# The economic opportunity of generative AI in the EU

Beyond the hype – boosting EU competitiveness with generative AI

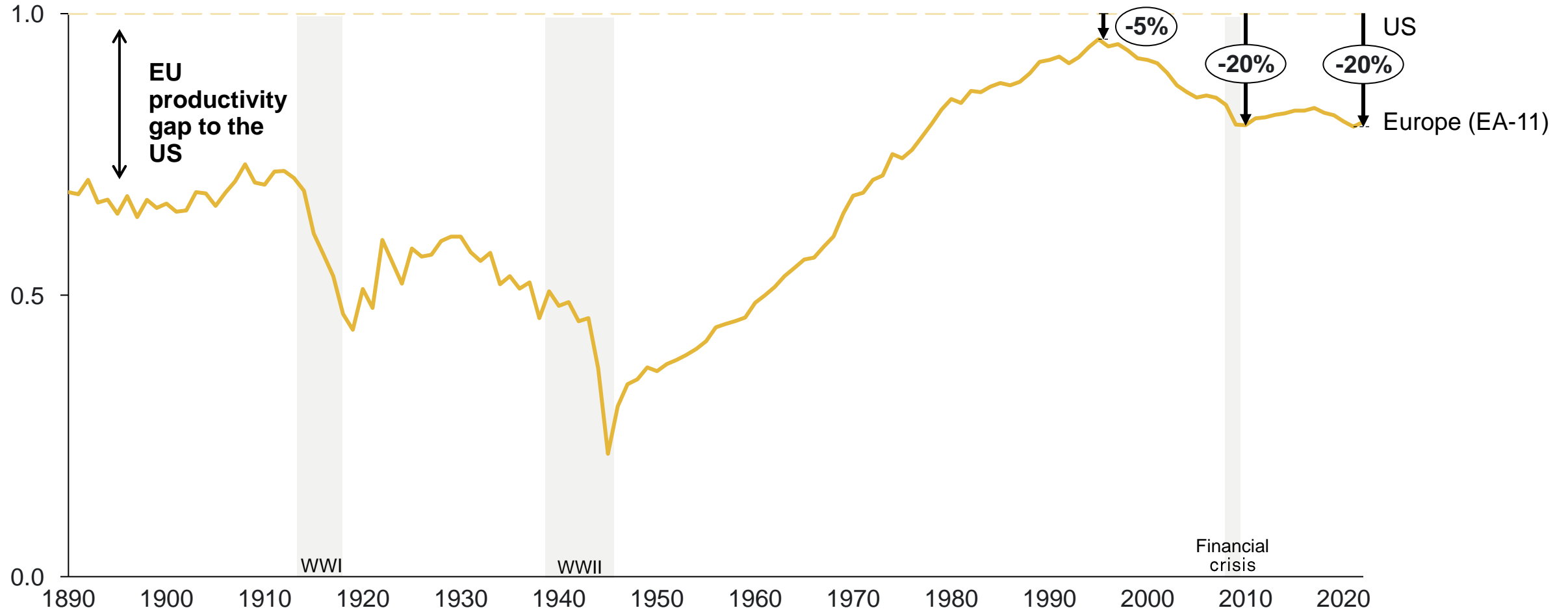**AI: The Next Frontier in Business? Insights from Europe's Leading Companies**

