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The Macroeconomic Consequences of AI

ANALYSIS
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Artificial intelligence stands to become one of the most consequential technologies in generations, if not in the history of humankind, with enormous implications for the economy. However, the specifics of how it will shape the future remain highly uncertain and are the subject of immense debate. Many technologists deeply involved in AI's development believe it will massively increase productivity, resulting in significant net job loss and much higher unemployment. Conversely, most economists who look to the economic history of past general-purpose technologies tend to be more circumspect, expecting AI to lift productivity but also to diffuse slowly enough through the economy that the job market adjusts more gracefully. There may be bouts of higher unemployment, but any increase will be modest, as jobs lost to AI will be largely offset by new jobs supported by the income and wealth it creates. How this ultimately unfolds is all but impossible to fathom. Therefore, in this study, we consider several scenarios that put some bounds around the possibilities that economists are contemplating.

The Macroeconomic Consequences of AI[1]

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Artificial intelligence stands to become one of the most consequential technologies in generations, if not in the history of humankind, with enormous implications for the economy. However, the specifics of how it will shape the future remain highly uncertain and are the subject of immense debate. Many technologists deeply involved in AI's development believe it will massively increase productivity, resulting in significant net job loss and much higher unemployment.[2] Conversely, most economists who look to the economic history of past general-purpose technologies tend to be more circumspect, expecting AI to lift productivity but also to diffuse slowly enough through the economy that the job market adjusts more gracefully. There may be bouts of higher unemployment, but any increase will be modest, as jobs lost to AI will be largely offset by new jobs supported by the income and wealth it creates.

How this ultimately unfolds is all but impossible to fathom. Therefore, in this study, we consider several scenarios that put some bounds around the possibilities that economists are contemplating. The most likely, or baseline, scenario, **AI-Empowered Economy**, holds that AI will meaningfully increase productivity over the next decade. The productivity and resulting gains in profits and incomes are strong enough to justify the high expectations of stock investors and other creditors, but not so strong as to significantly disrupt the job market and cause substantial job losses and higher unemployment. This is a generally sanguine scenario, to which we assign a 40% probability.[3]

In the most likely alternative scenario, **AI Falls Flat**, stock investors in highly valued AI companies are disappointed by AI adoption rates, productivity gains, and, ultimately, the profitability of these companies. Similar to the bursting of the Y2K internet stock market bubble a quarter century ago, the stock market suffers a severe selloff, with the resulting negative wealth effects undermining consumer spending. Credit markets are also roiled, as AI companies struggle to manage the debt they have taken on to help finance their rapid expansion. The economy suffers a modest recession. In the long run, productivity growth in this scenario is impeded by various negative externalities created by AI, including heightened cybercrime and national security threats, as well as the government regulations passed in response. Productivity in non-AI-related industries also suffers due to less investment, as capital is diverted to AI-related activities. We attach a 25% probability to this downside scenario.

Channeling the forecasts of many AI technologists, in the **Job Market Upheaval** scenario, to which we assign a 20% probability, AI adoption accelerates, leading to much larger productivity gains more quickly. The already fragile job market is hit hard, as job losses from the productivity gains occur so quickly that any job creation in the rest of the economy falls short, resulting in significant overall job losses, high unemployment, and a recession. Although AI companies are highly profitable and their shareholders enjoy greater stock wealth, the economic benefits are highly concentrated, exacerbating the downturn. Lower- and middle-income Americans—who do not own much, if any, stock—do not benefit and are therefore forced to cut back on spending amid the reeling job market and income losses. Historically, stronger productivity gains have ultimately led to lower inflation and interest rates, higher real incomes, and more consumer spending. But not in this scenario, as steadily increasing market share across many industries impedes competition, allowing businesses to maintain higher prices and profit margins for longer.

On the other side of the distribution of possible macroeconomic outcomes is an optimistic **Productivity Boon** scenario, which has a 15% probability. This scenario is loosely fashioned after the second half of the 1990s, a period when the rapid build-out and adoption of the internet supported stronger productivity and job gains. It was also a period of disinflation and lower interest rates, as businesses passed through the benefits of the internet-supported productivity gains to consumers. Strong consumer spending spurred job creation across other businesses and industries. While there are many differences between now and the late 1990s, in this optimistic scenario, the similarities win the day.

