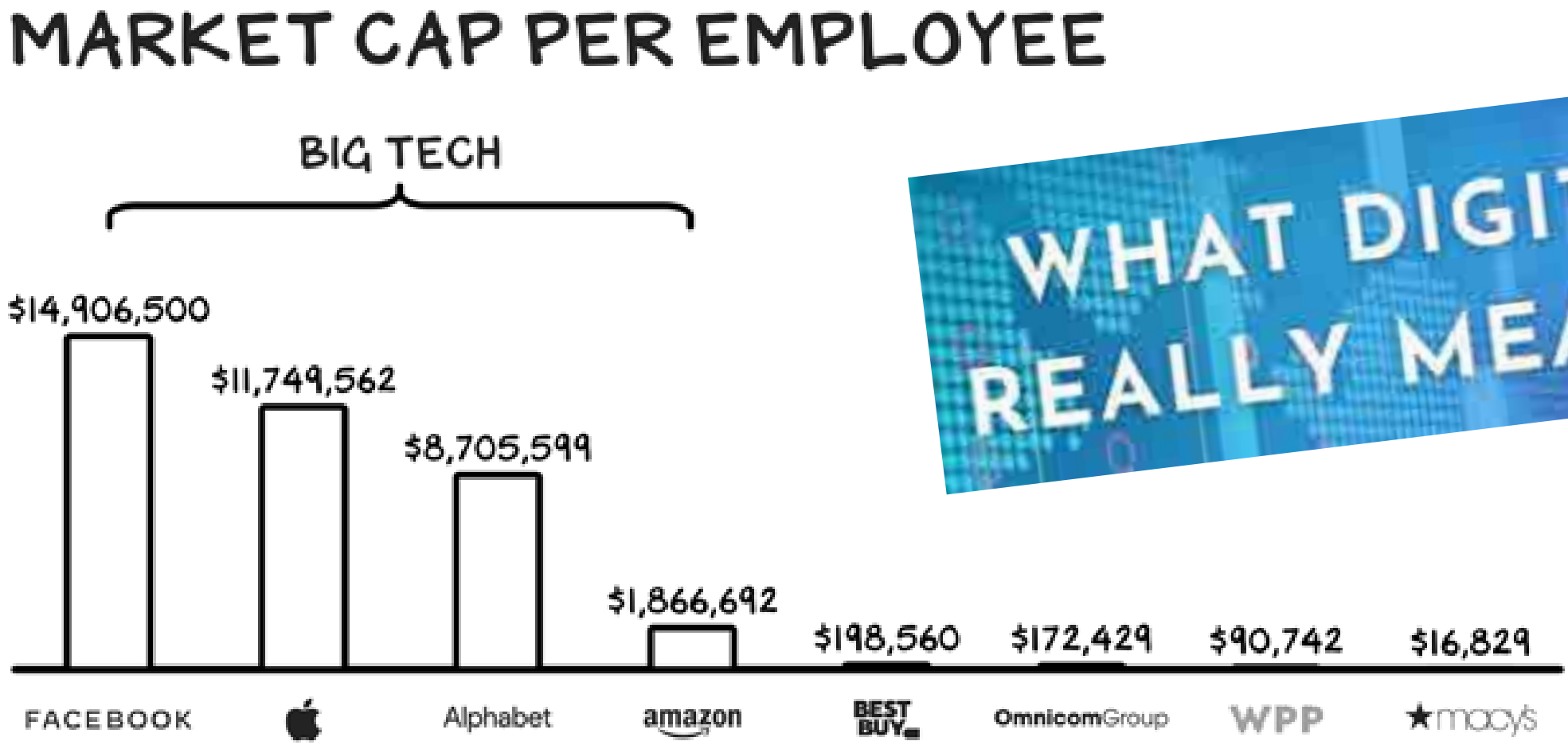
Source: OECD calculations using Orbis data, following the methodology in Andrews et al. (2016)