11 December 2024

# European competitiveness is largely determined by successful digital innovation and adoption across the economy
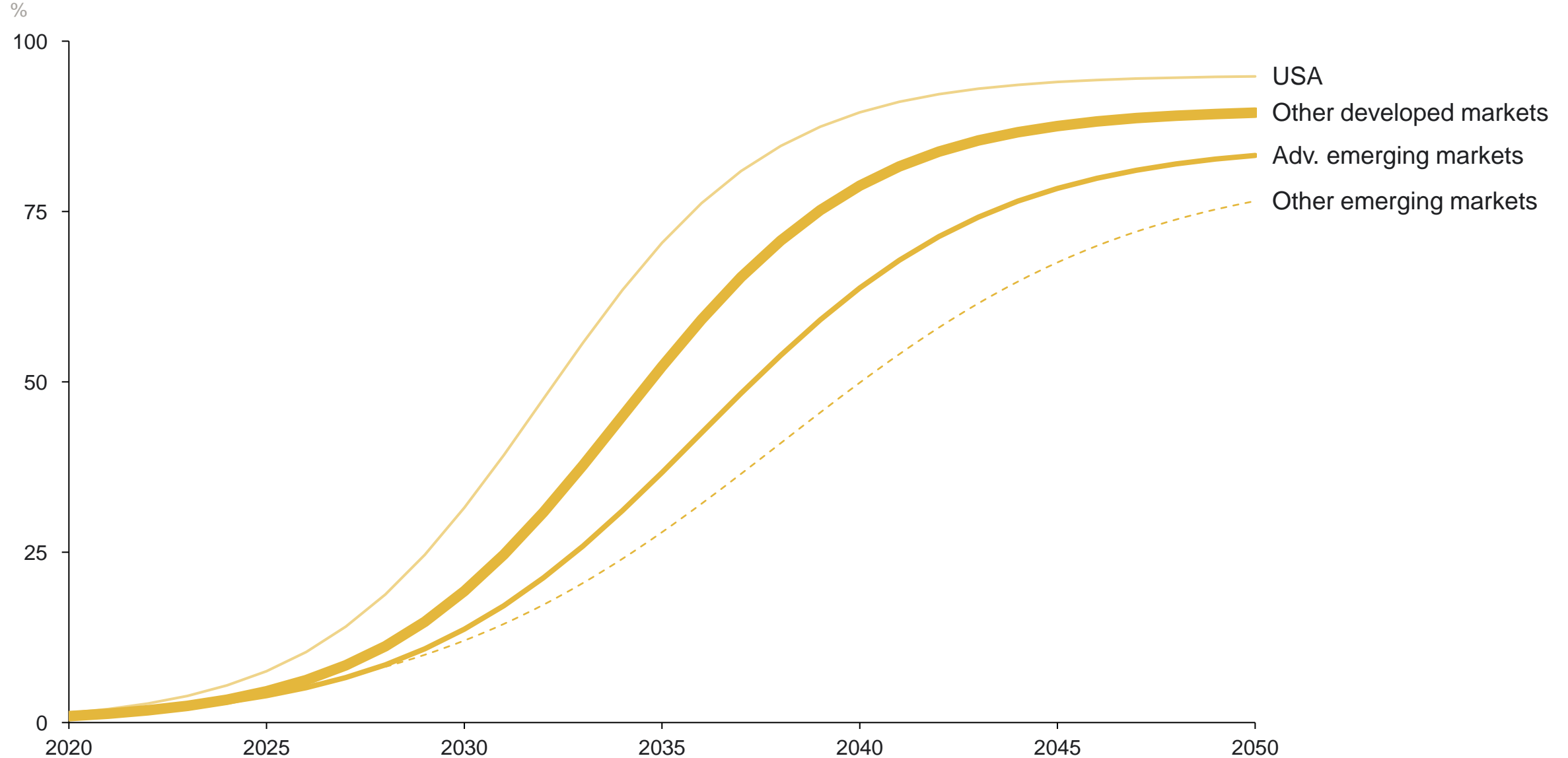
## Relative labour productivity
Ratio of European to US hourly labour productivity

