

# The AI Weekly



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## The History of US Productivity Ebbs & Flows with Technology

US productivity has historically moved in waves that line up loosely, though imperfectly, with major general-purpose technologies: electrification, internal combustion, the internet, information technology and now AI.

Historical US productivity growth, y/y

Period	Productivity growth (y/y)	Reason
1914 - 1972	3.0%	19th century innovations (electricity, combustion engine)
1972 - 1995	1.6%	Pre-internet boom productivity recession
1996 - 2004	3.2%	3rd Industrial Revolution ('90s internet boom)
2005 - 2023	1.6%	Post-GFC / Pre-COVID productivity recession
2024 - onward	> 2.5%	4th Industrial Revolution (AI)

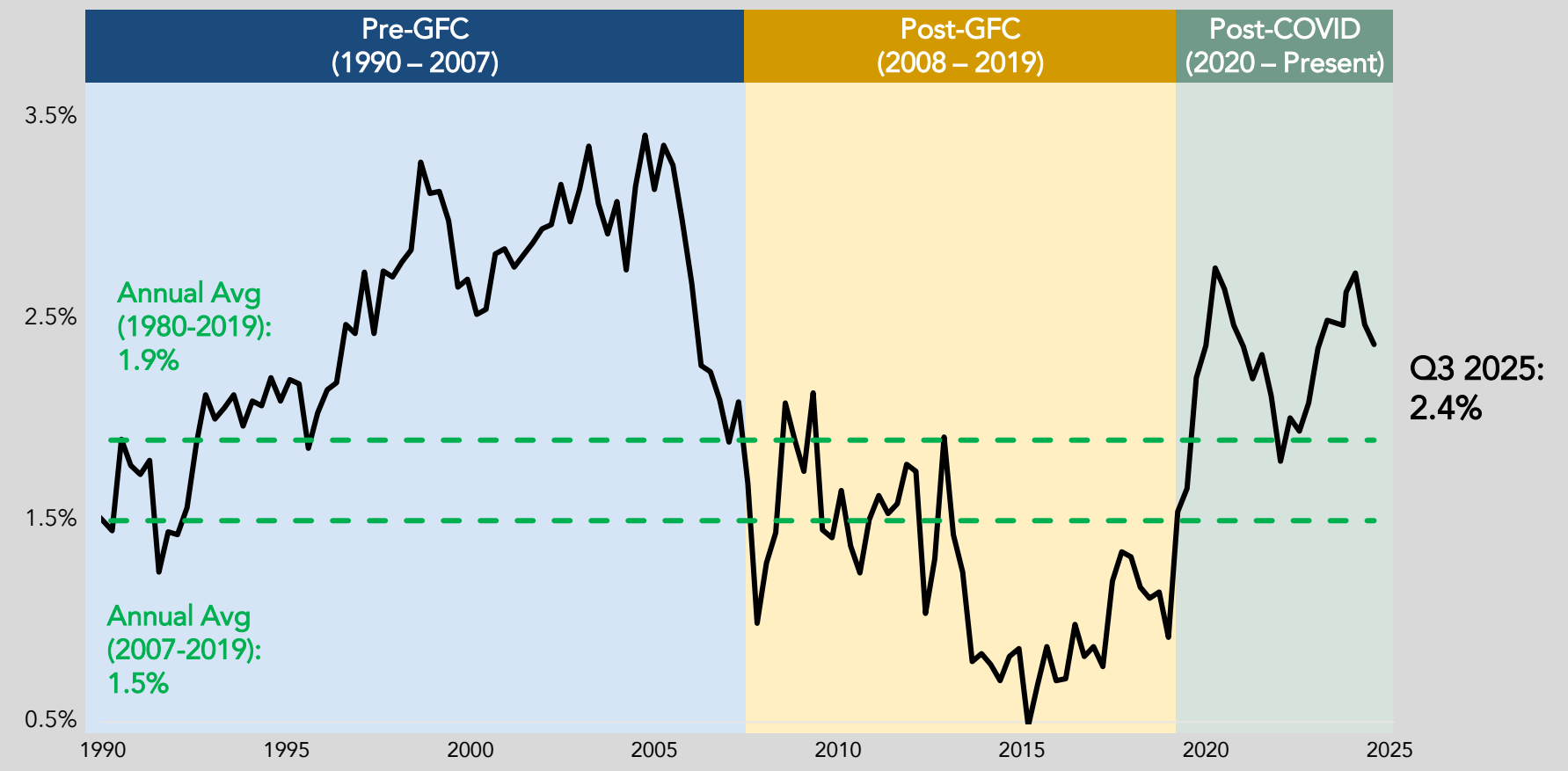
Source: (1) Bloomberg, "Fed Fixates on AI, But It's Not Ready to Make Big Greenspan Bet". Robert J. Gordon.

