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The AI revolution: How big the pie and how many slices?

Top highlights

- 1. AI can bake a bigger economic pie – but the oven is expensive.** Productivity could lift growth and the economy's natural real interest rate, but firms must first fund data centers, chips, power, cooling, networks, and worker training.
- 2. Spend now, profit later.** The AI buildout is front-loaded, inflationary, and vulnerable to bubble risk; the payoff comes only after adoption reaches scale.
- 3. Jobs are changing more than disappearing.** AI is likely to reorganize tasks and reduce hiring rather than trigger mass layoffs. But some roles will vanish and the transition will be uneven.
- 4. The winning formula is humans plus machines.** The biggest gains come when AI handles routinized work while people supply judgment, expertise, context, and the human touch.
- 5. Skills will determine who wins the transition.** Workers who learn to complement AI may become more productive and valuable, making training and adaptation central to stronger growth and better jobs.
- 6. A bigger pie does not guarantee equal slices.** How much of AI's dividend reaches workers will depend on competition, labor-market conditions, wage flexibility, replaceability, and who owns the technology.

Artificial intelligence (AI) may be able to write the recipe, but the economy still must buy the ingredients, build the kitchen, and decide who gets served. The promise is a bigger economic pie – more productivity, stronger growth, and new kinds of work. The catch is that the bill arrives before the meal: massive investment, higher near-term costs, an uncertain payoff, and plenty of anxiety over who gets the biggest slice. This report looks past the magic trick to ask the questions that matter: How large could AI's dividend become, how rough will the transition be, and how broadly the gains will be shared.

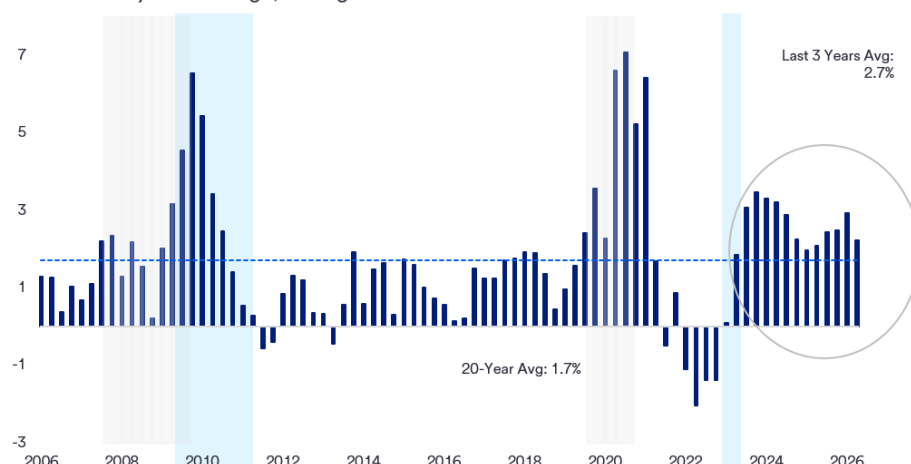
As AI-driven productivity gains enable workers and businesses to accomplish more with fewer resources, the overall return on capital increases, making private investments more attractive. As businesses increase investment, competition for available savings intensifies. To continue attracting

capital, government bonds and other fixed-income assets generally need to offer higher yields compared to the past.

This dynamic, as described in traditional economic growth models, leads to a higher equilibrium (natural) real interest rate – often referred to as r^* . In other words, when productivity rises, the economy’s baseline real interest rate tends to move upward, reflecting enhanced profitability and greater investment incentives. Importantly, this shift supports sustained economic growth and full employment without necessarily causing higher inflation, since increased productivity offsets cost pressures. In other words, the economic pie gets bigger. The question will then be: How many slices? Who will get fed?

U.S. nonfarm business productivity

Year-over-year % change, through 2Q'26



Source: U.S. Bank Economics, Bloomberg, U.S. Bureau of Labor Statistics (BLS).