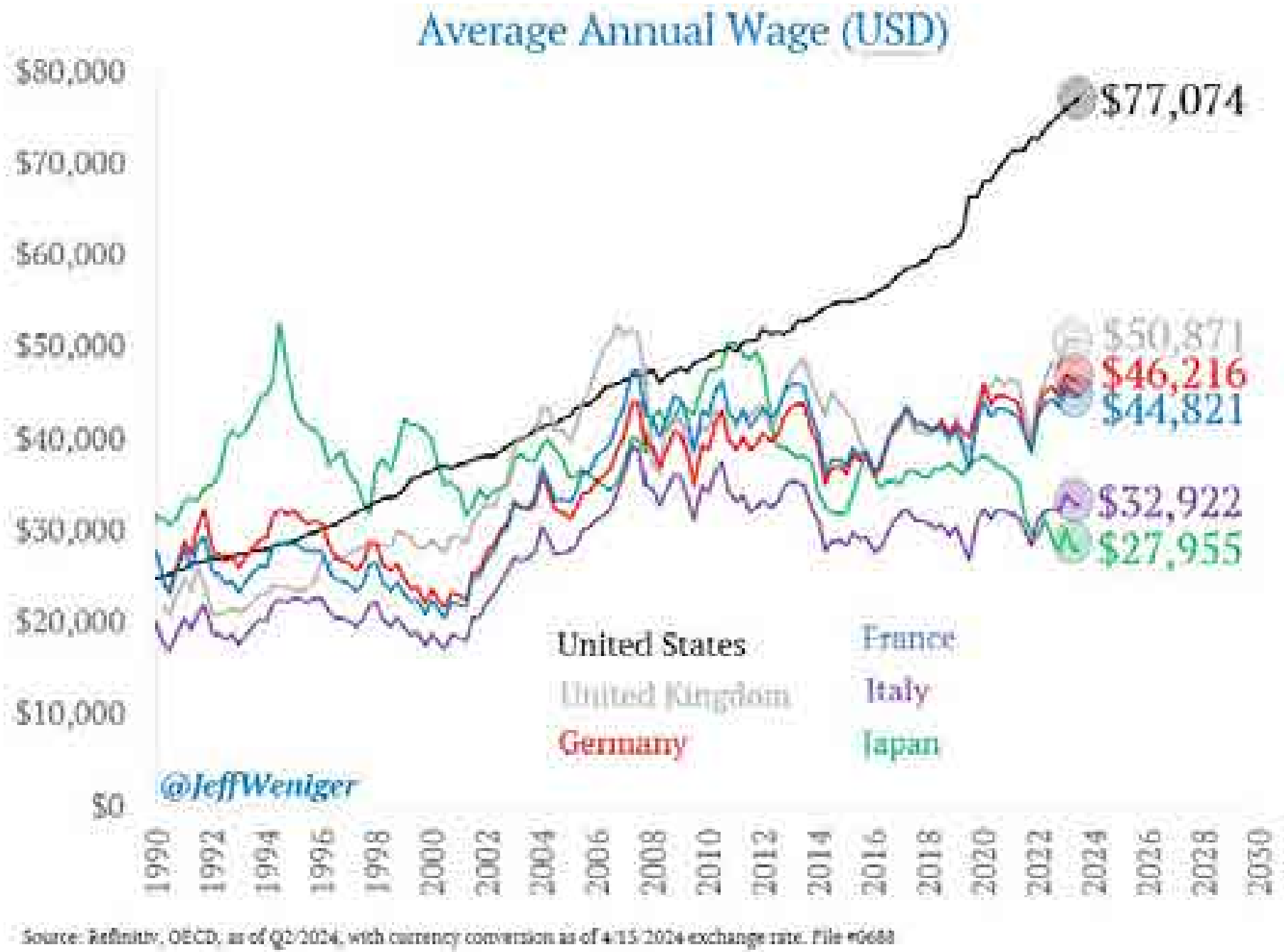
Productivity of «Big Platforms»





