REWIRING EUROPE'S PRODUCTIVITY FRAMEWORK: ALIGNING INVESTMENT, INNOVATION, AND DIFFUSION

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FROM INNOVATION AND DIFFUSION TO PRODUCTIVITY OUTCOMES

1. **Europe's productivity gap** with the United States has widened again — and compounding makes it matter over time.

2. **The gap is mostly within sectors**, not because Europe is concentrated in the "wrong" sectors.

3. **Innovation raises productivity** when firms can commercialise, adopt, adapt and use new technologies effectively.

4. **Policy must facilitate investment in intangibles and strengthen innovation capabilities** so diffusion delivers better outcomes for firms, people and places.

EUROPE'S COMPARATIVE PRODUCTIVITY PERFORMANCE KEEPS WEAKENING

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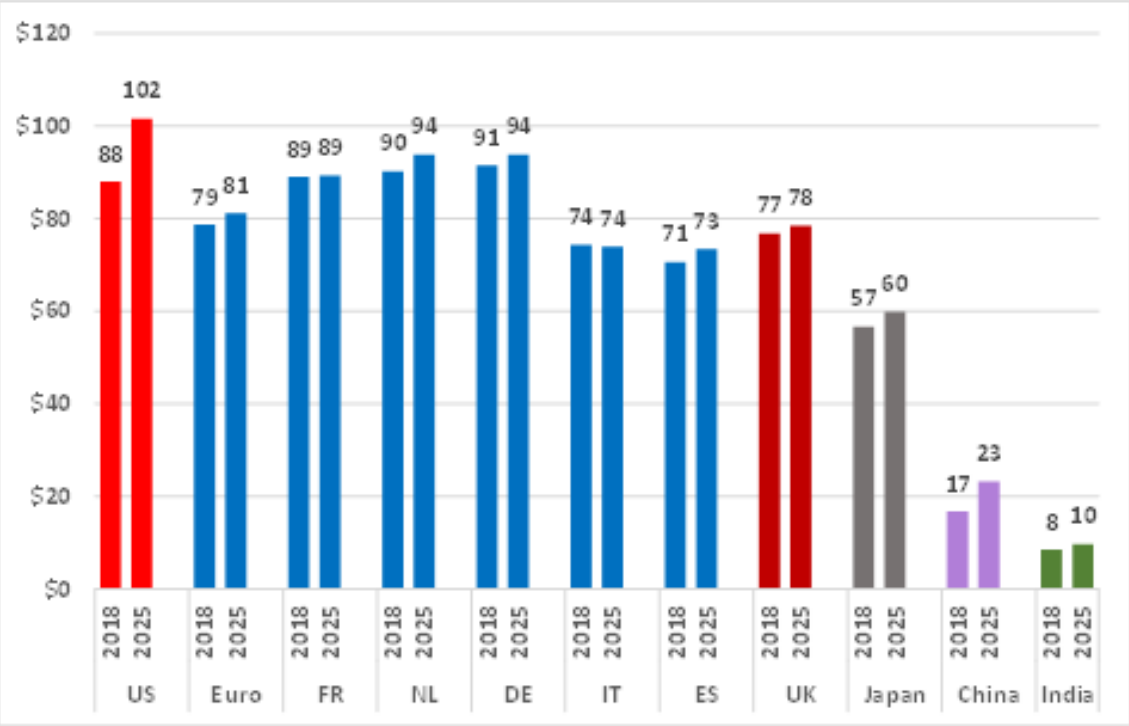
Chart 1

Levels of Labour Productivity, 2018 and 2025 (in real 2024 US$)

(GDP per hour worked, US$ constant 2024 US$ based on 2021 PPP,)

