



Megatrends from a European Perspective

Post-crisis Europe and what Good Tax Policy Should do Next





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December 2025



Agenda

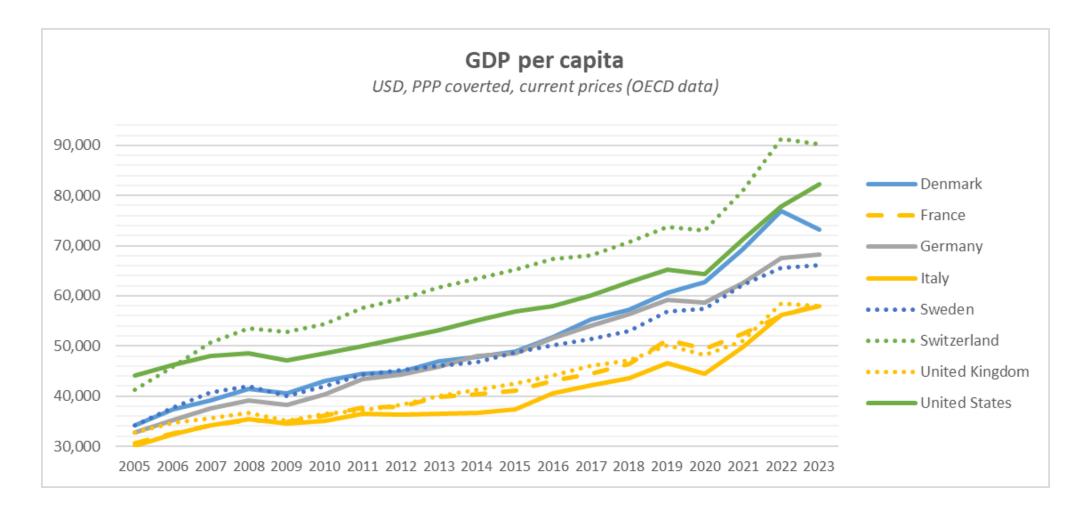
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Europe since the Global Financial Crisis