## Tech Driven Productivity Resurgence in the US



As evidenced by the 12-year period from the 2008 GFC to the 2020 COVID crisis (QE, zero & negative rates), excessive monetary policy easing did not generate above trend GDP growth, inflation or productivity. While an element of productivity is cyclical and therefore tied to growth, the resurgence in US productivity in the post-COVID era has been driven more by significant US capital investment in productivity enhancing technologies (i.e., digitization, automation, robotics, quantum computing, big data, AI).

US non-financial corporates productivity 5-year average, q/q

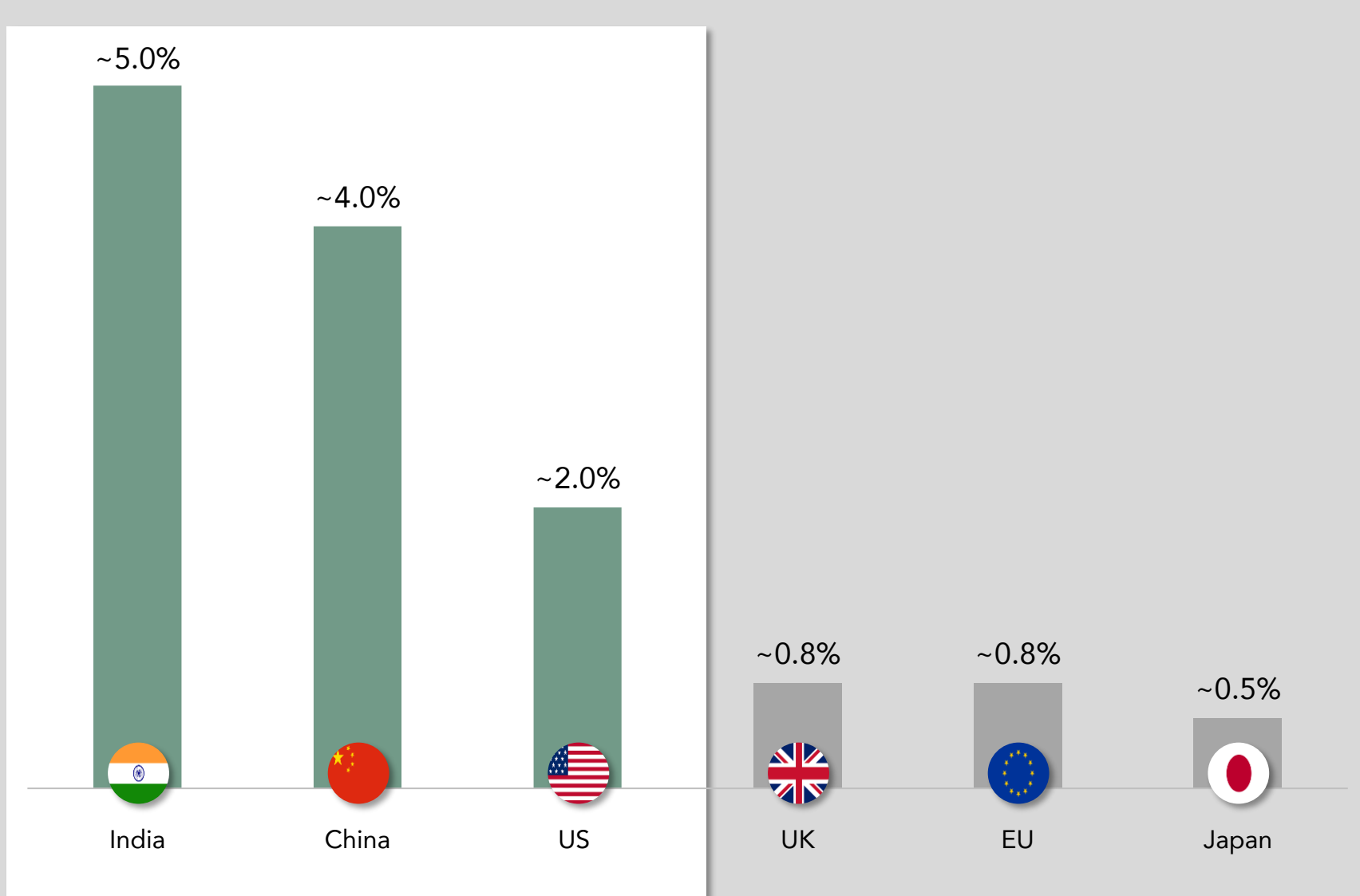


Source: (1) Bureau of Labor Statistics. Data through Q3 2025.