High-tech means higher value

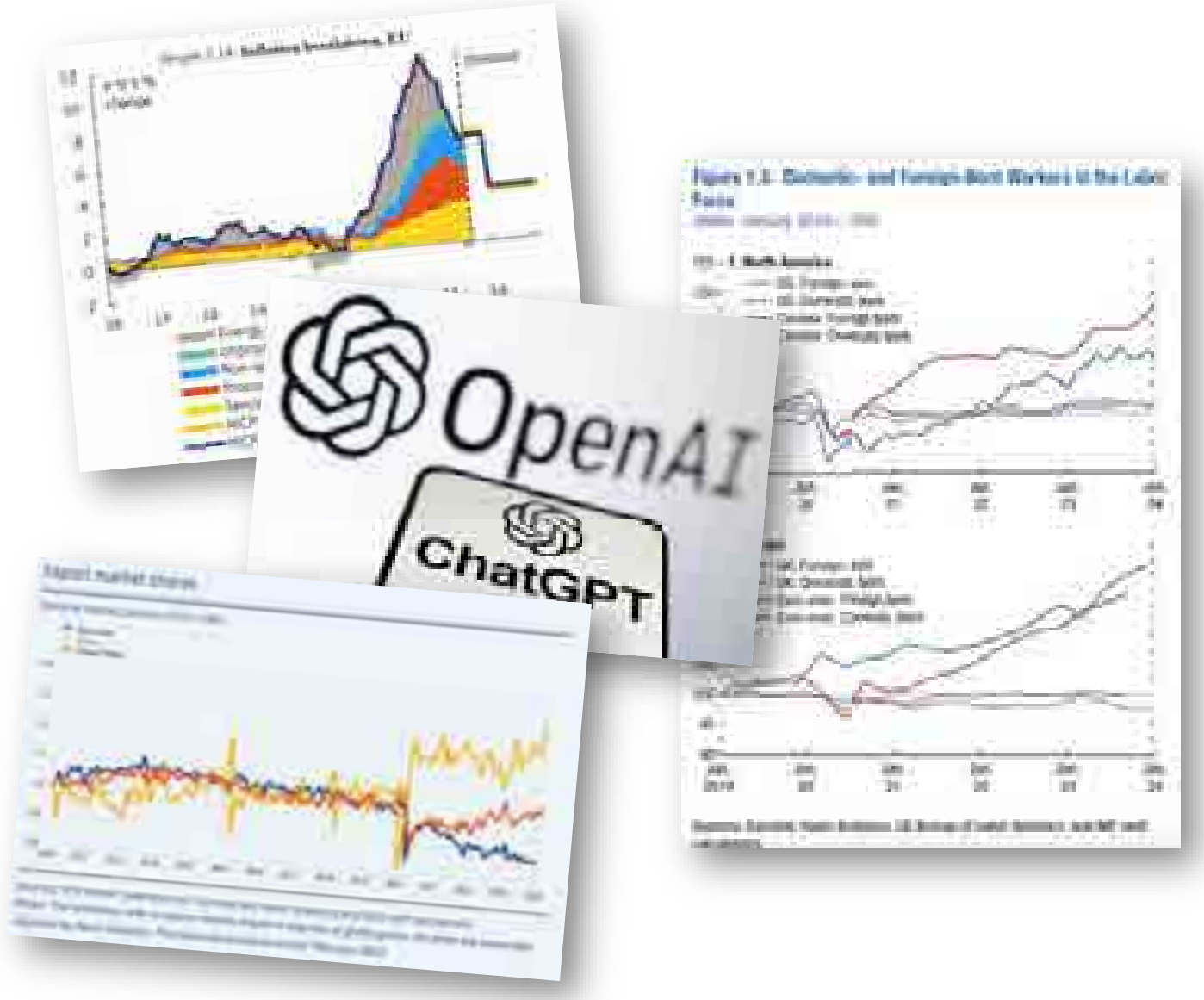




USA vs EU: diverging wage levels

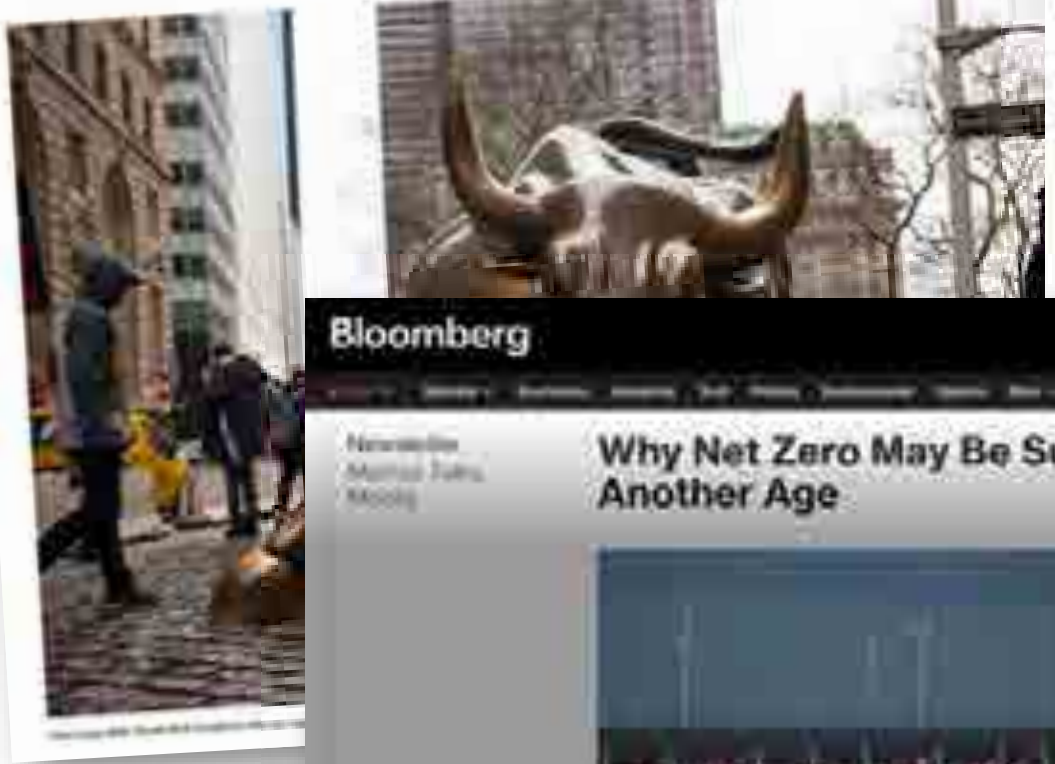
THE GEOPOLITICAL, MACROECONOMIC, AND TECHNOLOGICAL DRIVERS OF CHANGE

1. A post-global world
2. A post-green world
3. A post-digital world
4. Challenges and opportunities for CIOs



FAREWELL, «NET ZERO»…

The Biggest US Banks Have All Backed Out of a Commitment to Reach Net Zero



Top American banks exit net zero alliance: What does this mean for their European peers?