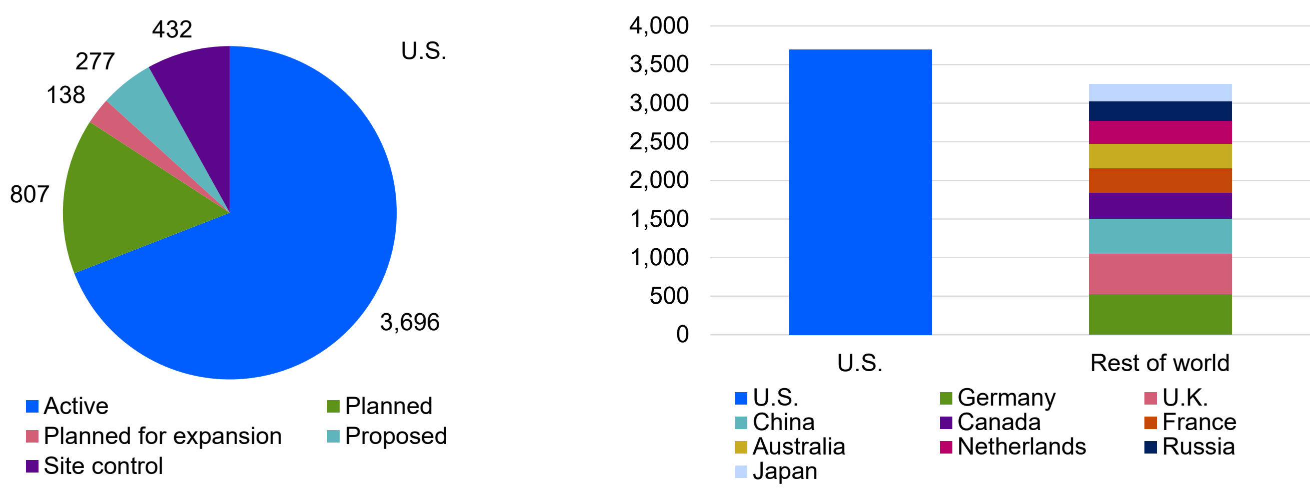
We determine the macroeconomic consequences of these scenarios over the next decade through simulations of our large-scale model of the U.S. and global economies.[4] The model is used regularly for forecasting and scenario analysis and is well-suited for quantifying AI's near- and long-term effects on a wide range of economic variables, including GDP, inflation, jobs, and unemployment, as well as financial variables such as the stock and bond markets. Of course, the scenario analysis depends on various assumptions, including the rate of AI adoption and implementation among businesses and consumers, as well as the rate at which AI's capabilities advance.[5] In the discussion that follows, we describe the scenarios in more detail, the underlying assumptions, and their macroeconomic consequences.

AI-EMPOWERED ECONOMY (40% PROBABILITY)

Far and away the biggest upside surprise to economic growth this past year was the contribution from AI. In 2025, AI added an estimated half a percentage point to real GDP growth (see Table 1). Approximately one-third of this contribution came from ramping up data centers and electric power construction, as well as other investments in equipment and software. And the other two-thirds came from increased consumer spending, driven by the positive wealth effects from the surge in the value of stockholdings in AI companies (see Chart 1).[6]

Chart 1: AI Investment Boom

of data centers, yr-end 2025



Sources: Cloudscene, Moody's Analytics

While considerable, this growth understates AI's actual contribution to GDP growth because of an artifact in how business investment is measured. Namely, that semiconductor purchases by many AI companies—even those used to train AI models—are not counted as GDP, at least not for a while and perhaps never (see Box 1). Imports of AI-related investment goods, which are considerable, also subtract from GDP, including chips classified as

BOX 1: MEASURING AI INVESTMENT IN GDP

Artificial intelligence's measured contribution to GDP, though already sizable, meaningfully understates its actual contribution. The measurement challenges relate to how AI infrastructure is acquired and integrated. When businesses purchase equipment such as computer servers from original equipment manufacturers, the GDP accounting is straightforward. The semiconductors used in the servers are treated as intermediate inputs and, thus, do not count directly toward GDP. But the servers are treated as equipment investment and included in GDP when sold to businesses. The chips' value and contribution to GDP are captured in the price of the servers. This historically typical path, from chip to OEM to business, is appropriately measured.

But increasingly, AI hyperscalers are vertically integrating, purchasing semiconductors and associated inputs directly and building proprietary training clusters and data processing systems internally. When these firms buy chips directly and assemble their own systems, those chips register as intermediate goods, the same as when they are sold to an OEM. But there is a critical difference, as the server never appears as a separate market transaction. The firm has simply moved components from one part of its operation to another.

In theory, this internal production should still be recorded as an own-account equipment investment, similar to the capitalization of in-house-developed custom software. But it is significantly harder for the Bureau of Economic Analysis to track activity that happens entirely within a single company. The primary survey used to capture this activity, the Annual Capital Expenditures Survey, relies on companies to self-report their capital spending, including internally produced equipment. However, it operates with a considerable lag, meaning the recent surge in internal AI infrastructure development may take years to be fully reflected in the national accounts—and undercounting remains a risk even as the data are revised.

The treatment of the AI model development adds another layer of complexity. Under BEA conventions, foundation model training is meant to be captured as own-account software investment regardless of whether companies use owned hardware or purchased cloud services. The measurement challenge is similar to own-account equipment. That is, businesses must self-report this internal activity, and the same survey lag applies.

Consider a firm that buys cloud services from another provider to train a large language model. The cloud compute purchase is recorded as an intermediate service. The resulting improvement to the LLM—an intangible asset with economic value—should be counted as own-account software investment, captured through the same survey that tracks internally produced equipment. The cloud bill is recorded immediately, while the software investment will take years to be properly reflected in the national accounts and faces similar reporting gaps.