But while knowing that in the end, the economy will grow, getting there is the challenge. Already the AI buildout is generating more inflation in an already inflationary environment that the Fed must fight. History indicates that innovations like this one lead to new industries being created, with more economic growth and more jobs for workers. That’s the long run. Today, investors have embraced the AI revolution, with AI investments dwarfing other initiatives. But that also increases worries of bubbles forming. Such as if expectations for the productivity influence have gotten ahead of themselves. Productivity grows the economy without inflation, but with AI, when will it start? And while history points to more jobs in the future, the transition will make some jobs obsolete. How bumpy will be the ride to prosperity?

From buzzword to reality

AI is moving from buzzword to business reality, and the economic conversation is finally catching up. The big question is how the costs and benefits will show up across workers, companies, prices, and growth.

With about 80% of AI adoption benefits tied to cost efficiencies, the upside is larger, with AI adopters already showing margin expansion (McKinsey Global Survey, 2025). But with these benefits there is increasing fear that AI agents will replace workers, thereby destroying their ability to spend and invest for their own future. Employers are mindful of the costs to compete in an AI world and are also reluctant to rely solely on AI agents so are holding onto workers until they understand business processes with this new technology. The right ingredients for business success are still being tested.

Like every major technology shift, this one will create winners, losers, and a messy transition period in between. The near term could feel inflationary and disruptive as firms spend heavily on chips, data centers, energy, and training. Workers ‘level-up’ to supervise AI agents. Over time, though, broader adoption should lift productivity, support growth, and change the way people work more than simply eliminate work altogether. **U.S. Bank Economics believes that the real story is less about humans versus machines and more about how partnerships evolve.**

AI’s price tag: Spend now, profit later

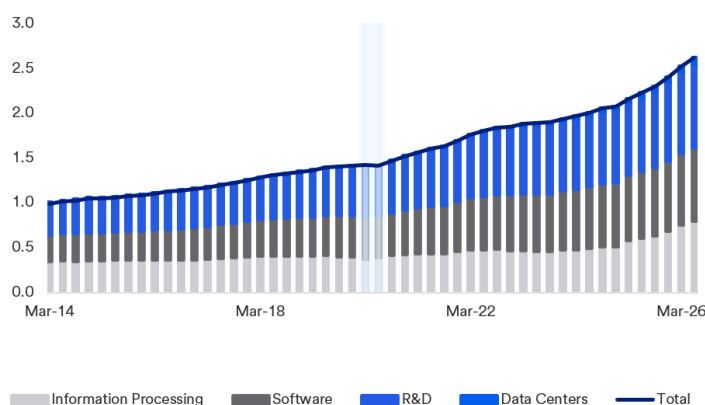
AI may look like magic, but the bill for the trick arrives first. Workers aren’t the only ones climbing a steep learning curve. Businesses are also trying to set strategy, measure results, balance costs, and keep pace with the rush to adopt AI.

The surge in private investment is exciting, but fears of an AI bubble – and the fallout if it bursts – aren’t unwarranted. Some ideas will fail in production. Remember Sony’s Betamax: introduced in 1975, overtaken by VHS, and eventually dead.

Like any major invention, AI should eventually lift productivity and lower inflation once businesses fully adopt it. Getting there, however, is expensive and potentially inflationary. Higher shipping costs add inflation pressure, while the scramble for project financing can crowd out other investments. The buildout is already visible: since 2022, data center construction has surged, reaching a seasonally adjusted annual rate of nearly \$60 billion by May 2026. The payoff comes later; first firms must fund/build data centers, chips, power, cooling, networks, and the training workers need to ‘supervise’ their AI agents.