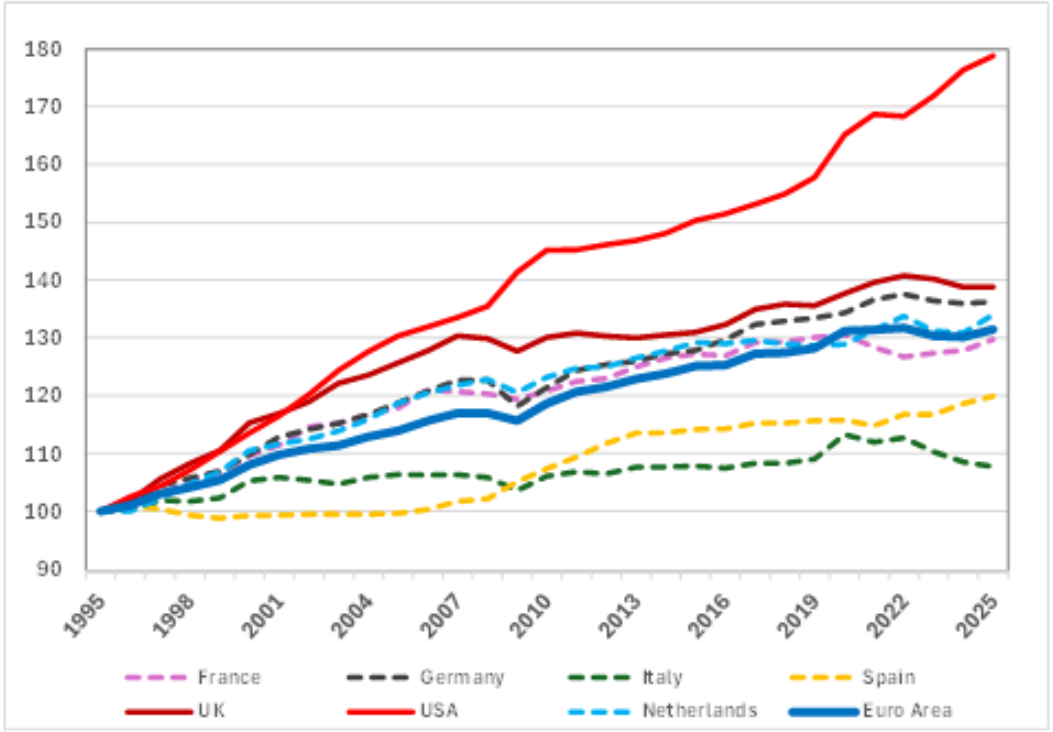


Sources: The Conference Board, Total Economy Database, update, 2025;
Note: euro area current membership; FR = France; NL = Netherlands; DE = Germany; IT = Italy; and ES = Spain.

Chart 2

Growth of GDP per Hour, 1995-2025 (1995=100)

GDP per hour worked), 1995=100



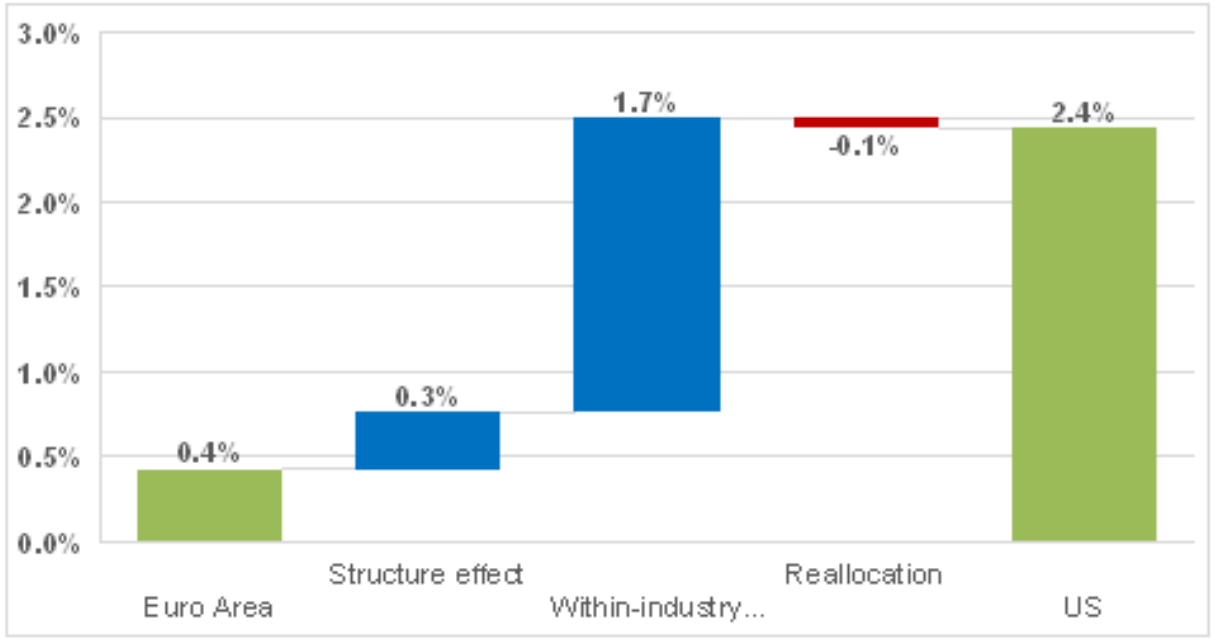
Sources: De Vries, Martin and van Ark (2026), based on Eurostat, ONS, BLS and BEA
Note: euro area current membership.