Import intensity compounds the issues with the own-account measurement. Imported semiconductors subtract from GDP immediately, while the own-account equipment they are embedded in may not show up as investment until years later due to survey lags. The result is a temporary, and potentially persistent, understatement, as the import drag appears in real time, but the investment boost shows up later—if fully captured. This asymmetry is most severe for vertically integrated infrastructure, where hyperscalers import components and assemble systems internally rather than purchasing complete equipment.

The national accounts are catching only part of the AI investment story. Traditional equipment purchases—such as servers from manufacturers, off-the-shelf software, and data center construction contracts—are captured in the data. But the vertically integrated infrastructure that increasingly characterizes AI's capital formation operates largely outside of real-time measurement. Companies that buy chips and build proprietary systems, as well as those that train foundation models using internal or purchased computing resources, are expected to eventually appear in the GDP statistics. But the lag is measured in years, and the risk of undercounting is significant. What we can measure shows a substantial boost, though this is almost certainly an undercount.

Table 1: AI Is Powering Real GDP Growth
4th qtr to 4th qtr, ppts

	2025	2026
Real GDP growth, %	2.23	2.62
Change in real GDP growth	*-0.17*	*0.39*
Artificial intelligence	0.52	0.53
Capital investment	0.18	0.25
Stock wealth effects	0.34	0.28
Deglobalization	-0.83	-0.63
Tariffs & trade restrictions	-0.51	-0.32
Restrictive immigration policy	-0.32	-0.31
Economic policy	0.09	0.49
Monetary policy	0.18	0.10
Fiscal policy	-0.09	0.39
Other factors	0.05	0.00

Note: Feb 2026 baseline forecast
Source: Moody's Analytics

intermediate goods. As odd as it sounds, installing servers using domestically produced chips in data centers often does not lift GDP, while installing equipment using imported chips in the same data centers actually subtracts from measured GDP. Even abstracting from these measurement issues, AI-related investment is already contributing meaningfully to GDP.

We expect much the same in 2026 in the baseline AI-Empowered Economy scenario. Given the hundreds of billions of dollars in equity and debt capital raised by AI hyperscalers and the seemingly easy access to much more, the investment boom is expected to intensify. The five leading public AI companies have collectively committed to spend upwards of $700 billion this year on big-ticket projects.[7] It would take a lot to derail this investment, at least any time soon.

The economy also benefits from increased consumer spending driven by the positive wealth effects from soaring AI stock prices (see Box 2). Last year alone, shareholder wealth increased by an astonishing approximately $10 trillion. In this baseline scenario, stock prices do not rise much, if at all, in 2026, as investors have already discounted the AI boom and then some. However, the boost to consumer spending from the well-to-do, who own most of the stocks, continues throughout the year. There are considerable lags between changes in wealth and spending, particularly due to rising stock prices, as investors are appropriately wary that stock prices are volatile and may fall as quickly as they have risen.

To date, AI's impact has been almost entirely on the demand side of the economy—increased business investment and consumer spending. There are only nascent and modest indications that AI has lifted the supply side of the economy via stronger productivity growth. This quickly changes in the baseline scenario, with productivity growth steadily accelerating as AI adoption among businesses continues apace, approximately consistent with that of the internet (see Chart 2). Over the coming decade, 2026-2035, nonfarm business productivity is projected to increase by 2.5% per annum. This is meaningfully stronger than the current approximately 2% productivity growth, the 1.8% per annum growth in the previous decade, and the less than 1.5% per annum growth in the decade following the Global Financial Crisis, a period characterized by so-called secular stagnation (see Chart 3).[8]

While the stronger anticipated productivity gains in the baseline lead to somewhat slower job growth and higher structural unemployment in the longer run, they support stronger

BOX 2: MEASURING THE WEALTH EFFECT

The wealth effect is the change in consumer spending resulting from changes in household wealth. Wealthier households are more able and willing to spend from their current income.

The wealth effect is not directly observable, but it is estimated based on an equation explaining consumer spending. In the equation below, we estimate consumer spending across the 50 states and the District of Columbia, using quarterly data from 1997 to 2023. This pooled cross-sectional equation has a log-linear specification, and thus the coefficients on the variables used to explain consumer spending are simple elasticities.

As shown, a 1% increase in the value of stocks owned by households results in a 0.054% increase in consumer spending per household (see Table). The housing wealth effect is somewhat larger. A 1% increase in the value of the housing stock per household results in a 0.068% increase in consumer spending per household. These estimated wealth effects are generally robust to different specifications, estimation periods and state pools. The estimated wealth effects are small, but given the large increases in stock and housing wealth since the pandemic, they have contributed significantly to consumer spending and overall economic growth.

In our previous research, we found that the wealth effect can vary between stock and housing wealth over time, and it is bigger when household wealth is declining than when it is increasing.