# AI has the potential to transform the global economy over the coming decades
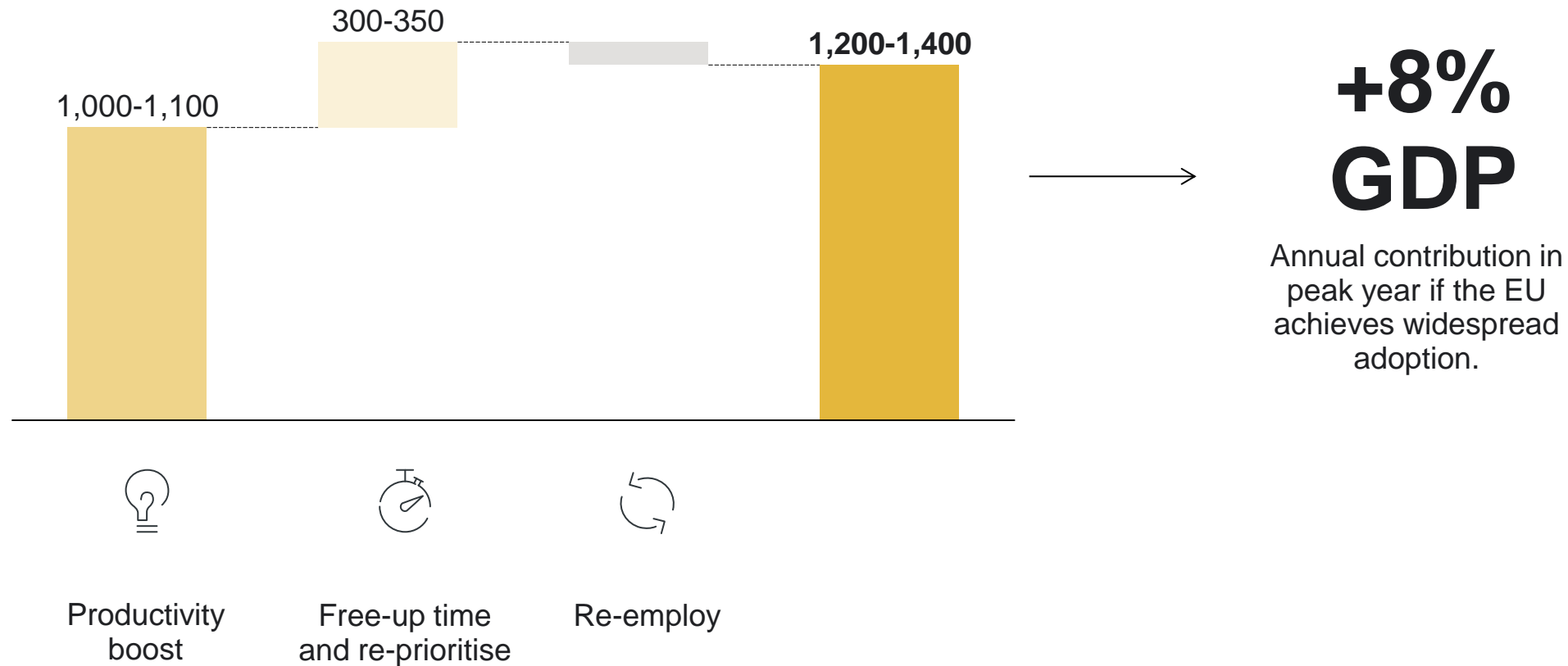
Adoption of generative AI