PERFORMANCE DOMINATES OVER STRUCTURE

Chart 3

euro area-US labour productivity growth GAP, market economy, 2018-2025

(percent, labour productivity growth, average annual)

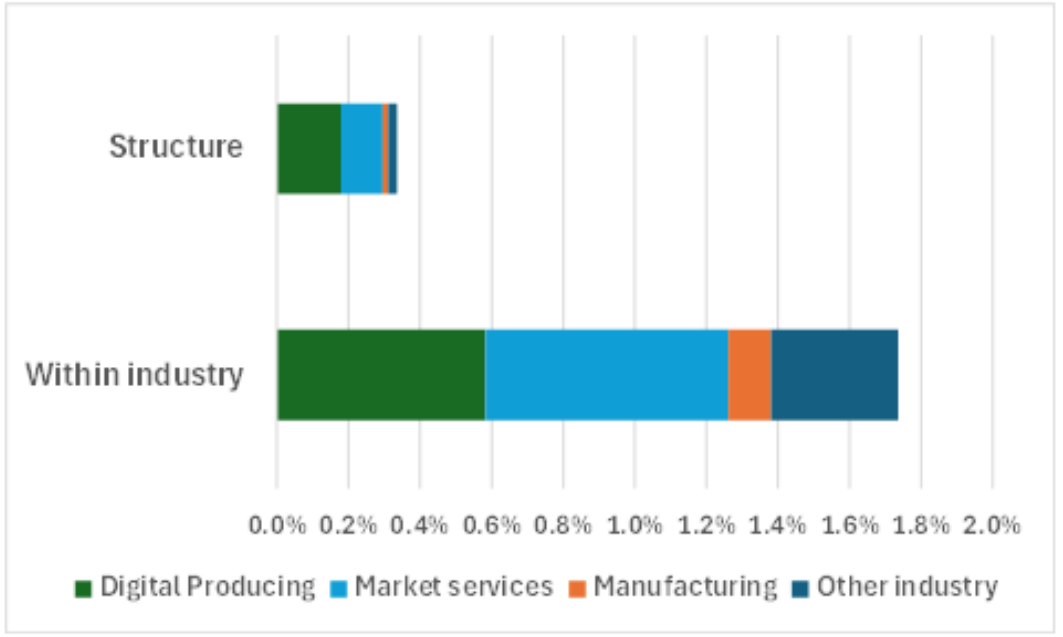


Sources: De Vries, Martin and van Ark (2026), based on Eurostat, BLS and BEA.
Notes: euro area excludes Cyprus, Estonia, Ireland, Luxembourg and Malta due to data issues. Market sector excludes all public administration and defence, education and health and social care activities. Real estate activities and activities of households as employers are also excluded.