Explaining Consumer Spending

Dependent variable is consumer spending per household

Log linear specification
Estimaton method is pooled least squares with fixed effects
Sample period is 1997Q1 to 2023Q4
Time period observations: 108
State cross-sections included: 51
Total pool observations: 5,508

Independent variables:	Coefficient	Std. Error	t-Statistic
Constant	0.324	0.189	1.7
Equity wealth per household	0.054	0.051	1.1
Housing wealth per household	0.068	0.018	3.8
Personal income per household	0.797	0.086	9.2
Share of the population in their 20s	0.118	0.071	1.7
Fixed effects not shown			
R-squared	0.98		
Adjusted R-squared	0.98		
S.E. of regression	0.04		
Sum squared resid	7.61		
Log likelihood	10318.80		
F-statistic	6025.39		
Durbin-Watson statistic	0.42		

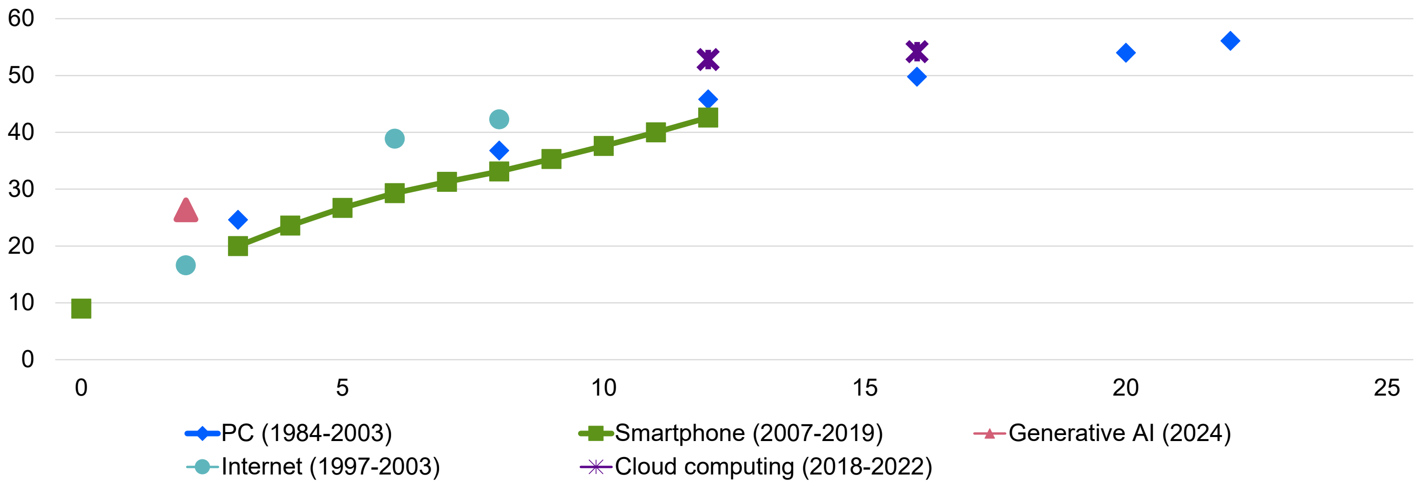
Sources: BEA, Federal Reserve, Census Bureau, Moody's Analytics

household incomes and corporate profits. They also underpin higher stock, housing, and other asset prices, and help ease the government's fiscal problems. The baseline scenario is thus a sanguine macroeconomic outlook, consistent with that of most other professional economists who produce long-term forecasts (see Table 2).

Not surprisingly, then, our estimate of AI's future contribution to productivity growth is also generally consistent with those of professional economists (see Table 3). Over the next decade, AI's boost to productivity is expected to range from a few basis points per annum to nearly a percentage point. AI technologists have a starkly different perspective, expecting productivity gains of 3% to an astonishing 30% per annum.[9] The widely divergent views between economists and technologists reflect a range of factors (see Box 3). While we do not examine the economy in a future like the one that AI technologists anticipate—one that is well outside any historical bounds and thus the capabilities of our global model—we consider several alternative scenarios in the analysis that follows.

Chart 2: AI Adoption Rate Is Strong, but Within Historical Bounds

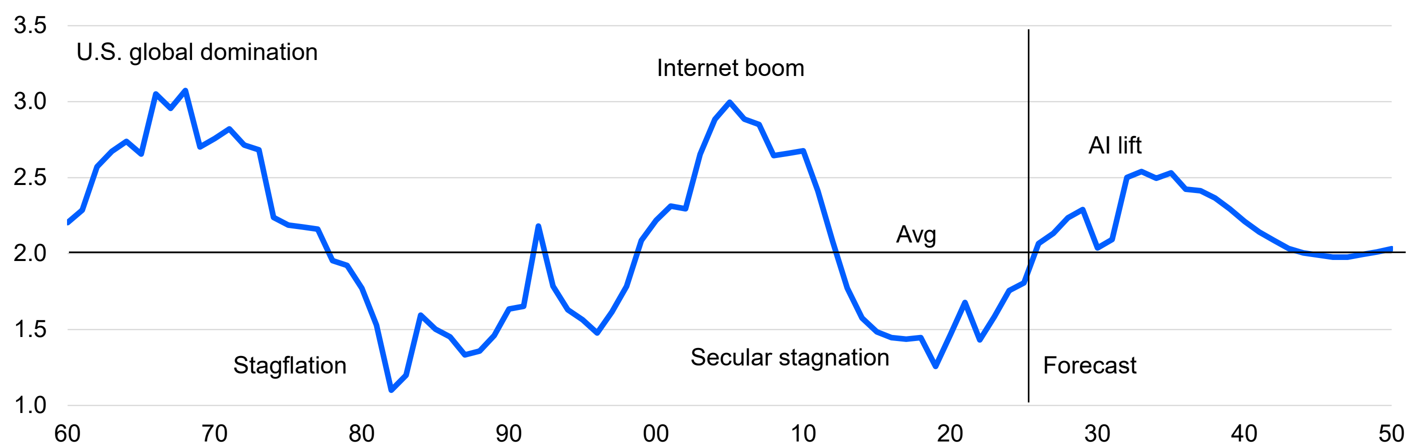
Adoption rates (y-axis) at work by yr since mass-market introduction (x-axis)