## Wide Dispersion in Labor Market Productivity

The wide dispersion in global labor market productivity has been driven by: (1) size of digital infrastructure investments; (2) pace of tech and AI adoption; and (3) the varying pace of economic diffusion of AI tools into the real economy.

2026 global productivity growth forecasts

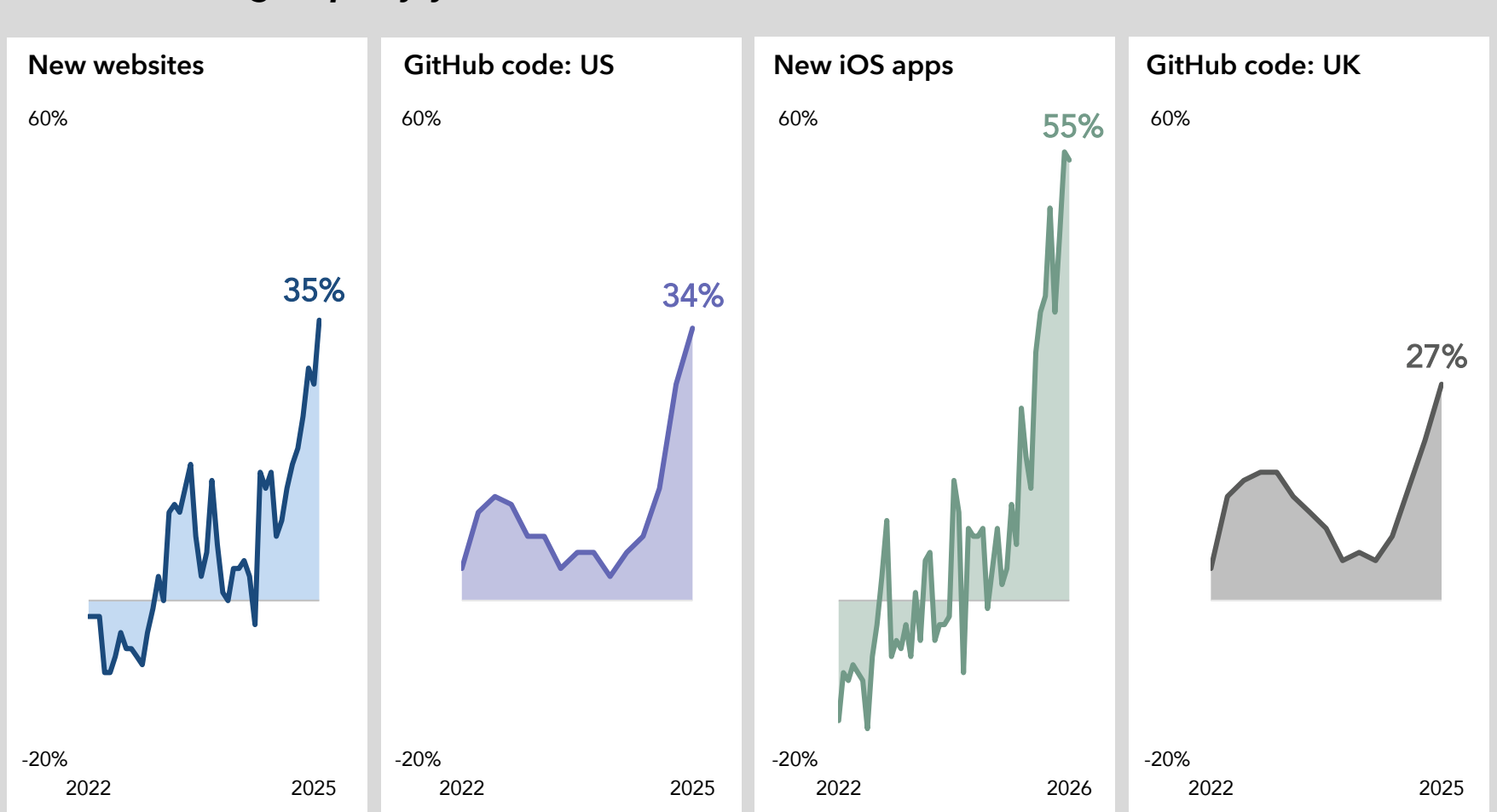


Source: (1) The Conference Board (US, China), OECD (EU, UK, Japan), IMF (India). Forecasts are the difference in real GDP growth and labor force growth.