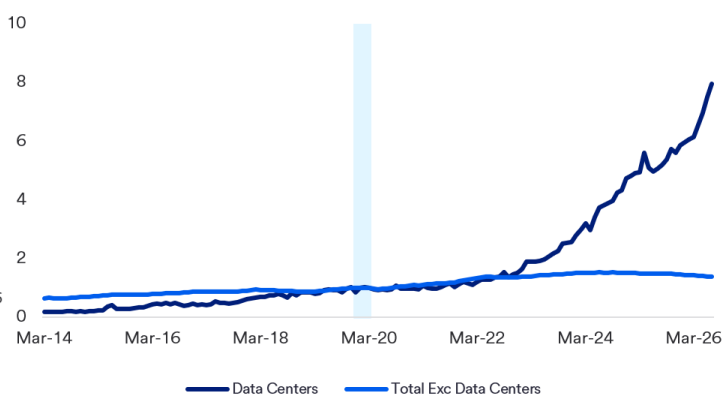
U.S. AI investment approximation

Trillions of dollars, SA, through 2Q'26



U.S. construction spending

Index; Jan 2020 = 100, through Jul 2026



Sources: U.S. Bank Economics, Bloomberg, U.S. Bureau of Economic Analysis (BEA), U.S. Census Bureau.

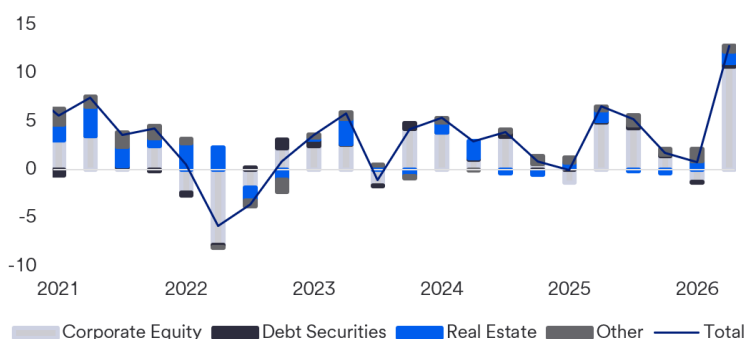
The returns are not limitless. Flashy frontier projects may grab attention, but broad adoption still depends on affordability and practical value. From the industrial revolution to cloud computing and ATMs, lasting impact has required a balance between innovation and economic viability. At some point, AI's costs can outweigh its benefits. A multi-billionaire may fund an extreme project for fun, but most Americans aren't emptying the family savings account and taking on debt for a quick trip to the moon.

How much of AI's productivity dividend reaches workers' paychecks will depend on what firms produce, how easily workers can be replaced by an AI agent, the value of AI agent supervisors, firm competition, labor-market tightness, wage rigidity, and who owns the technology. Managers are still learning the startup costs, how to use AI, and where workers fit into the new AI world.

While AI is a huge generator of productivity, it still needs human knowledge to teach it where to go. The struggle for managers then will be how to measure worker compensation in this new AI world. Those who own equity share in AI businesses have already gained. But how will a seasoned 'AI agent supervisor' be rewarded? How will businesses attribute worker productivity from their AI investments?

Changes in net worth: households and nonprofit

Trillions of dollars, SA, through 2Q'26



S&P500

Index; Oct 2022 = 100, through Aug 2026



Sources: U.S. Bank Economics, Bloomberg, Financial Accounts of the U.S., Goldman Sachs.

So far, the job market impact looks limited. As businesses adopt technology, some roles will disappear, but for now there seem to be fewer hires rather than job fires: firms are holding onto workers while cutting openings. Managers may still be deciding which workers – and how many – are needed alongside AI. Because research on adoption and employment is young, it is too early to draw firm long-term conclusions.

AI also may be getting too much blame for elevated unemployment among recent graduates. A recent report points instead to the loss of office ‘face time’: less in-person mentorship makes it harder for new employees to learn the ropes and succeed early in their careers (Liberty Street Economics, NY Fed, 6/1/26). The Fed estimates remote work explains 64 percent of the rise in unemployment among young college graduates – far more than generative AI. If so, AI adoption is still in its early innings. The nearer-term story is less about jobs vanishing overnight and more about firms reshuffling tasks, skills, and hiring as they learn what people should do – and what machines should do. That brings us to the next question: are jobs disappearing, or are they changing?