Sources: Penn Wharton Budget Model, Moody's Analytics

Chart 3: The AI Productivity Boost

Nonfarm business productivity, avg annual %, rolling 10-yr periods, baseline scenario



Sources: Census Bureau, Moody's Analytics

Table 2: AI-Empowered Economy Baseline Scenario

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
Real GDP												**Avg annual growth**			
2017$ bil	23,885.8	24,584.8	25,023.7	25,514.1	26,121.6	26,806.6	27,519.7	28,208.8	28,874.4	29,496.2	30,097.5	2.4	2.3	2.3	2.3
% change	*2.3*	*2.9*	*1.8*	*2.0*	*2.4*	*2.6*	*2.7*	*2.5*	*2.4*	*2.2*	*2.0*				
Nonfarm employment															
Mil	159.4	159.9	160.7	161.5	162.3	163.2	164.1	164.8	165.4	165.9	166.4	1.2	0.5	0.4	0.4
Change, ths	*1,441*	*502*	*784*	*770*	*841*	*872*	*896*	*768*	*564*	*508*	*479*				
Nonfarm business productivity															
Index	117.2	121.0	123.6	126.6	130.0	133.5	137.0	140.5	144.0	147.3	150.5	1.8	2.6	2.4	2.5
% change	*1.8*	*3.2*	*2.2*	*2.4*	*2.7*	*2.7*	*2.6*	*2.5*	*2.5*	*2.3*	*2.1*				
Labor force, mil															
Mil	170.9	170.8	170.9	171.6	172.3	173.0	173.9	174.7	175.2	175.7	176.1	0.8	0.3	0.3	0.3
Change, ths	*2,770*	*-102*	*152*	*637*	*699*	*780*	*850*	*755*	*573*	*439*	*389*				
												Avg			
Unemployment rate, %	4.3	4.5	4.4	4.4	4.4	4.5	4.5	4.6	4.6	4.6	4.5	4.6	4.4	4.5	4.5
												Avg annual growth			
Consumer Price Index															
% change	*2.7*	*3.1*	*2.7*	*2.2*	*1.9*	*1.9*	*1.9*	*1.8*	*1.8*	*1.9*	*2.0*	*3.1*	*2.4*	*1.9*	*2.1*
												Avg			
Federal funds rate, %	4.2	3.2	3.0	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.3	3.0	3.1
10-yr Treasury yield, %	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	2.6	4.3	4.2	4.3
												Avg annual growth			
Real disposable income per household															
2017$ bil	135,310	137,017	139,677	141,804	144,831	148,152	151,600	154,834	157,559	159,564	160,996	1.8	1.8	1.7	1.8
% change	*0.5*	*1.3*	*1.9*	*1.5*	*2.1*	*2.3*	*2.3*	*2.1*	*1.8*	*1.3*	*0.9*				
Corporate profits after taxes															
$ bil	3,484.2	3,760.4	3,933.1	4,108.8	4,258.3	4,411.9	4,627.5	4,867.5	5,059.7	5,191.1	5,296.2	6.6	4.8	3.7	4.3
% change	*-0.4*	*7.9*	*4.6*	*4.5*	*3.6*	*3.6*	*4.9*	*5.2*	*3.9*	*2.6*	*2.0*				
S&P Stock Price Index															
Index	6,211.0	6,773.6	6,656.2	6,869.0	7,375.3	7,964.3	8,450.4	8,746.1	8,990.1	9,268.3	9,625.8	11.7	5.1	3.9	4.5
% change	*14.5*	*9.1*	*-1.7*	*3.2*	*7.4*	*8.0*	*6.1*	*3.5*	*2.8*	*3.1*	*3.9*				
FHFA House Price Index															
Index	429.8	436.1	444.1	455.9	469.5	483.7	497.4	510.9	524.5	538.8	554.1	7.3	2.4	2.8	2.6
% change	*2.8*	*1.5*	*1.8*	*2.7*	*3.0*	*3.0*	*2.8*	*2.7*	*2.7*	*2.7*	*2.8*				
												Avg			
Federal budget deficit, $ bil	-1,666.8	-2,073.1	-2,440.0	-2,655.7	-2,876.3	-3,122.6	-3,384.0	-3,653.4	-3,880.5	-4,011.0	-4,032.9				
% of GDP	*-5.4*	*-6.4*	*-7.2*	*-7.5*	*-7.8*	*-8.1*	*-8.5*	*-8.8*	*-9.0*	*-9.0*	*-8.7*	*-6.3*	*-7.1*	*-8.7*	*-7.8*
Federal debt-to-GDP ratio, %	100.2	100.6	103.2	105.6	107.6	109.8	112.3	115.5	118.9	121.0	122.5	88.5	104.5	116.6	110.6