## Rapid Rise in Coding Output

Over the last year, the volume of code being committed to production has reached unprecedented levels with 40-55% of boilerplate and routine code generated or heavily assisted by AI.

Growth in coding output, y/y

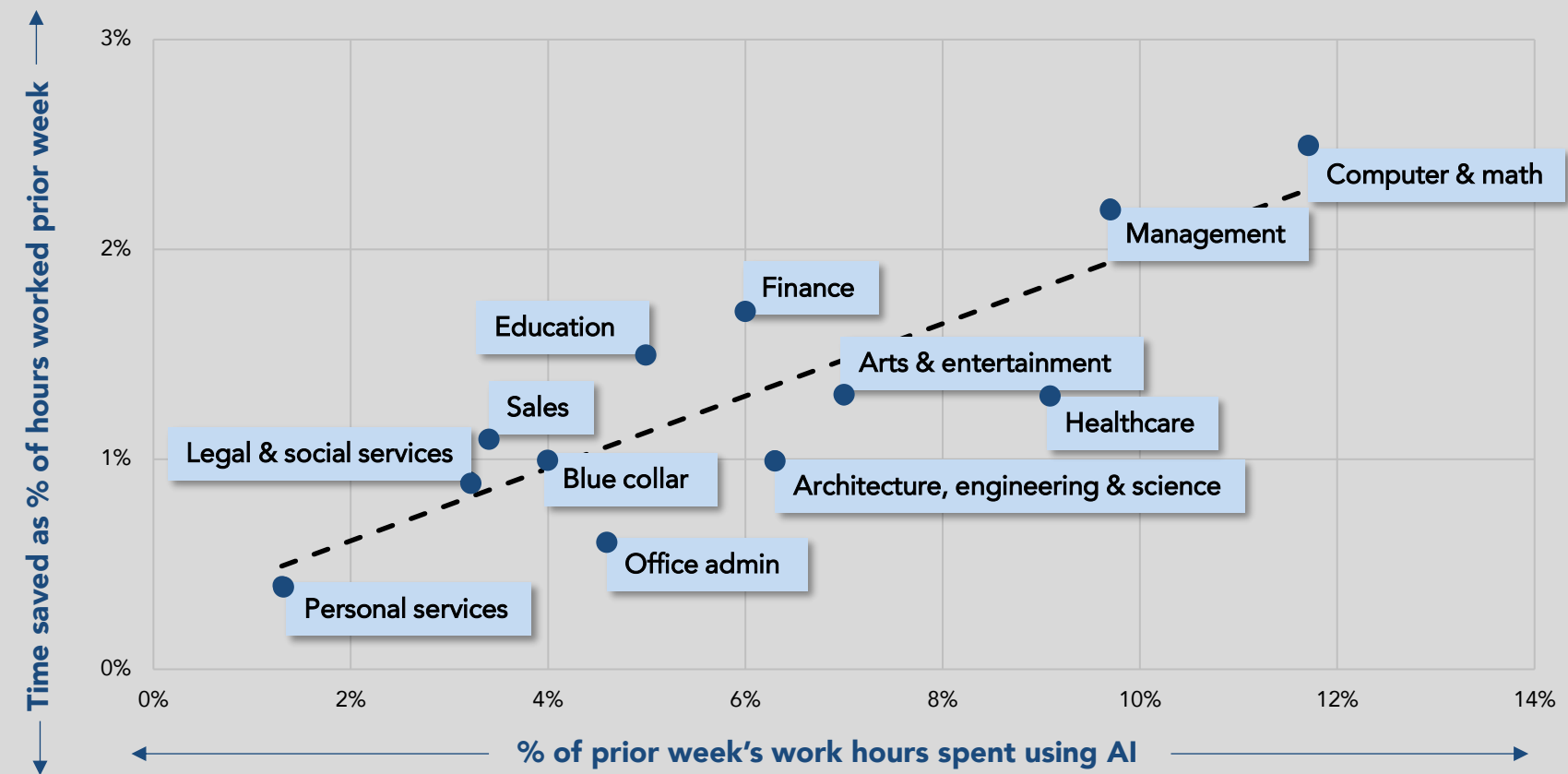


Source: (1) FT, "The AI Shift: Is this the 'take off' moment for AI agents?" Domain Name Industry Brief. SensorTower. Github. Github data is quarterly pushes. New websites data is through August 2025. New iOS apps data is through Jan 2026. Github data is quarterly pushes through Sep 2025.