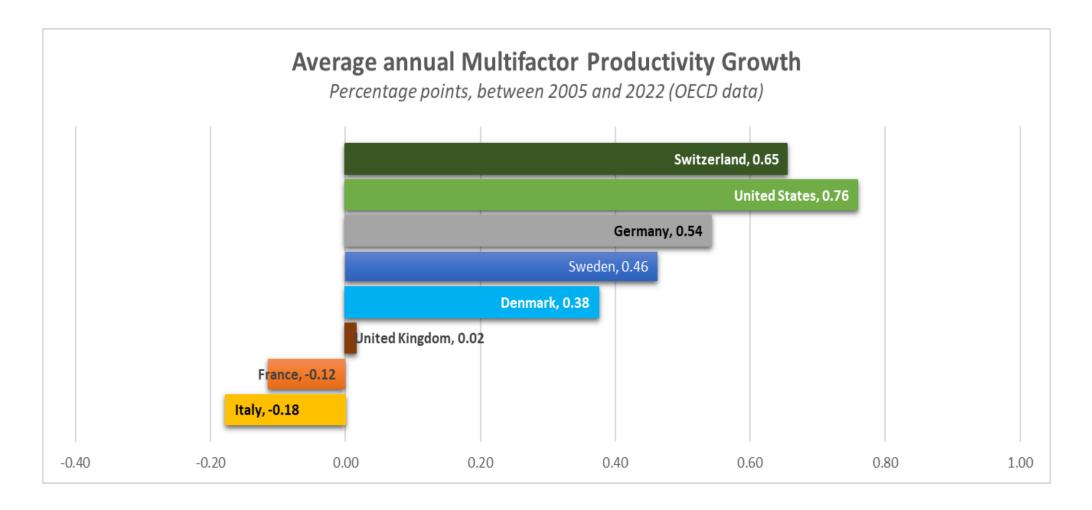
GDP per capita, selected jurisdictions

2005-2023



Multifactor productivity, annual average growth

2005-2022



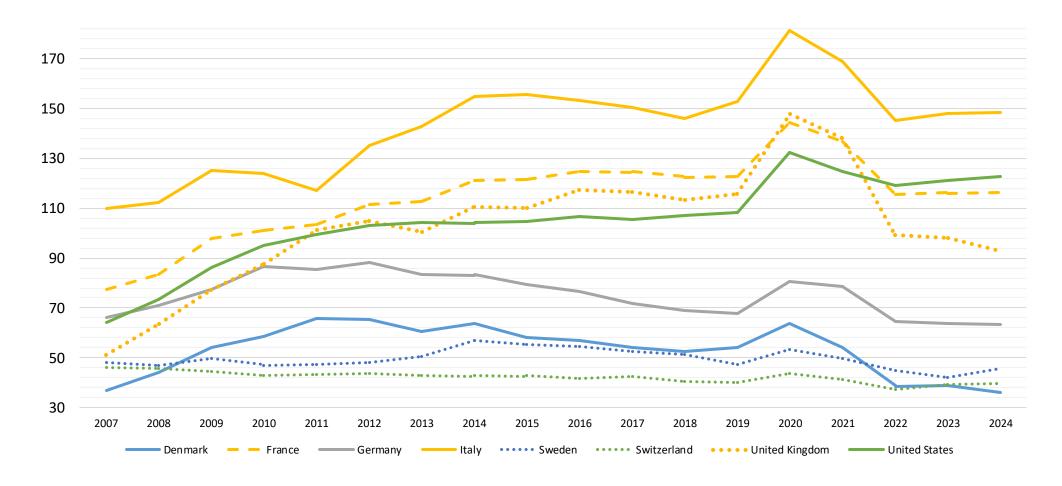
Demographic Shifts in Europe

Europe is ageing faster than many peers

- Eurostat's latest <u>EUROPOP projections</u> show the euro area's **working-age population (15–64)** falling by about **19% between 2022 and 2100** (from 221m to 180m).
- The old-age dependency ratio (65+/15-64) is projected to rise from 34% in 2022 to about 51% in 2050 and 60% in 2100.
- The OECD shows that in many Southern and Eastern European countries (Italy, Spain, Greece, Portugal, Poland, etc.) the working-age population could shrink by **more than a third by 2050**, making Europe one of the regions most affected globally (OECD Employment Outlook, 2025).
- Börsch-Supan (<u>ECB Sintra paper</u>) emphasises that the euro area's working-age population is projected to fall by around **16% between 2015 and 2050**, more than double the decline expected in the US (about 8%).
- Europe faces a **more severe demographic headwind** than the US on average, and similar in magnitude to Japan or Korea for some countries.

Government debt as % of GDP

Government gross debt, General Government



Source: OECD Public Finance Main Indicators, 2025



The Trends Beyond the Headlines

Technological Disruption – Automation and Reallocation

Capital versus Labour

Massive net job losses from AI?

Return to labour to decrease drastically?

Empirical evidence:

- Historically, similar fears (Luddites in the 19th century, Keynes' "technological unemployment" in 1930) did **not** materialise: 19th–20th century mechanisation replaced some tasks but created new sectors and jobs and did not impoverish workers overall.
- Acemoglu et al. (2020) show that in the US 2010s there was a big rise in AI-related job postings, especially in firms performing AI-relevant tasks; those firms cut hiring for non-AI jobs and shifted skill demand toward AI-complementary skills. At the aggregate level they find no overall effect on employment or wage growth so far suggesting reallocation within firms rather than a collapse in total jobs and pay.
- Spencer Bastani and Waldenström (2024)
 - The empirical literature on labour vs. capital shares is mixed: some papers suggest a downward trend in labour shares, especially in the US, but there is no consensus on the size or causes of any decline.
 - OECD countries: net labour shares relatively stable over the last 25 years, typically 70–90% of national income in both 1995 and 2021. Some countries (notably the US) do show a decline, but in others France, Italy, the UK labour's share has increased; cross-country differences are larger than changes over time.

Return to labour to decrease drastically?

Labour and AI-related capital may be **complements**: if enough workers' productivity rises with AI investment, labour's overall share can remain stable even as AI diffuses.

Even if some jobs disappear, **new ones will emerge**, as work is reallocated rather than simply destroyed.

By boosting productivity, AI and related technologies can support **higher wages over time**.

Is AI Different? Is Europe Different?

Challenges

IS AI DIFFERENT?

Past waves of technology did not bring about the "end of work", but that history may not be a perfect guide for AI.

Generative AI is a general-purpose technology that can:

- 1) automate a far wider range of cognitive and creative tasks, not just routine or physical ones
- 2) be applied across almost all sectors and stages of production, and
- 3) scale at very low cost once deployed.

This combination means its impact on jobs, skills and wages could be broader and faster than previous technological shifts – and policy, including tax policy, needs to be designed with that uncertainty in mind.

IS EUROPE DIFFERENT?

Historically, Europe slower in adopting new technology.

- 1990s–2000s (investment in ICT)
- 2000s to 2020s (digitalisation)

Europe's problem is less about *access* to technology and more about *diffusion and scale*.