Sources: BEA, BLS, Census Bureau, Treasury, Moody's Analytics

Table 3: AI's Expected Impact on Productivity

Study	AI boost to total factor productivity, avg annual % change	Horizon	Cumulative level effect	Notes
Acemoglu (2024)	0.07%	10 yrs	~0.66%-0.71%	Upper bound; published NBER WP gives ≤0.66%; Economic policy version ≈0.71%. TFP estimate.
Penn Wharton Budget Model (Sep 2025)	~0.1%-0.15% (front-loaded, fading)	To 2075	1.5% by 2035, 3% by 2055, 3.7% by 2075	TFP estimate. Gains are strongest in early 2030s, then fade. Originally released 2024; updated Sep 2025.
IMF/Cazzaniga et al. (2024)	~0.3%-0.4%	10 yrs	~3%-4%	IMF staff discussion note. Higher-complementarity scenario yields ~4% TFP gain over 10 yrs. TFP estimate.
Moody's Analytics baseline (2026)	0.3%	2026-2035	3%	Based on authors' forecast of nonfarm business productivity; reconciled to TFP framework.
Filippucci et al./OECD (2024)	0.25%-0.6%	15-20 yrs	3%-8%	TFP estimate. Range depends on sectoral adoption speed and AI capabilities. OECD AI Papers No. 29.
Bergeaud (2024)	~0.3%-0.6%	10-20 yrs	~3%-6%	Primarily a European productivity estimate (ECB Sintra paper). Cumulative upper bound lower than original table; ~2.9% in baseline scenario per IMF citation.
Tytell (2024)	0.2%-0.9%	10 yrs	2%-9%	Fidelity Investments institutional research paper. TFP conversion from labor productivity.
Baily, Brynjolfsson & Korinek (2023)	~0.6%-0.9% (TFP equiv.)	10-15 yrs	~6%-10%	Original estimate is 1%-1.5% annual labor productivity. Converted to TFP using labor share (~0.6). Brookings Institution.
Aghion & Bunel (2024)	0.07%-1.24% (median: ~0.68%, historical analog: 0.8%-1.3%)	10-20 yrs	Median ~7% (range 1%-12%+)	Two approaches: (1) task-based framework—median 0.68% TFP, range 0.07%-1.24%; (2) historical tech parallels—0.8%-1.3% per yr.
Goldman Sachs/Briggs & Kodnani (2023)	~0.9% (TFP equiv.)	10 yrs post-adoption	~9%	Headline: ~1.5 ppt annual U.S. labor productivity growth. Converted to TFP using labor share (~0.6). Conditional on widespread adoption; timing uncertain.

Note:
Studies use different methodological frameworks, time horizons and productivity measures. Annual figures marked "(TFP equiv.)" are converted from labor productivity estimates using an approximate labor share of 0.6. Bergeaud (2024) focuses primarily on European economies. Aghion & Bunel (2024) present two distinct approaches yielding a wide range; the table reflects both. Penn Wharton (2025) models gains as front-loaded and eventually fading. This table reflects the authors' efforts to reconcile estimates around total factor productivity over at least the next decade. Ordered roughly from lowest to highest annual TFP boost.

Sources: Authors, Moody's Analytics

BOX 3: ECONOMISTS VS. AI TECHNOLOGISTS

Economists generally believe that artificial intelligence will significantly boost productivity growth in the coming years and even decades. But these expected gains pale in comparison to those anticipated by the technologists developing AI and running AI companies. At the risk of overgeneralizing, these two camps are talking past each other for a range of reasons.

First, economists and technologists are using different definitions of productivity. Economists measure productivity as real output per hour worked, while technologists measure it as task throughput such as lines of code, customer tickets, legal documents, and radiology scans. For example, a developer who writes 40% faster while using Copilot may not produce 40% more economic output if the bottleneck was never code generation but rather requirements gathering, testing, organizational decision-making, or regulatory approval. Technologists see the task-level acceleration and extrapolate, while economists see the broader frictions that attenuate it.

Second, economists see adoption lags in new technologies that technologists systematically underestimate. The so-called productivity J-curve is central in economists' perspective. It suggests that for a general-purpose technology like AI to be adopted, companies must heavily invest in complementary intangible capital—such as reorganizing workflows, retraining workers, redesigning processes, and renegotiating contracts—before they see any significant productivity gains. These investments can be large, unmeasured in GDP, and slow to pay off. Technologists, however, operate within organizations that are typically capable of quick adjustment.