%



USA

Other developed markets

Adv. emerging markets

Other emerging markets

100

75

50

25

0

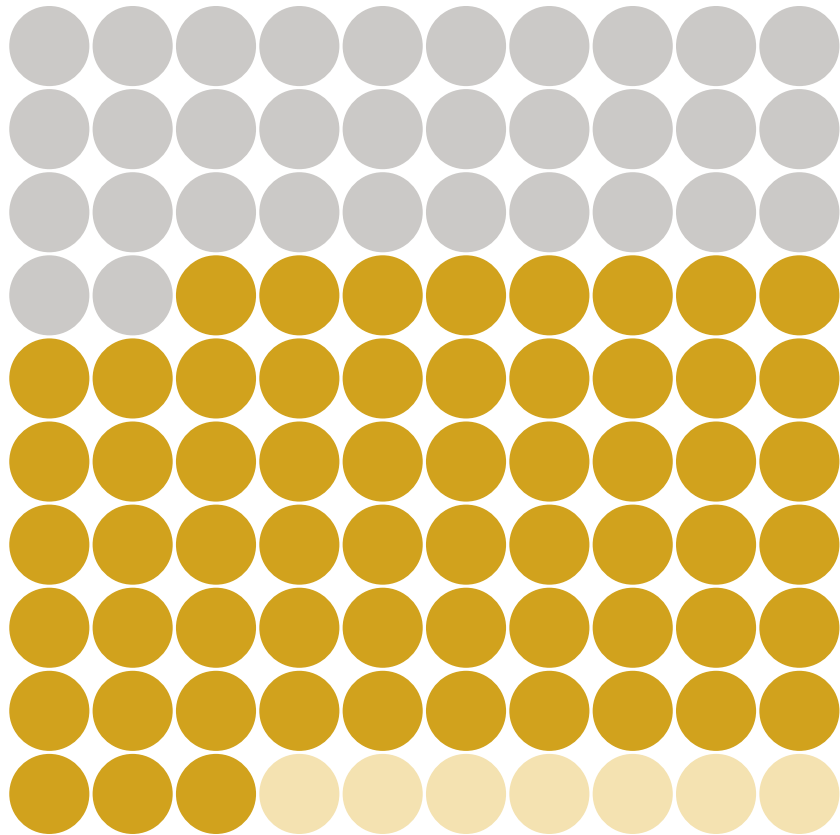2020    2025    2030    2035    2040    2045    2050

# Generative AI can contribute up to €1.4 trillion to GDP in the EU – causing growth to exceed current forecasts

## GDP potential of generative AI in the EU
€ billion annual increase from baseline GDP after a ten-year adoption period

300-350

1,200-1,400

1,000-1,100

**+8% GDP**

Annual contribution in peak year if the EU achieves widespread adoption.

Productivity boost

Free-up time and re-prioritise

Re-employ

Note: GDP figures are expressed in 2022 levels.

# Generative AI is expected to augment most jobs

| 32% | ~ **65 million jobs** with no exposure |

Baristas, construction workers, personal care (human-to-human tasks)
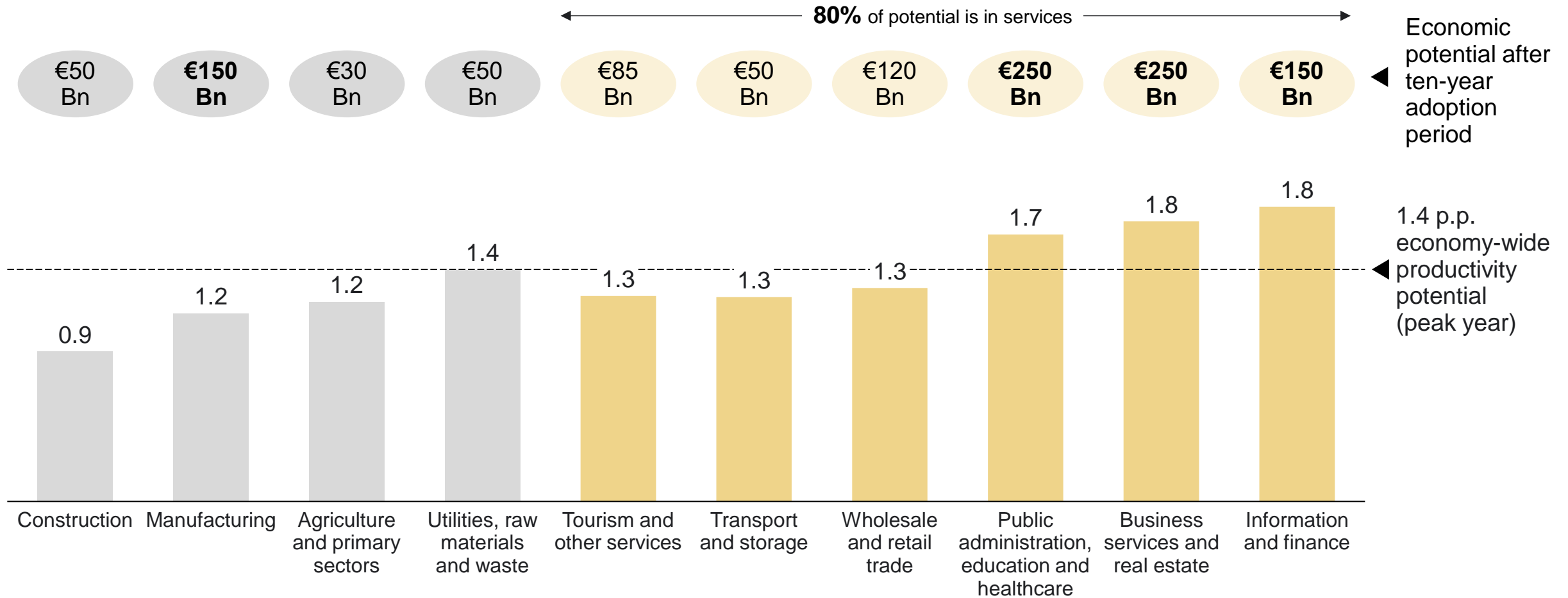
| 61% | ~ **125 million jobs** likely to be augmented by generative AI |