# Productivity Impact of AI Usage by Occupation

According to a study by the Federal Reserve Bank of St. Louis, while AI-driven time savings vary across occupations, time savings and overall usage are highly correlated. The findings indicate that a 10 ppt increase in the share of time spent using generative AI is associated with a 1.7 ppt increase in the time saved as a share of hours worked.

Average time saved by using gen AI, by occupation

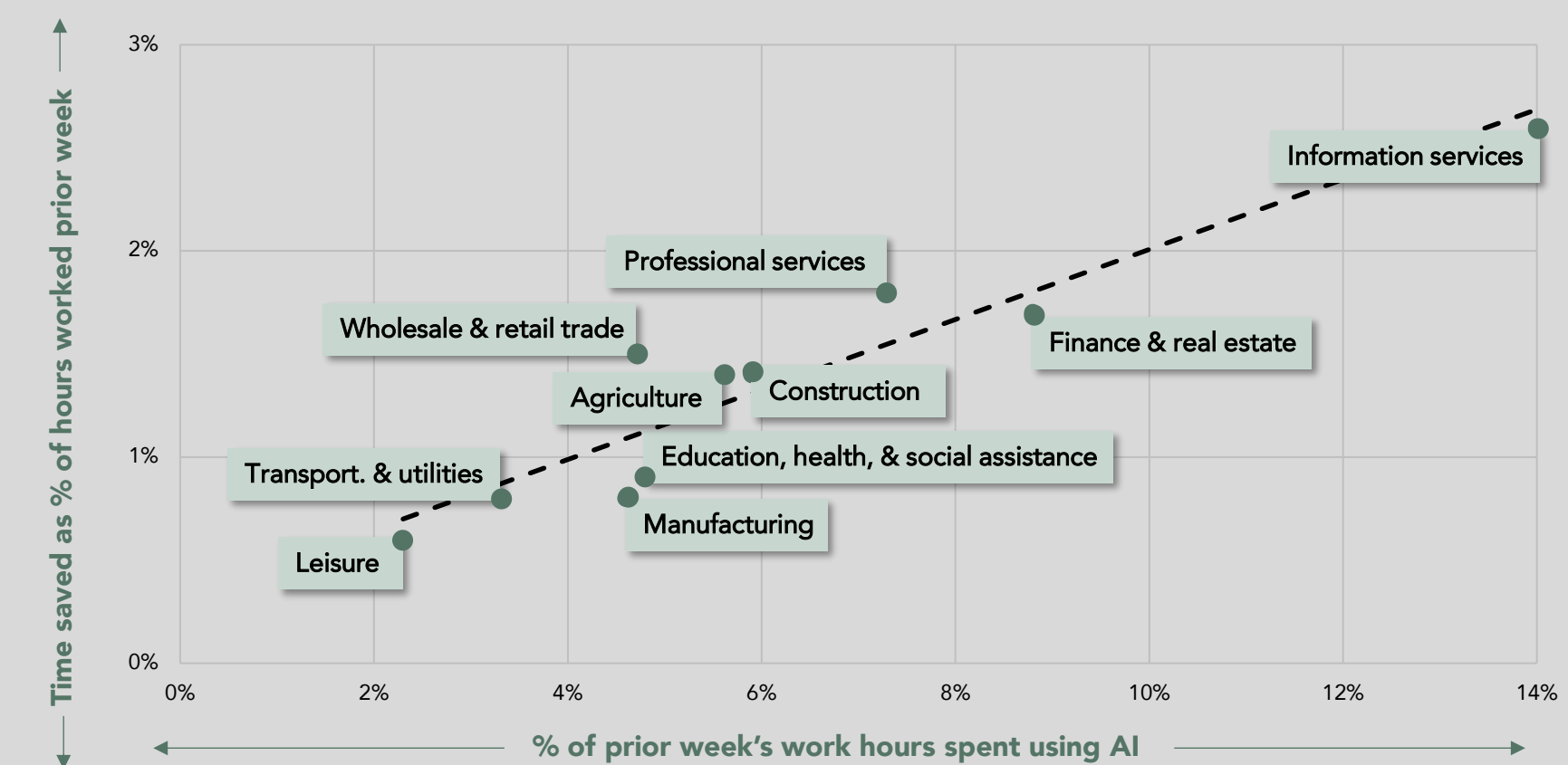


Source: (1) St Louis Federal Reserve, "The Impact of Generative AI on Work Productivity". The Rapid Adoption of Gen AI (Bick, Blandin, Deming).

