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AI Monthly: The productivity frontrunners

The adoption of artificial intelligence is becoming increasingly widespread, and fears surrounding job replacement are beginning to rise – but AI does offer opportunities to boost productivity and create new jobs. Still, as the digital transformation of the workforce picks up, differences between occupations and countries may lead to uneven gains



OpenAI CEO Sam
Altman and French
President Emmanuel
Macron. AI could
provide a major boost
to productivity, but we
could see uneven gains
between countries particularly across
Europe

Gen AI will transform the labour market, but isn't causing widespread job displacement just yet

In a recent interview, Nvidia's CEO, Jensen Huang, addressed AI's potential impact on the job market:

"New jobs will be created, some jobs will be lost, every job will be changed".

According to Huang, artificial intelligence will largely increase human potential rather than replace it. In the last computer boom we saw, software engineers provided a major contribution to company growth; this AI boom will also have a hand in creating more jobs. This will be largely due to the construction of massive new data centres, which will inherently generate demand for those in trade crafts, like electricians, construction workers and masons, alongside engineers, networking

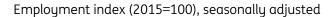
and operations personnel.

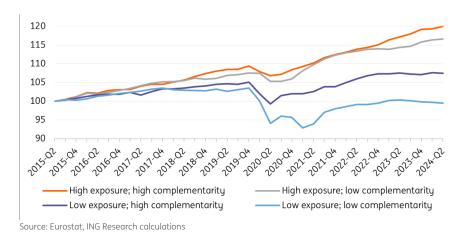
Aside from the job creation that building these data centres will bring, the multiplier effect – the spillover into other areas of economic activity – will also create indirect jobs. These can span from maintenance of the centres to the local service industry around it, like financial services, healthcare, and hospitality, stimulating broader economic activity. Al will also affect the work of doctors, financial professionals, teachers, etc. In highlighting how Al-assisted engineers at Nvidia have driven higher productivity, Huang underscores that this has led to increased revenue and the ability to expand hiring.

In the eurozone, <u>our recent study</u> shows that the labour market is becoming increasingly ready for potential productivity gains through AI. Job growth since 2015 has been concentrated in high-exposure and high-complementarity occupations that benefit extensively from AI support in task augmentation (e.g., teaching, engineering, and administrative professionals). Artificial intelligence is expected to boost productivity in these occupations.

There is, however, growth in roles at risk of AI replacement, such as office clerks and software developers. These occupations are categorised as high exposure but low complementarity, and often manage tasks that can be substituted by AI. So while AI is reshaping work, widespread job displacement has not occurred yet. The gap between jobs that could benefit from AI and those least impacted by AI widened during the pandemic when jobs in low AI-exposure sectors like hospitality and construction decreased significantly. If adopted wisely, AI's potential impact on the labour market grows as high-exposure jobs increase.

In the eurozone, high Al-exposure jobs have been increasing at a faster pace





Significant differences among countries might result in uneven gains from AI

Within the eurozone, our study also shows that even though the broader labour market impact of AI is modest at the moment, there is varying potential between member states. Northern European countries like the Netherlands, Belgium, and France have a higher proportion of AI-compatible jobs; southern countries like Italy and Spain have a lower proportion, limiting AI's

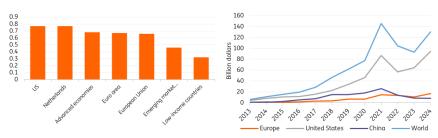
influence. This will potentially widen regional productivity gaps and could lead to greater divergence within the eurozone.

The scope of task automation or augmentation through artificial intelligence is not only dependent on the nature of occupations but also on whether countries can leverage it effectively. According to the IMF's AI Preparedness Index, some countries score better when taking elements such as digital infrastructure, regulation, innovation, and human expertise into consideration. Singapore, Denmark, the Netherlands, and the US seem to have an edge as top scorers in AI preparedness, while low-income countries are on the lower end. Recent years have also seen billions of dollars invested in AI. The US leads in terms of investment and is host to half of the world's data centres, which also reflects imbalances in AI development capabilities between countries.

Large cross-country differences in AI related investments and AI preparedness

Panel 1: AI Preparedness Index

Panel 2: Annual private investment in AI (constant 2021 \$US)



Source: IMF; Quid via Al Index Report (2025), U.S. Bureau of Labor Statistics (2025), Our World in Data

Al brings promise at a price

As billions of dollars in AI investments <u>continue to pour in</u>, artificial intelligence could become an economic growth engine by transforming the labour market and boosting productivity if implemented wisely. Some countries may take the fast lane in realising AI-related gains, while others lag behind.

On the corporate front, staying on top of the AI race also brings some surprising costs. As OpenAI CEO Sam Altman noted, saying "please" and "thank you" to AI costs millions, providing a glimpse into the significant electricity expenses tied to running large AI models. In today's AI race, it's not just expensive to build intelligence – it's also costly to be polite to it.

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