Teachers, architects, economists and managers

| 7% | ~ **15 million jobs** with high exposure |

Proofreaders, clerical support workers, contact centre salespersons

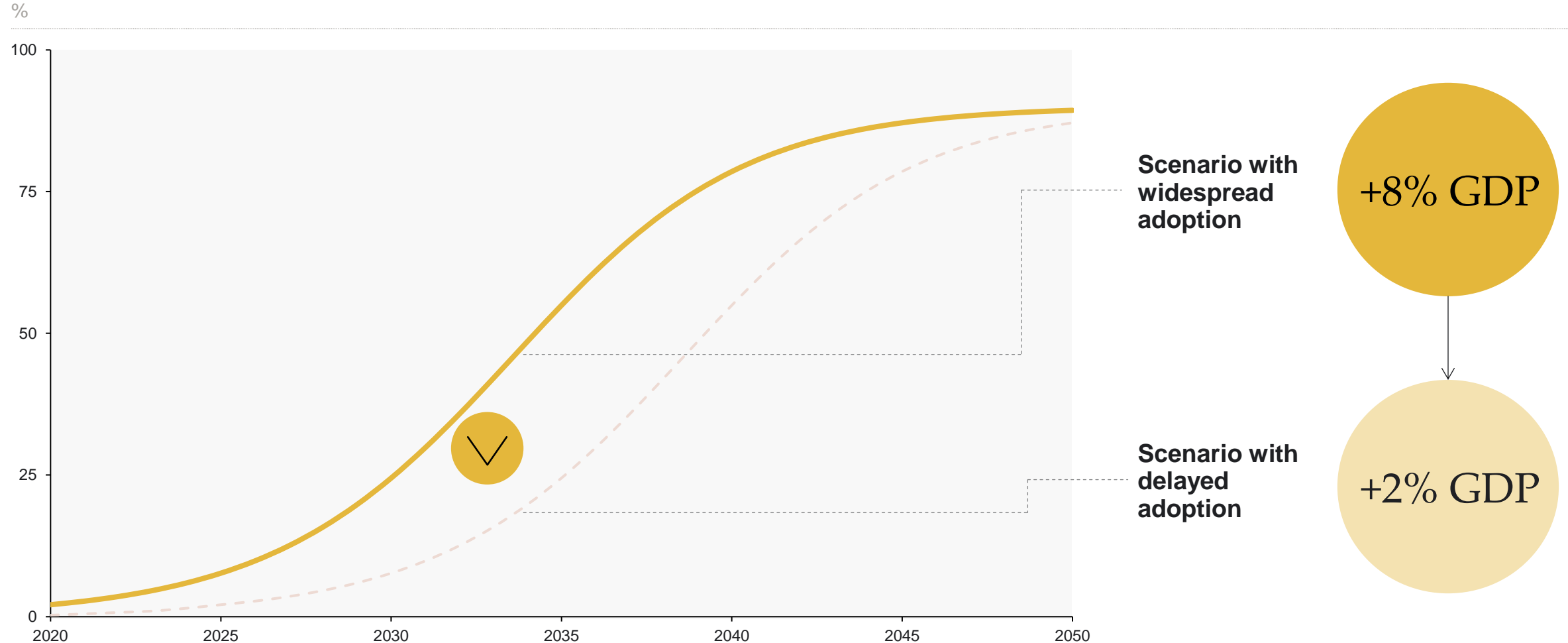# Generative AI can boost productivity across all sectors