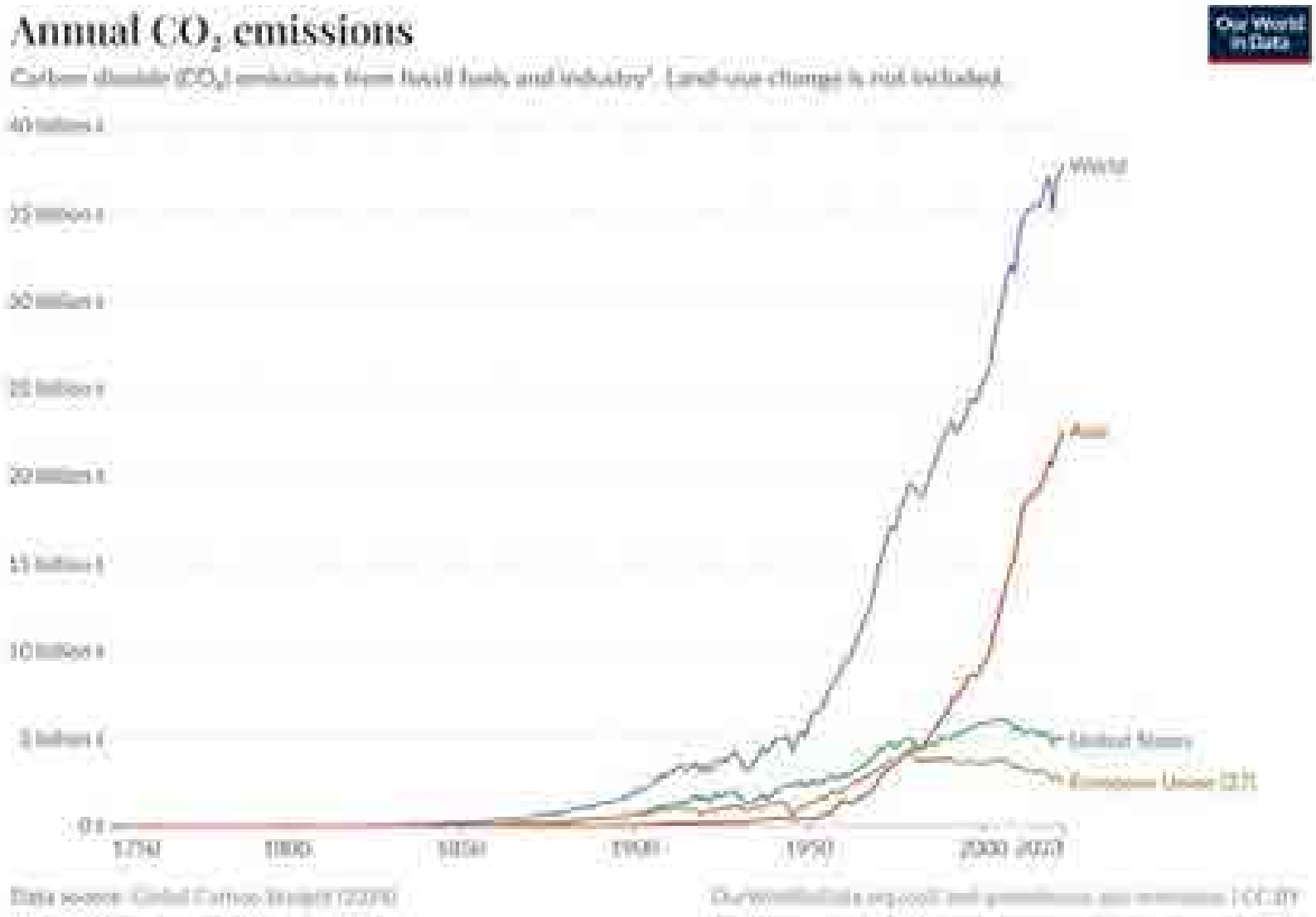
Bloomberg

Why Net Zero May Be Suited for Another Age

ESG round-up: Japanese bank exits Net-Zero Banking Alliance

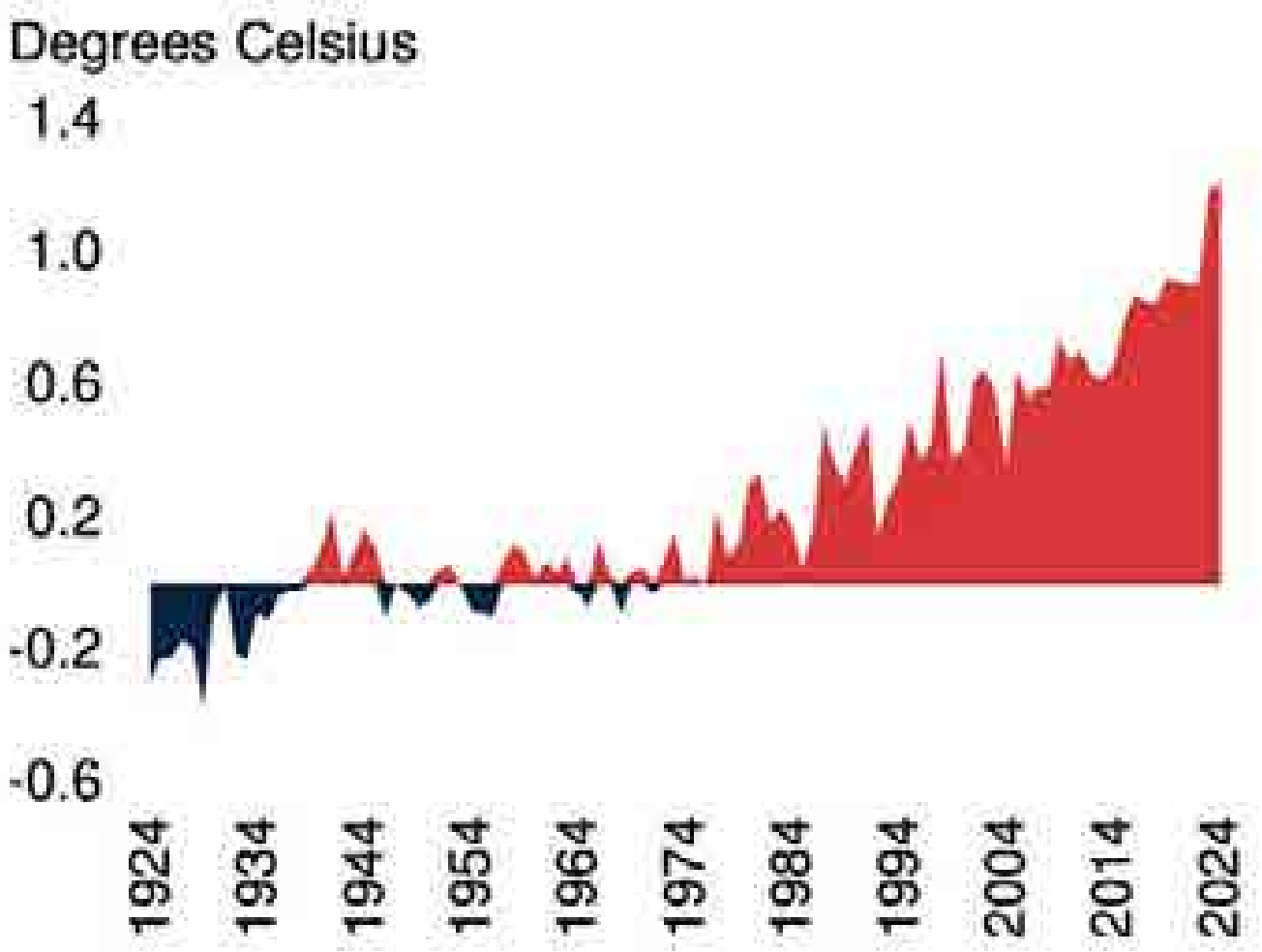
Sumitomo Mitsui Financial Group has become the first Japanese bank to leave the Net-Zero Banking Alliance (NZBA), according to the alliance's website. A spokesperson for the bank confirmed the departure to Bloomberg. The initiative has experienced a swathe of exits this year, including from major US banking groups including JPMorgan, Citi and Goldman Sachs, as well as Canadian banks and Macquarie in Australia.