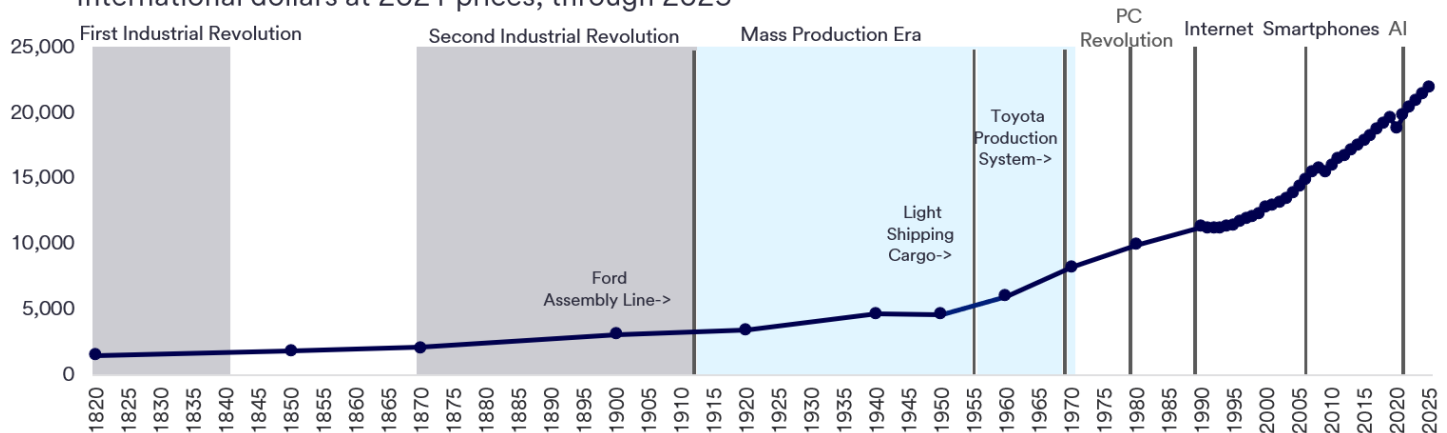
Jobs are changing more than disappearing

The future of work isn’t waiting. It is already showing up in our inboxes, meetings, and daily routines. AI is redistributing tasks within jobs, increasing productivity and reducing routine work. So, the work people do is changing and will continue to change. Like past technological shifts – the industrial revolution, the automobile, ATMs or the dot-com world – some jobs will be replaced by an AI agent. But, as in past revolutions, it is often the work that changes, not the worker who is replaced.

As ATMs spread across the US, people worried that automation would displace bank tellers. Instead, as ATMs proliferated from 1985 through 2022, the number of bank tellers increased by 8.7% (Rajadhyaksha, A., Barclays, 3/2/26). But they were redeployed toward complex transactions and relationship management. And, while unemployment rose from 3.7% at the ATM introduction in September 1969 to 9.0% in May 1975, banks expanded operations and added workers. With revolutions of the past, we expect AI will create new opportunities and even more jobs.

Global avg real GDP per capita

International dollars at 2021 prices, through 2025



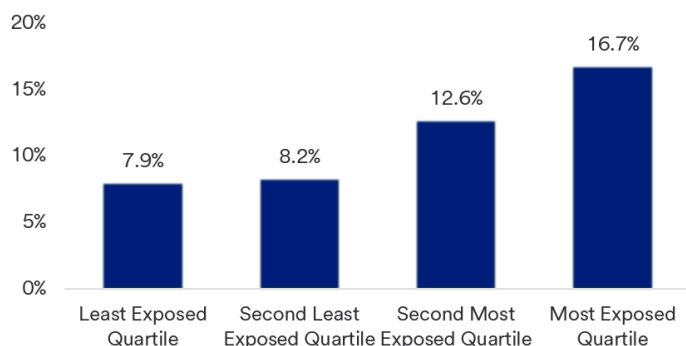
Sources: U.S. Bank Economics, Bloomberg, OurWorldinData.com

That doesn't mean this transition will be easy or stress free. AI will generate distortions – and some pain – along the way. The automobile wiped out the horse and buggy industry but created businesses such as motels and drive-throughs. Textile innovations sparked fears that machines would replace weavers. One worker could operate multiple looms and produce far more output. But while many new jobs in textile mills were created, such as mill maintenance and machine operation (like the loom), they were less skilled and poorly paid in bad working conditions (Cartwright, M, 3/1/23).