Chart 4

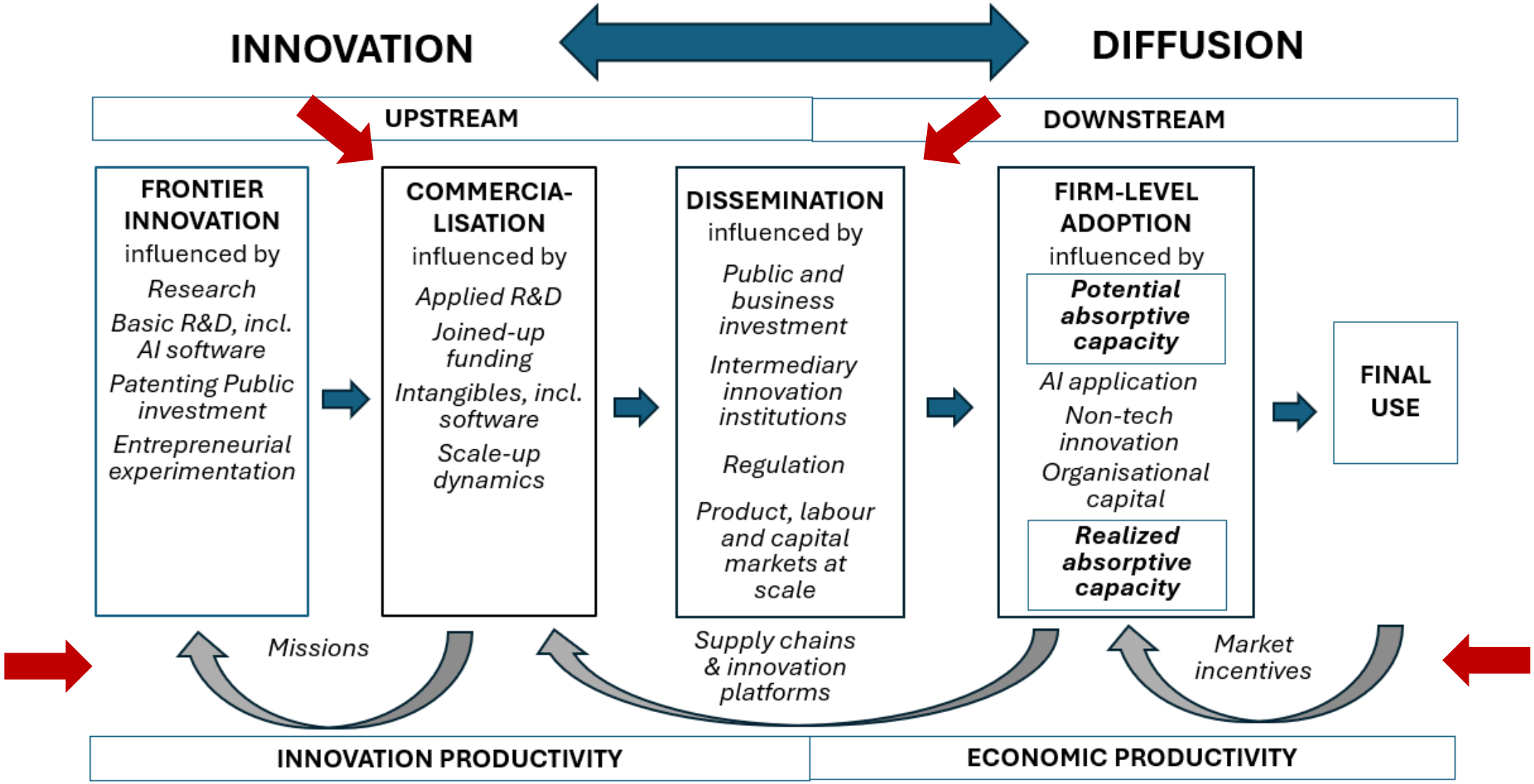
Decomposition of euro area-US labour productivity growth gap by major sector group, market economy

(Percentage point contribution to combined structure and within-industry gap, value added per hour, average annual %



Sources: De Vries, Martin and van Ark (2026), based on Eurostat, BLS and BEA. See Chart 3 for total euro area-US labour productivity growth gap
Notes: euro area excludes Cyprus, Estonia, Ireland, Luxembourg and Malta due to data issues. Market sector excludes all public administration and defence, education and health and social care activities. Real estate activities and activities of households as employers are also excluded.

THE INNOVATION AND DIFFUSION SYSTEM



AI AS EUROPE'S PRODUCTIVITY RISK AND OPPORTUNITY

1. **Artificial intelligence is a general-purpose technology**, raising productivity levels, but may also **improve invention itself** and possibly growth rates.

2. **The US has captured more AI upstream value**: AI software may explain +/- 40% of its recent rise in U.S. TFP growth; whereas this is effect is negligible in Europe (Bontadini et al, 2026).

3. **Adoption is still early and uneven**: firm-level adoption rates are in the high teens/low twenties, with large gaps by country and firm size.

4. **Europe's opening is the application layer**: gains require skills, work redesign and scaling in sectors where Europe is strong.