WELCOME BACK, «CLEAN & INDUSTRIAL» INSTEAD OF «GREEN»…



We should have reduced emissions, but…

D. July temperature anomalies relative to 1901-2000 average

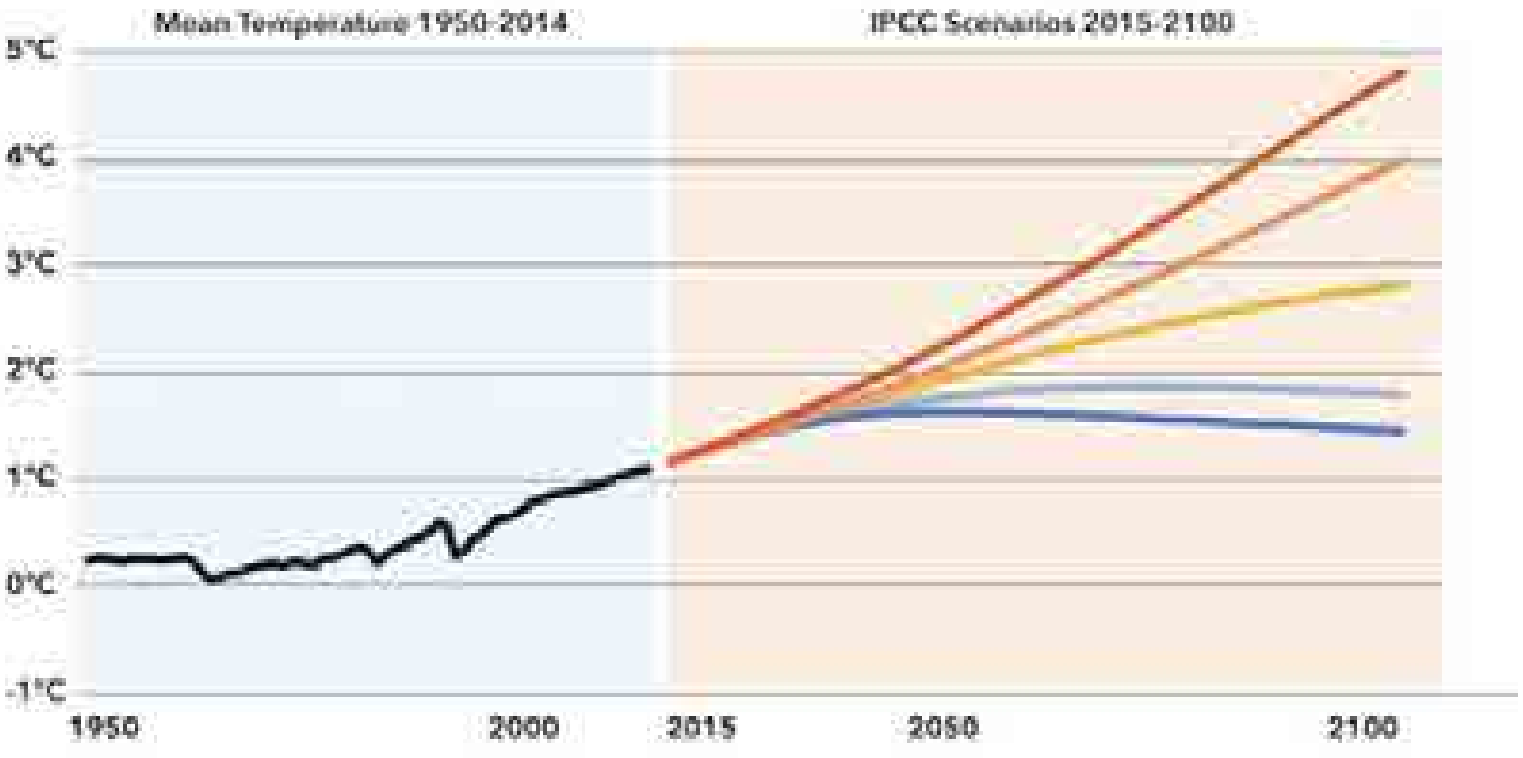


We should have been cooler, but…

Source: World Bank - Global Economic Prospects, January 2025

Figure 1.4 Uncertain Future

(temperature change in °C, scenarios used by the IPCC)



There is significant uncertainty about the trajectory of global emissions and as a result global warming.