Economic theory says direct substitution from AI will lower labor demand and wages for exposed workers, while jobs that work alongside AI will raise earnings for those with the right skills. New technology creates higher output at lower costs, with workers benefiting from the greater surplus. AI will eventually replicate codified (textbook) knowledge, such as entry-level workers, but rely on the tacit knowledge from workers who learned through experience. The trick will be training the workforce to adapt to the new workplace. That 'partnership' is what will drive growth. In other words, augmented intelligence capacity creates more substantial value than either pure human or pure AI approaches.

U.S. growth rate for wage per employee

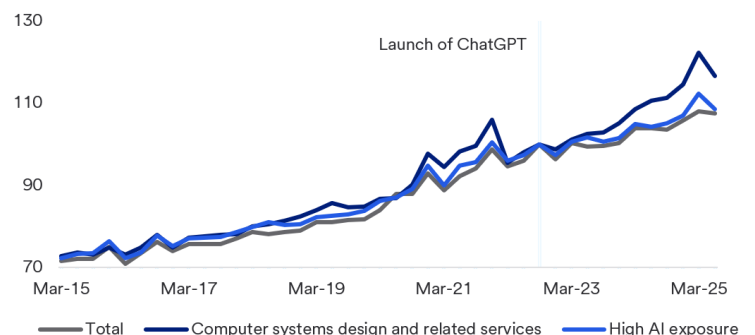
Percent, 2018-2024



Sources: U.S. Bank Economics, Bloomberg, Dallas Fed, OurWorldinData.com.

Average U.S. weekly wage

Index; 2Q'22 = 100, through 2Q'25



Important disclosures provided on last page

Already workers in industries more exposed to AI are seeing gains in their wages. According to PwC, wages for employees in industries ‘most exposed’ to AI have grown by 16.7% from 2018 to 2024, over twice as large as workers in industries who are ‘least exposed to AI’ (7.9%). Similarly, Dallas Fed research shows that since ChatGPT’s launch, wages in highly AI-exposed industries and computer systems design have outpaced the broader economy. These trends suggest that firms are rewarding workers who can leverage AI to enhance productivity.

Why can’t we be friends? Humans and machines working together

That partnership matters because the biggest productivity gains come when AI augments human judgment and expertise – starting in, but not limited to, knowledge-intensive sectors such as analytics, finance, IT, and professional services.

Still, at the same time, roles requiring physical presence, dexterity, or human interaction remain difficult to automate. Hospitality staff, cleaning services, food preparation, and personal care rely on adaptability and hands-on work that AI cannot replicate at scale. Labor in these areas may become scarcer and, therefore, more valuable – potentially putting upward pressure on wages.

The broader lesson is simple: AI will not decide the future of work – we will. AI is less about replacing whole jobs than reshuffling the tasks inside them. The transition will create winners, losers, and some bumps along the way. The real divide won’t be between humans and machines, but between those who learn to work with AI and those who don’t. But the best outcomes will come from letting machines do what they do well, letting people do what they do well, and training the workforce to connect the two. Get the partnership right, and AI won’t just change jobs. It will create better ones.

The Macro Bottom Line

AI may have written the recipe, but the economy is still learning how to cook. The long-run promise is enticing, with stronger productivity, faster growth, new businesses, and a bigger economic pie. But first comes the shopping bill – data centers, chips, energy, financing, training, and a few costly experiments that may end up looking more Betamax than breakthrough.

The labor-market story is also less about humans versus machines than about humans learning to work with them. Some jobs will disappear, but more often, the type of work changes. New jobs will be created, and many more will be rebuilt from the inside out. For now, the evidence points more to fewer hires than job fires. The workers and businesses that learn where human judgment ends and machine efficiency begins will have the best shot at capturing the gains.

So, yes, AI can make the pie bigger. The harder questions are how bumpy the trip to the bakery will be, who owns the oven, and how many people get a slice. Get investment, training, and human-machine partnership right, and AI can create better work and broader prosperity. Get them wrong, and we may still have a bigger pie – but just one served at a very small table.

Disclosures

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