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To the point!

Cross-Asset- and Strategy-Research

Artificial intelligence and the labor market

Risks for beginners, opportunities for experts

The world of work is undergoing a profound transformation. Artificial intelligence (AI) is reshaping professions across industries. Standardized and repetitive tasks, such as data processing, logistics, or basic administrative duties, are particularly affected. AI can automate time-intensive processes, potentially leading to a decline in job opportunities for entry-level workers. For recent graduates in fields like law or consulting, the early stages of their careers are often dominated by tasks like coding, research, or preparing presentations and briefs. It is foreseeable that AI will soon perform these activities more cheaply and efficiently.

Seasoned experts are expected to remain in demand, even as AI advances. But these experienced professionals once upon a time started out in junior roles as well. How will individuals climb the career ladder if the bottom rungs are missing?

Al productivity gains are no hallucination

So far, the feared job apocalypse has not materialized. In the United States, where Al adoption is further advanced, the relative unemployment rate among young university graduates has hardly changed (see chart). Perhaps it is still too early to identify sweeping trends. A recent study by Seyed Hosseini and Guy Lichtinger of Harvard University provides a more nuanced perspective. They examined employment patterns for junior and senior employees in U.S. companies, finding that the number of junior staff has recently been declining, while the number of senior employees has continued to grow.

Interestingly, in companies that actively began hiring specialists to integrate AI into their business processes from 2022 onwards,

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Al will reshape the job market

Fig.: US unemployment rate of 20–24-year-olds with Bachelor degree, minus overall unemployment rate (12-month moving average)



Source: Bureau of Labor Statistics, LBBW Research. Last data point: August 2025 junior employee numbers fell almost 8% faster than in companies that did not make such hires. <u>Young professionals are increasingly anxious</u> about their prospects.

In most cases, this decline was due to a reduction in hiring younger employees rather than widespread layoffs. However, this could change: tech companies at the forefront of the AI revolution – such as Amazon and Meta – have recently announced plans to cut tens of thousands of jobs, particularly in administrative roles. Are those layoffs canaries in the coalmine?

Hopes and realities of Al adoption

But will the future really be as grim as it sounds? Al skeptics often reference the so-called Solow Paradox, named after growth economist and Nobel laureate Robert Solow, who once quipped that "you can see the computer age everywhere but in the productivity statistics". That's quite a bon mot. However, there are early signs that some <u>large companies</u> are already reaping significant productivity gains thanks to Al. For smaller businesses, these gains are (so far) largely absent.

This spells trouble for Germany. The country's economy is heavily reliant on small and medium-sized enterprises (SMEs), many of which are family-owned. These businesses are typically not early adopters of Al. At the same time, demographic shifts are making the shortage of skilled labor an increasingly urgent problem for Germany. German companies should be embracing new technologies with particular enthusiasm.

Alas, they are not. A survey conducted by the credit agency Creditreform found that only 27% of medium-sized German companies currently use AI technologies, and 17% plan to adopt them in the future. Skepticism dominates, particularly in the SME sector, where over two-thirds of respondents dismiss AI's role in mitigating worker shortages as negligible or non-existent. Many SMEs are either unwilling or unable to fully adopt AI at this time, often citing such perceived obstacles as lack of expertise, time and resources, or data protection concerns.

This bodes poorly for Germany's capacity for innovation and economic competitiveness. Adverse demographic trends are broadly given, meaning the shrinking working-age population must be all the more productive if the country hopes to maintain its standard of living. Businesses cannot afford to shy away from technological progress. If widely adopted, AI has the potential to reverse the long-standing decline in German productivity growth. If Germany remains on the sidelines of the AI revolution, economic stagnation may become entrenched – leaving young people with certainly diminished opportunities, even as their numbers decline.

Take courage: embracing progress is the only way forward!

Tougher for young professionals

SMEs underestimate the potential



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