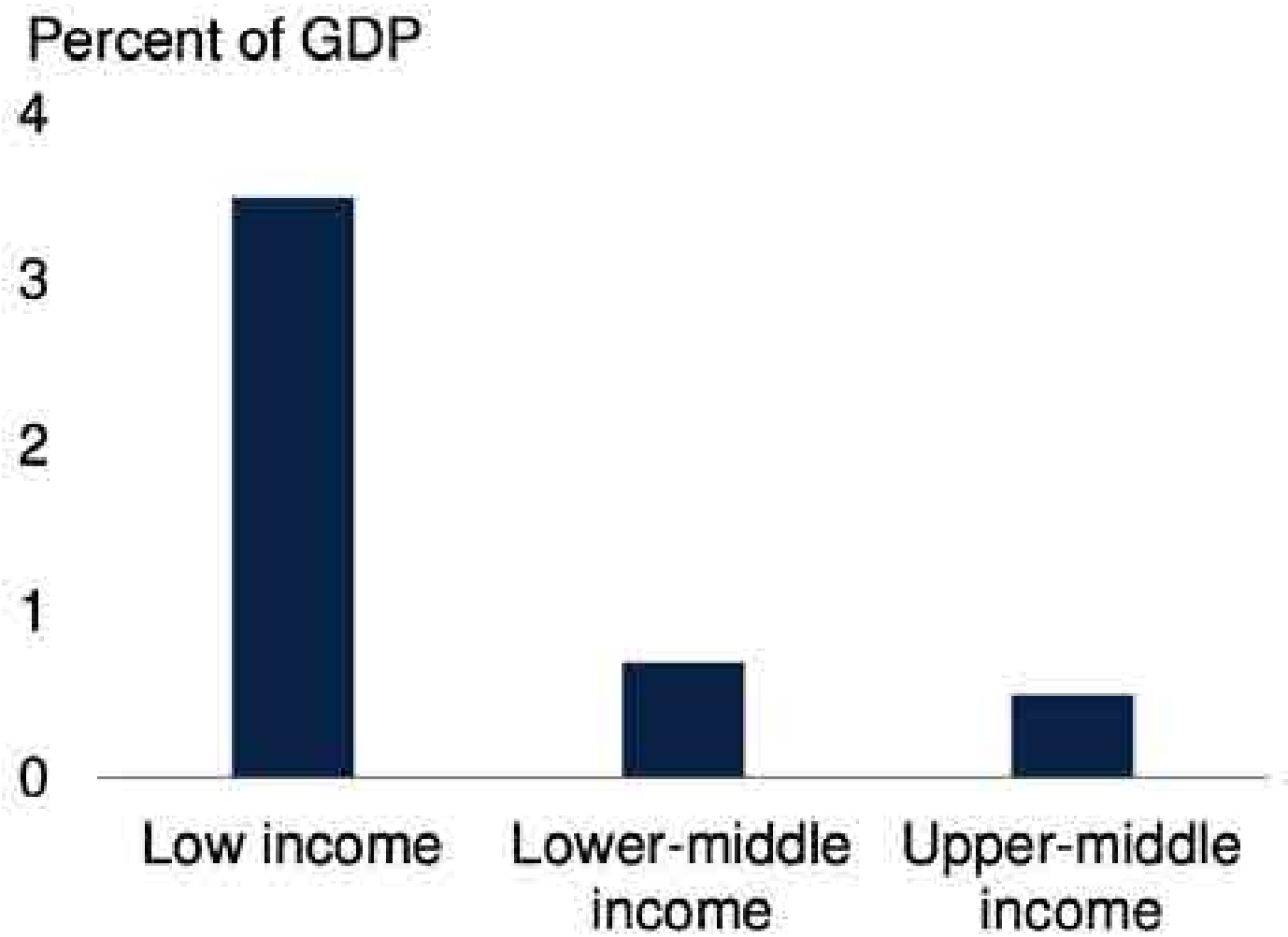
Source: IPCC, 2021 Summary for Policymakers.
Note: Global surface temperature change relative to period 1850–1900.

structural challenges that pose risks
prospective balance of payments sta
became operational in October 202
intended to help member countries
longer-term challenges–including cl
and pandemic preparedness. The re
implemented under the RSF arrange

Uncertain scenarios on global warming.

An increase of 4 degrees would be catastrophics for the global environment.

D. Annual climate adaptation costs



Getting green isn’t for the poors…

Source: World Bank - Global Economic Prospects, January 2025