## Productivity boost from generative AI
Percentage points productivity growth p.a. at peak

**80%** of potential is in services

Economic potential after ten-year adoption period

| €50 Bn | **€150 Bn** | €30 Bn | €50 Bn | €85 Bn | €50 Bn | €120 Bn | **€250 Bn** | **€250 Bn** | **€150 Bn** |

1.4 p.p. economy-wide productivity potential (peak year)

| Construction | Manufacturing | Agriculture and primary sectors | Utilities, raw materials and waste | Tourism and other services | Transport and storage | Wholesale and retail trade | Public administration, education and healthcare | Business services and real estate | Information and finance |
|---|---|---|---|---|---|---|---|---|---|
| 0.9 | 1.2 | 1.2 | 1.4 | 1.3 | 1.3 | 1.3 | 1.7 | 1.8 | 1.8 |

# A five-year delay in the adoption of generative AI could reduce the potential GDP contribution significantly

Adoption of generative AI
%



Scenario with widespread adoption

**+8% GDP**

Scenario with delayed adoption
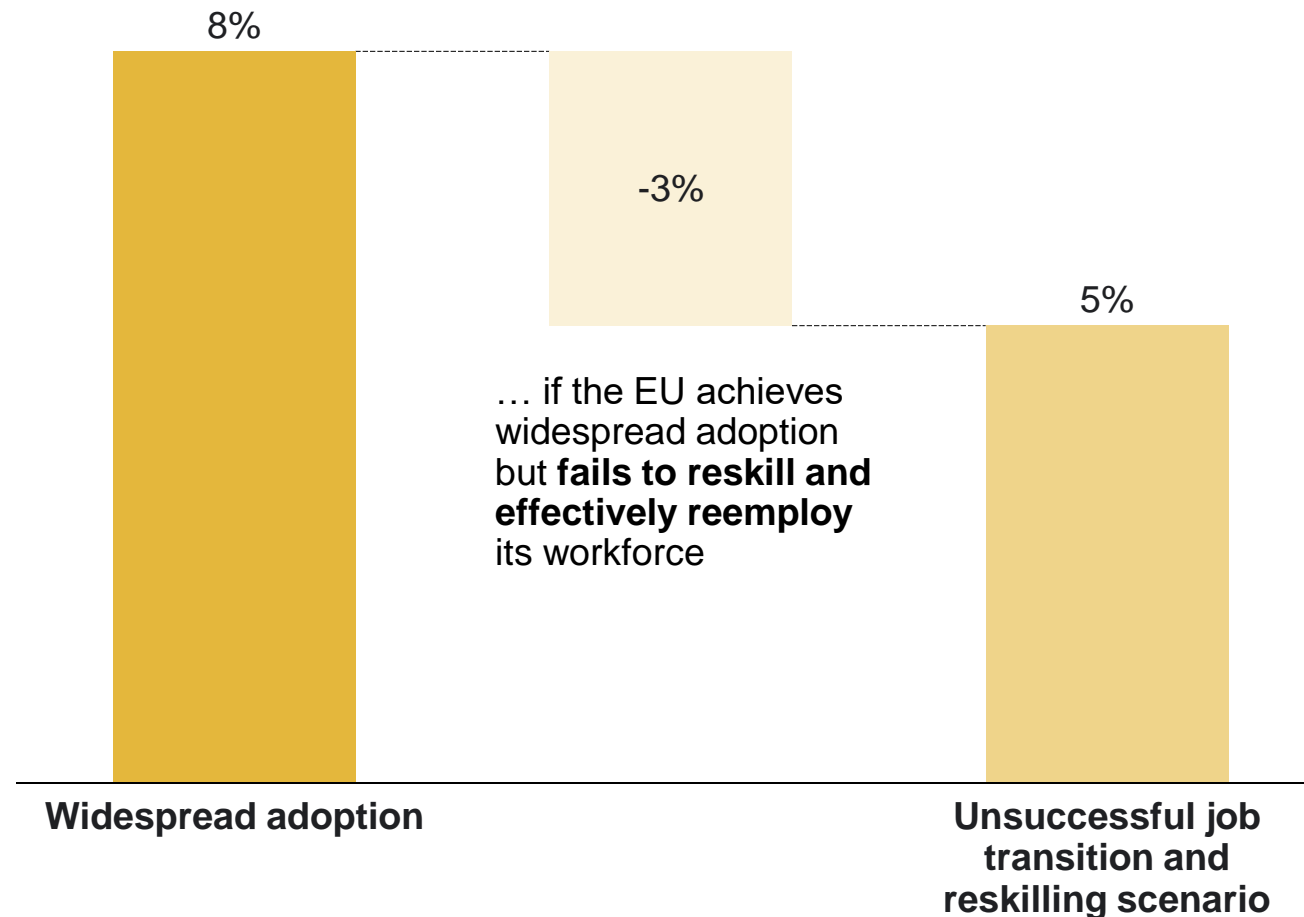
**+2% GDP**