Third, economists and technologists have fundamentally different beliefs about the speed of AI capability improvements. Based on the history of new technologies, most economists believe that technological capability improves incrementally and experiences diminishing returns. There are impressive improvements moving from GPT-3 to GPT-4 to GPT-5, for example, but there are decelerating marginal gains on various benchmarks, with rising training costs. By contrast, technologists see emergent capabilities and research pipelines that they believe will sustain extraordinarily rapid improvements in AI capabilities.

Fourth, economists' views are rooted in Robert Solow's 1987 observation that "you can see the computer age everywhere but in the productivity statistics." That is, the gains from new technologies will be smaller and slower than the hype suggests. The technologists argue that it is far from hype, and that the perceived delay between the economic impact of technology and its reflection in the data is not actually a lag, but rather a natural consequence of measurement taking time to catch up with reality.

Finally, both economists and technologists may be talking their book, so to speak. Economists have an incentive to be cautious because they jeopardize their credibility if they buy into the technologists' prediction that "this time is different" and AI will revolutionize the economy. But if AI proves to be an economic game changer that the economists did not anticipate, they will face fewer professional penalties. On the other hand, technologists have an incentive to be anything but cautious, as they must convince investors to provide significant amounts of capital to build out the AI infrastructure. Therefore, their success rests on the narrative that AI will be transformative.

AI FALLS FLAT (25% PROBABILITY)

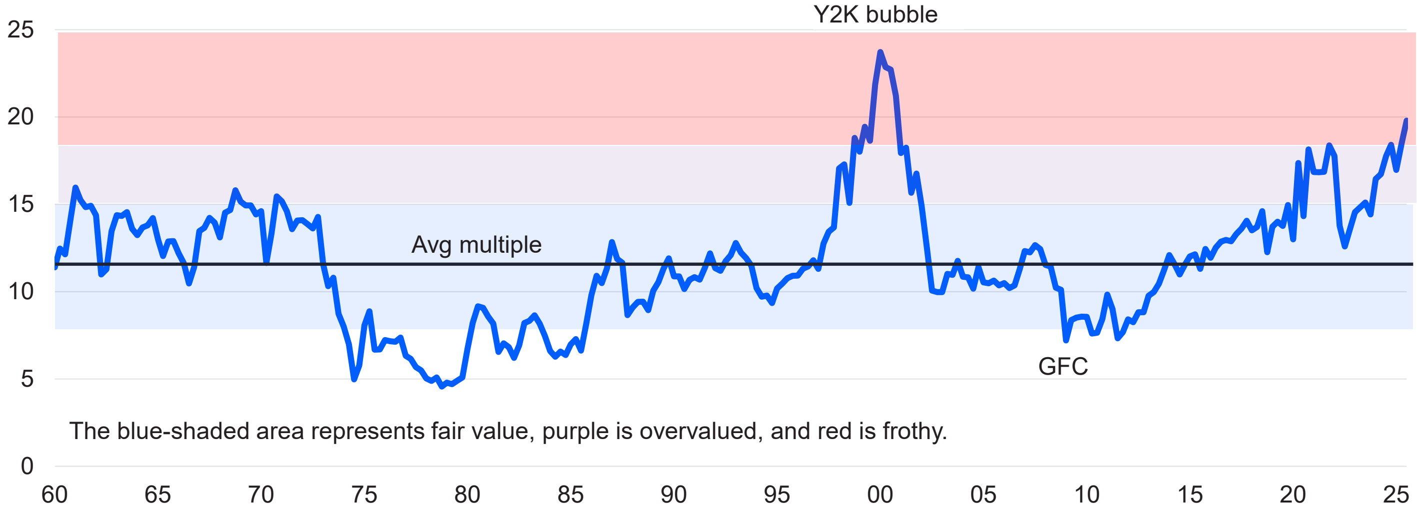
The most likely alternative scenario, **AI Falls Flat**, is motivated by the extraordinary surge in AI companies' stock prices. Stock prices have rocketed so far and so fast that the stock market appears overvalued, even frothy, and potentially in a bubble. In this scenario, investors have badly misjudged AI adoption rates and their impact on business workflows, and as a result, future gains in productivity and corporate profitability. The stock market suffers a significant near-term selloff, with the fallout hitting the financial system and economy hard, precipitating a recession.

The ingredients for a stock market bubble are arguably coming into place. Most importantly, aside from recent volatility, stock prices have been on a tear. Prices never move in a straight line, but they have risen more or less straight up over the past decade and have more than doubled since the COVID-19 pandemic. Since the Dow Jones Industrial Average index—comprising the 30 largest publicly traded companies—was first published in the late 1800s, there have been only three other decades in which prices have risen as much. The roaring 1920s, of course, ended terribly in the 1929 stock market crash, which ushered in the Great Depression of the 1930s. That was clearly a bubble. In the 1950s, stock market gains were powered by U.S. companies' dominance of the global economy in the wake of World War II. This included companies such as General Electric, AT&T, General Motors, U.S. Steel and DuPont. That was not a bubble. And then there was the 1990s internet craze, which ended soon after Y2K with a dramatic decline in stock prices. There is no question; that was a bubble. The internet was a game-changing technology that resulted in enormous productivity gains and ultimately generated significant profits. However, investors discounted all this and much more. Stock market valuations—stock prices relative to corporate earnings—surged.