# Productivity Impact of AI Usage by Industry

Information services has both the largest share of work hours spent using generative AI and the highest time savings while leisure has both the lowest share of work hours spent using AI and the lowest time savings. Using aggregate data, the St. Louis Fed determined that on average, workers are 33% more productive in each hour that they use generative AI.

Average time saved by using gen AI, by industry



Source: (1) St Louis Federal Reserve, "The Impact of Generative AI on Work Productivity". The Rapid Adoption of Gen AI (Bick, Blandin, Deming).

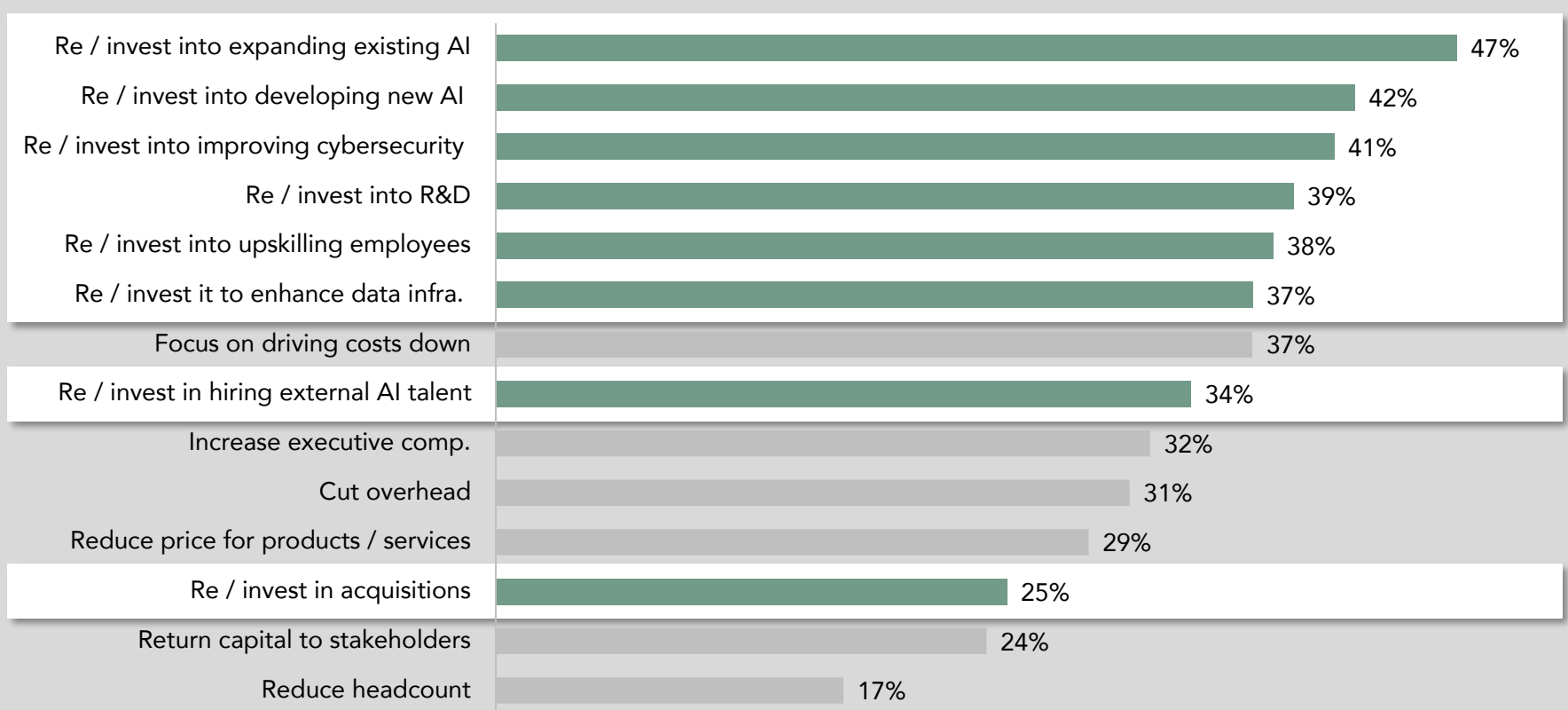
# How Organizations Use AI Productivity Gains



According to the latest EY US AI Pulse Survey, to date, reinvestment has been the primary source and usage for productivity gains, with only 17% of respondents citing reduced headcount.