FROM TECHNOLOGY TO PRODUCTIVITY: THE ROLE OF INTANGIBLES

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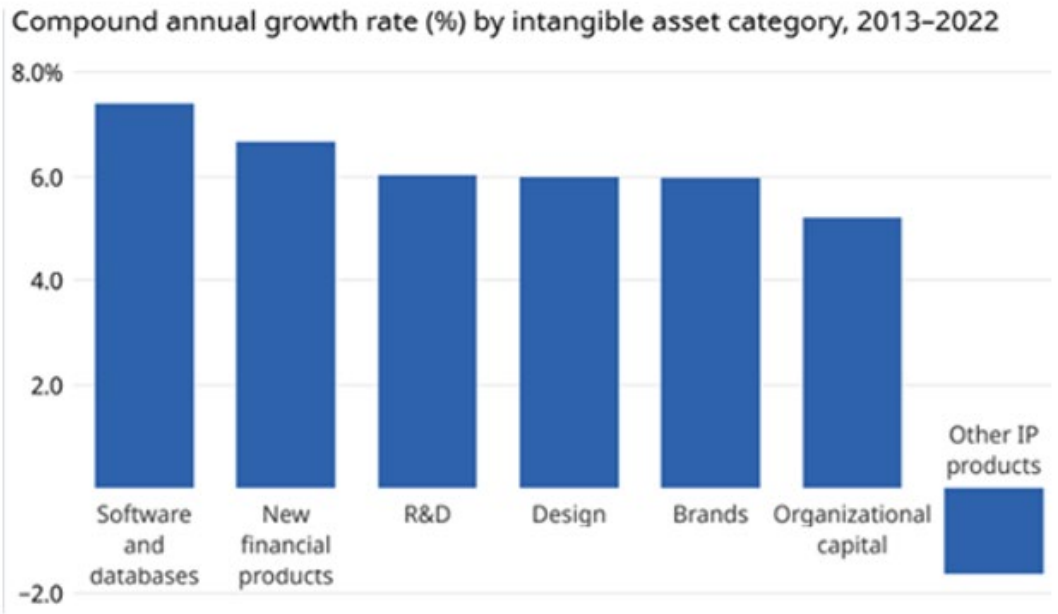
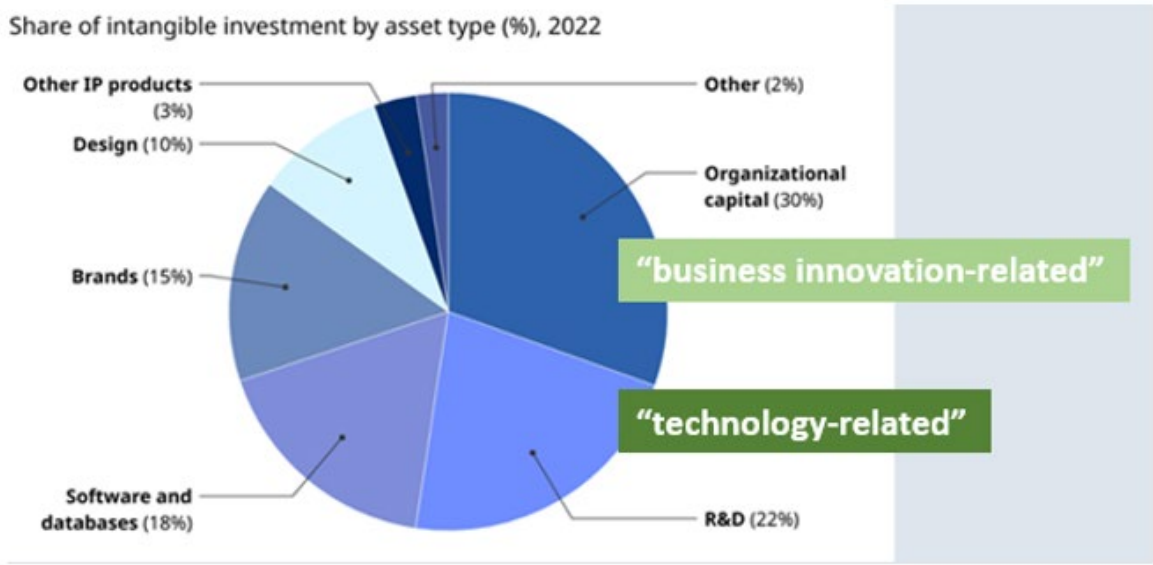
Chart 10

Growth and shares of intangible investment by asset category

(10a) Growth by intangible asset category, 2012-2022, annual %



(10b) GDP share of intangible investment by category (2022), %



Sources: WIPO–LBS Global INTAN-Invest Database, July 2025.
Note: Intangible investment by asset type has been aggregated over the sample countries: EU-22, India, Japan, the UK and the US.