Top European firms can be close to the global frontier, but there is a long tail of smaller firms that adopt late or not at all.

Europe looks strong in some manufacturing niches (e.g. German, Italian robotics and machinery) but less aggressive in automation in many sectors, and much weaker in scaling digital platforms.

Demographic Shifts

Effects for European Economies

GDP - Labour quantity reduction is a mechanical drag on potential GDP and GDP per capita

• OECD simulations suggest population ageing alone could subtract close to 8% from GDP per capita between 2021 and 2050 (~0.25 ppts of annual per-capita growth) if age- and gender-specific employment rates do not rise (OECD Employment Outlook, 2025).

Effect on innovation – fewer young workers, less dynamism

- Ageing workforces are associated with fewer young firms, weaker business dynamism and slower adoption of new technologies; this shows up as lower TFP growth and patenting in many European countries.
- <u>IMF</u> and <u>ESM</u> work find that projected ageing could reduce European TFP growth by around 0.2 ppts a year over the next two decades and that a 1 ppt rise in the dependency ratio is linked to persistent falls in labour productivity and patent applications.
- ESM estimates that raising growth-enhancing investment (in R&D, human capital and digital infrastructure) by roughly 0.2% of GDP can offset the productivity loss from a 1 ppt permanent increase in the dependency ratio.

Demographic Shifts

Effects for European Economies

Effect on productivity – not fixed or catastrophic

- Micro data show a "hump-shaped" age-productivity profile at the individual level productivity tends to rise through mid-career and flatten or decline somewhat at older ages.
- The OECD emphasises that evidence of a steep productivity drop at older ages is mixed and that firm practices (teamwork, job design, continuous training) can largely neutralise it.
- Ageing can even raise productivity per worker via **capital deepening** and stronger incentives to **automate**, modernise work organisation and adopt AI, especially in sectors facing labour shortages (<u>Acemoglu & Restrepo, 2022</u>).
- Policy choices are crucial multipliers: later and better-quality working lives and sustained investment in skills, R&D, and digital and green technologies will determine whether ageing becomes a drag or a catalyst for higher productivity.

Demographic ageing in Europe is a structural headwind that will mechanically slow growth by shrinking the labour force and, if unmanaged, dampening innovation. But the literature does not predict a demographic catastrophe. The long-run effect on productivity depends critically on how Europe responds – in particular whether it succeeds in keeping people healthy and working longer and using technology and investment to raise productivity per worker.

Demographic Shifts intersecting Technological Disruption

Cross-border mobility

PwC 2024 Hopes & Fears Survey – 56,000 workers in 50 countries (covering around 90% of global GDP) – **reveals structural shifts in how we work.**

- Nearly half of jobs can now be done remotely (48%).
- Among remote-enabled jobs:
 - Only 1 in 5 is performed fully in person.
 - Hybrid working is the dominant mode.
 - Full-remote is more popular than full in-person (23%).
- Among those who effectively work remotely (full or hybrid):
 - 56% have worked across borders (around 1 in 5 of the total sample).

Labour mobility allows people to sell their skills globally while remaining in Europe, **Europe** as a "home hub" for talent working for foreign companies.

Opportunity for EU firms, which can tap into global pools of talent more easily, filling shortages and bringing in new ideas without needing people to relocate/immigration.

Risk: selective loss of talent and tax base: the most mobile workers tend to be the best educated and most experienced, so if they move their residence or careers abroad, Europe could lose both skills and fiscal revenues.

Overall, **labour mobility is not inherently** harmful to European productivity and tax base but need right policies.



The Role of Tax

The Role of Tax

Three key areas for good tax policy

TAX BURDEN IN EUROPE

High overall tax burden: in 2024, total taxes and social contributions in the EU amounted to about 40.4% of GDP, and 40.9% in the euro area (Eurostat).

By comparison, the average tax-to-GDP ratio across OECD countries was around 33.9% in 2023 (OECD Revenue Statistics).

Europe already asks a lot of its tax base; further increases in the tax burden risk weighing on investment, work incentives and long-run growth.

EFFICIENCY OF TAX COLLECTION

When tax ratios are already high, efficiency becomes critical: Europe cannot afford costly or ineffective ways of raising revenue.

Complex rules, heavy compliance costs, fragmentation across Europe distort economic decisions more when the overall tax take is large.

If growth remains modest, inefficient tax collection will consume an increasing share of the limited gains our economies generate.

COMPOSITION OF THE TAX BASE

Technological change and digital business models mean profits, data and intellectual property are and can increasingly be located outside the EU,

while labour itself is becoming more mobile (for example through remote work) especially for the highly skilled, educated and experienced workers.

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