# Reskilling and upskilling are key for the economic opportunity – failing to do so can reduce the potential from generative AI

## GDP potential of generative AI in the EU
% contribution to GDP after a ten-year adoption period



8%

-3%

5%

… if the EU achieves widespread adoption but **fails to reskill and effectively reemploy** its workforce

**Widespread adoption**

**Unsuccessful job transition and reskilling scenario**

*"The competitiveness of the European economy depends on its ability to close current and future skills gaps."*
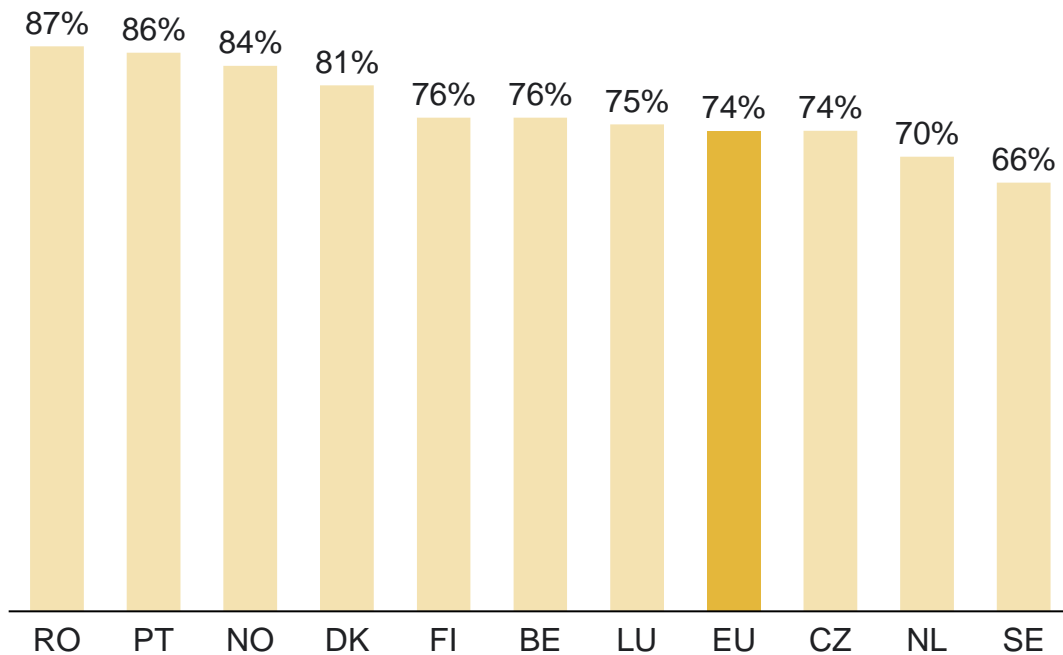
Mario Draghi