EY US AI Pulse survey:

What organizations have done with AI-driven productivity gains?

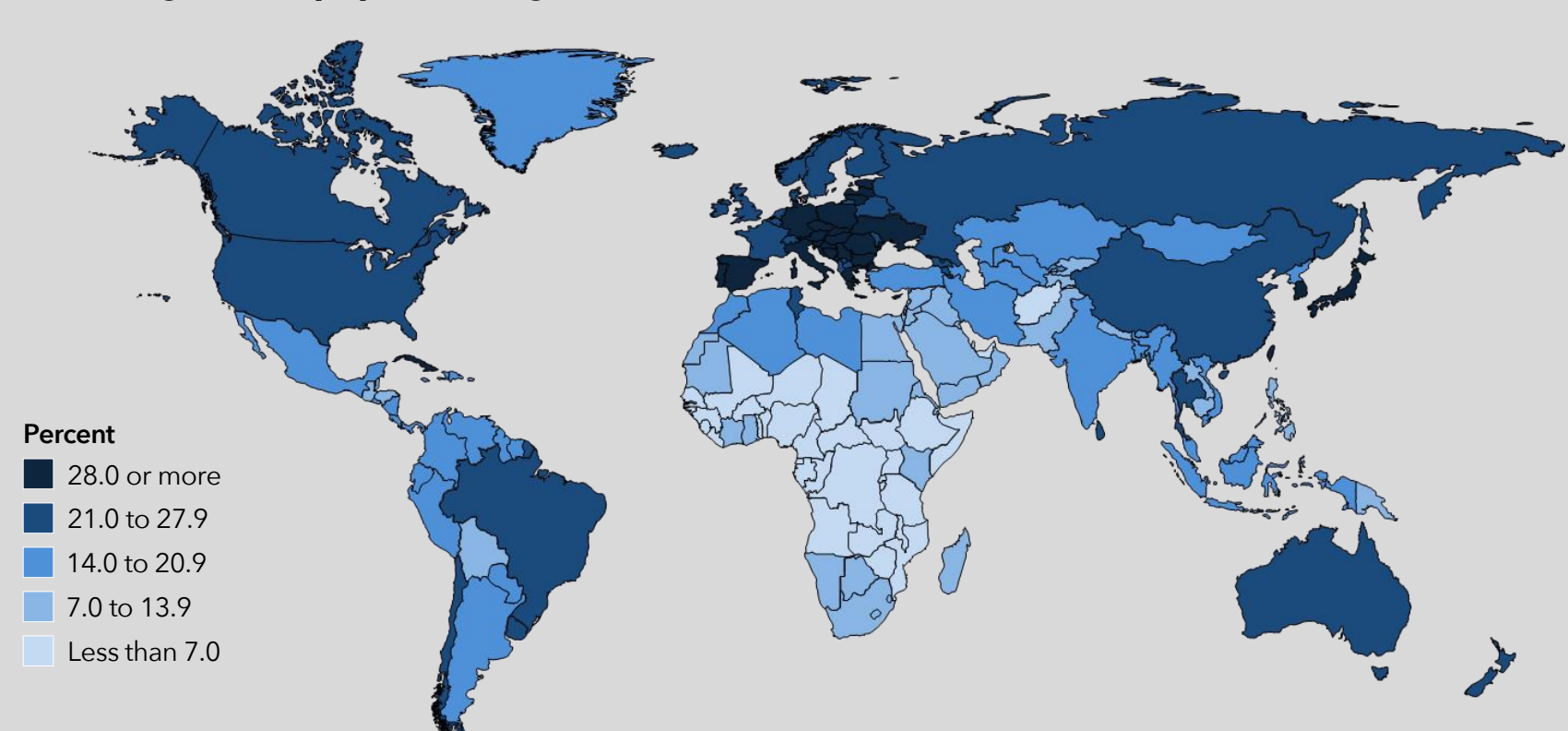


Source: (1) EY US AI Pulse Survey (December 2025). Survey of 500 US-employed decision makers (SVP+) from a broad range of sectors. Survey conducted online from Sep 19 - Oct 16, 2025. Responses taken from those whose organization is investing in AI and has experienced AI-driven productivity gains over the past year.