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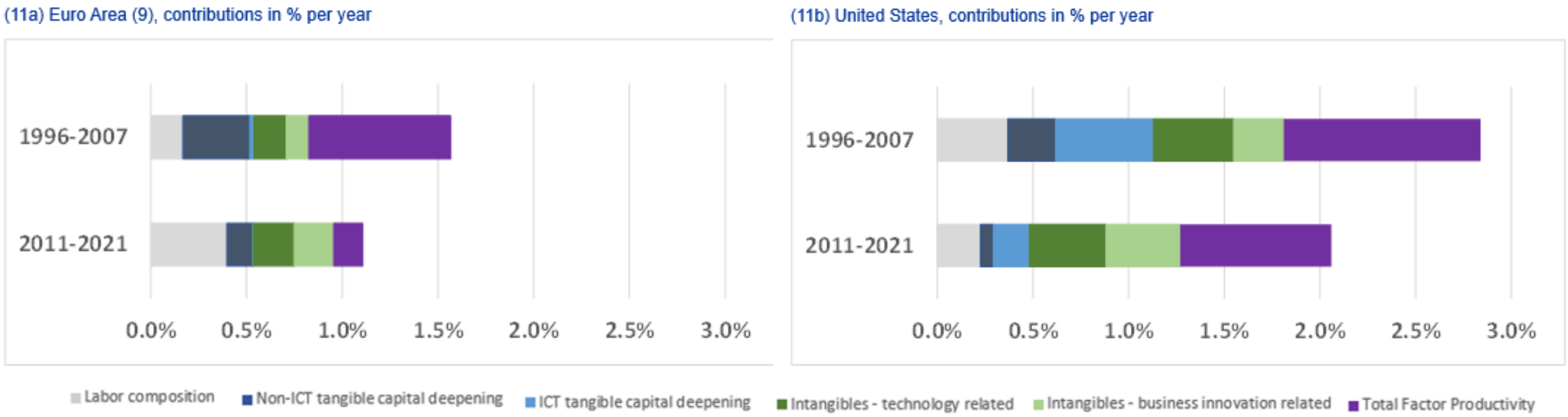
Chart 11

Decomposition of Labour Productivity Growth, Market Economy. 1996-2021



Note: EU(9) includes Austria, Germany, Denmark, Finland, France, Italy, Netherlands, Spain and Sweden
Source: EUKLEMS & INTANProd (2023); Van Ark et al. (2024b) with series updated from 2019 to 2021.

WHAT DOES THIS MEAN FOR POLICY?

1. **When diffusion is credible, intangibles can lift demand and R*; when it is not, they mainly weaken transmission.**

2. **Connect vertical and horizontal policy: industrial strategy can build scale, but productivity rises only when competition, markets, capital, skills and mobility spread it.**

3. **EU governance is multi-level: the EU steers markets, competition and trade, while sector policy often sits nationally — yet today's challenges span both levels.**

4. **Rewire the division of labour: use EU action for scale, missions, shared infrastructure and standards; use national policy for skills, SMEs and local absorption.**

A BROADER PRODUCTIVITY FRAMEWORK: FROM GDP TO WELFARE, FROM INPUTS TO ASSETS

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BROAD-BASED ACCESS
Resources, capabilities and opportunities reach firms, people and places

→

PRODUCTIVITY MECHANISM
Use resources better to create outcomes for people, firms and the economy

→

INCLUSIVE GROWTH
Productivity gains are shared widely and sustainably across society

Sources: based on Stiglitz et al. (2018); Heys et al. (2019); Coyle (2025); United Nations (2026); Pilat and van Ark (2026).

REWIRING EUROPE'S PRODUCTIVITY FRAMEWORK: THREE TAKEAWAYS

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1. **Not innovation vs diffusion** — Europe needs to reconnect the two.

2. **Productivity gains leak without capabilities** — skills, management, data, finance and organisation matter.

3. **Policy must reconnect levels in the innovation process** — EU scale, national reform, regional capability and firm investment.

Thank you !


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