# 74% of European workers see generative AI boosting productivity, and 43% expect it to positively impact their jobs
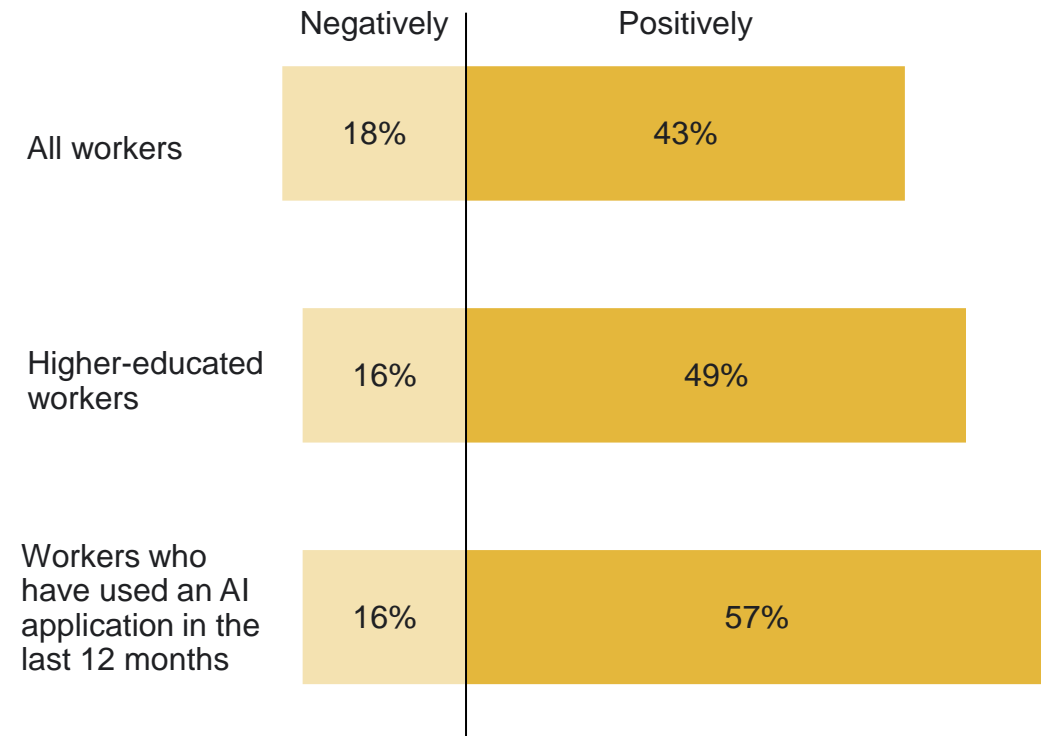
## Workers in Europe think that generative AI makes them more productive
%, Generative AI will help improve my productivity at work



| RO | PT | NO | DK | FI | BE | LU | EU | CZ | NL | SE |
|----|----|----|----|----|----|----|----|----|----|----|
| 87% | 86% | 84% | 81% | 76% | 76% | 75% | 74% | 74% | 70% | 66% |

## Workers in European countries think that AI will positively impact their job
%, How will AI impact your job over the next five years?



| | Negatively | Positively |
|---|---|---|
| All workers | 18% | 43% |
| Higher-educated workers | 16% | 49% |
| Workers who have used an AI application in the last 12 months | 16% | 57% |

# The EU performs well on basic adoption drivers but lags behind on innovation drivers

## The EU's AI capacity according to the Tortoise Global AI Index

Global AI Index, score out of 100 (global leader)