# Productivity as Critical Offset to Aging Demographics

The global population above age 65 is expected to double from 800 million people today (10% of total) to approximately 1.6 billion people in 2050 (16% of total). The number of people over age 80 is expected to triple over the same period to nearly 500 million. The IMF forecasts that aging demographics will curtail advanced economy growth rates by 0.5-1% points annually over the coming decades.

Percentage of the population aged 65+ in 2050



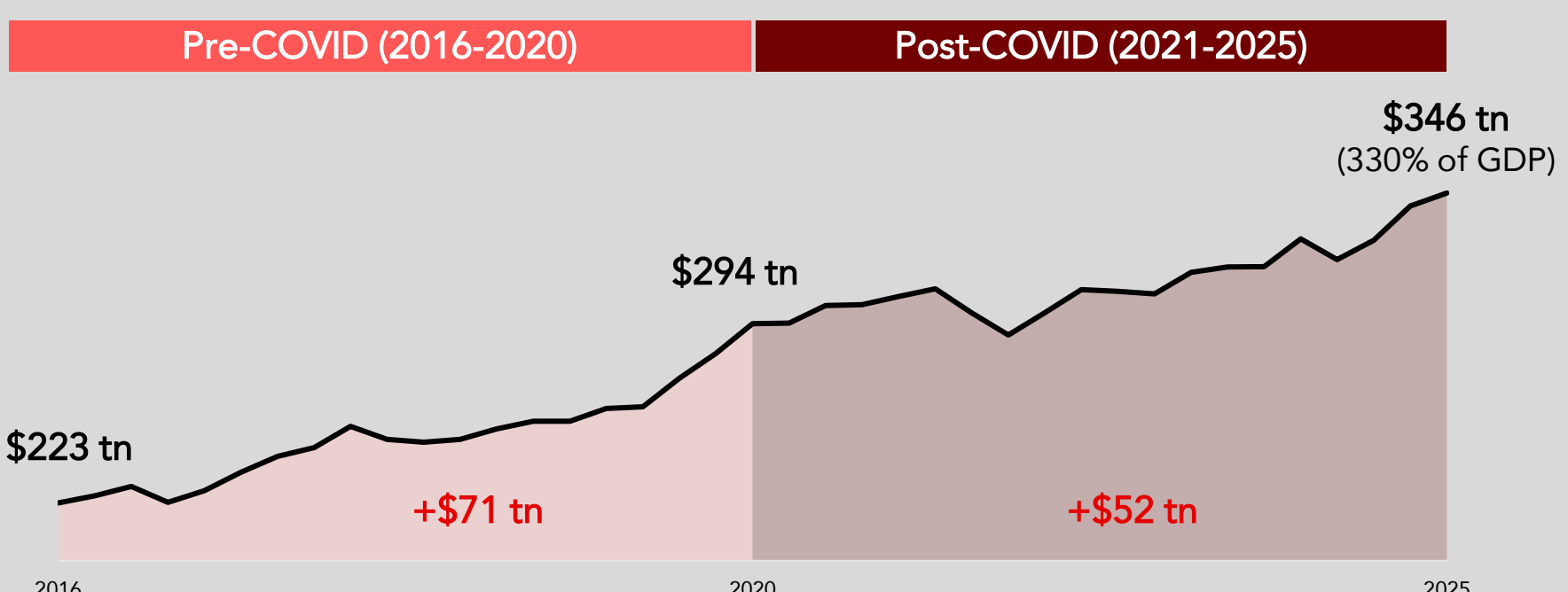
Source: (1) US Census Bureau, US Department of Commerce Economics & Statistics Administration.

# Productivity as Critical Offset to Soaring Debt



Global debt reached a record \$346 trillion by the Q3 2025, representing over 330% of global GDP. The IMF estimates that a sustained 10-percentage-point increase in debt-to-GDP is associated with a roughly 0.2% decline in annual GDP growth in advanced economies. Taken together, rising debt levels create a compounding cycle that crowds out productive investment, drives borrowing costs structurally higher, constrains fiscal policy during downturns and reduces growth capacity.

Global debt, USD tn



Source: (1) IIF Global Debt Monitor. Data through Q3 2025.

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"Macro stability isn't everything, but without it, you have nothing."