Today's valuations are not quite as lofty as they were in the late 1990s, but they are close. And they are still rising. A trusty measure of valuation is the ratio of the value of all publicly traded stocks, as measured by the Wilshire 5000, and economywide corporate profits from the Bureau of Economic Analysis. In the 75 years for which this valuation measure can be

Chart 4: AI-Powered Stock Market Is Overvalued, Bordering on Frothy

Ratio of Wilshire 5000 to NIPA after-tax corporate earnings, %



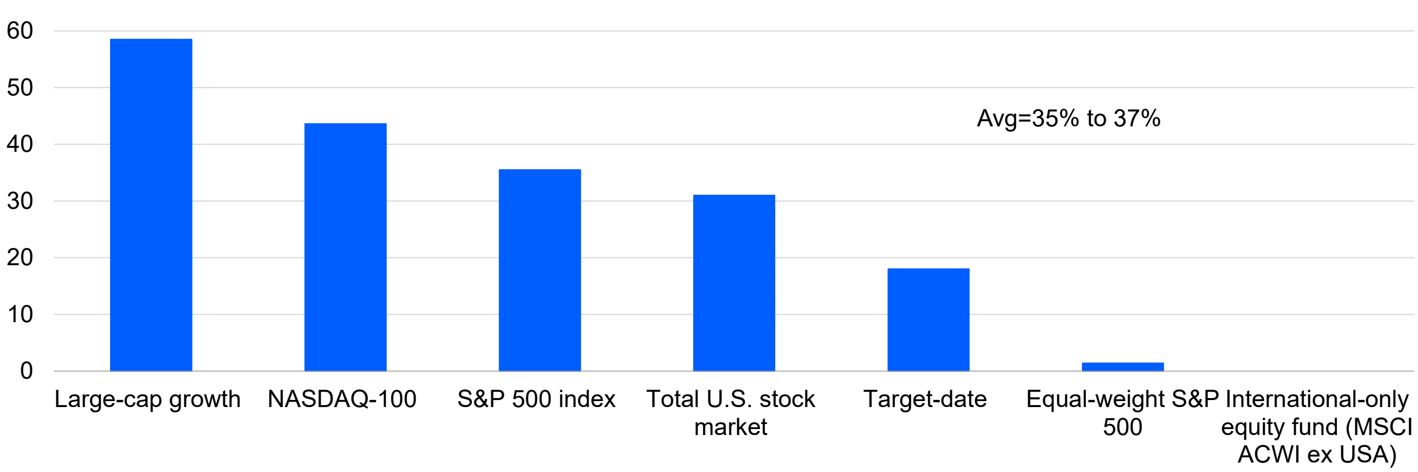
Sources: BEA, Financial Times, Moody's Analytics calculated, stock prices have averaged 12 times corporate profits (see Chart 4). Currently, prices are more than 20 times higher than earnings. The only other time valuations were higher was at the height of the Y2K bubble, when the measure briefly spiked to 24 times.[10]

But perhaps today's extraordinary stock market valuation is justified. After all, this largely reflects investors' optimism about the success of large AI companies. These hyperscalers are nothing like many of the fly-by-night internet companies (think Pets.com) that inflated the Y2K bubble. However, like those internet companies, the AI companies' stock prices are fueled by investor speculation. That is, an increasing number of investors are piling into these stocks, driven by the simple logic that since their prices have risen significantly, they will rise even further. This momentum will continue, and if it does not, they will be smart enough to recognize this and find other unwitting investors to buy their stocks before the bottom drops out.

Arguably, another form of speculation is taking hold in the stock market via the fast-growing index funds. These funds passively track a market index, such as the Standard & Poor's 500, by holding stocks in the same proportions as the index. The goal is to match the market's performance. Index funds offer the benefits of diversification and low fees, but they are not based on an analysis of the underlying companies' strengths. Thus, if a company's stock price rises, it will attract more investment from index funds, which will further drive its price higher. There is no argument that the stock price of AI chip juggernaut NVIDIA should be up significantly, for example, but it has increased substantially more due to this self-reinforcing dynamic (see Chart 5).

Chart 5: Even Passive Investors Are Highly Exposed to AI Stocks

Weight of the Magnificent Seven in most common 401(k) fund types, %



Sources: AInvest, Morningstar, Motley Fool, MSCI, Vanguard, Visual Capitalist, Moody's Analytics

If the current market trend persists, the stock market will soon be in a bubble. The final ingredient for a bubble is that nearly all the naysayers capitulate. They have called out the bubble for so long that they are no longer considered credible. Any skepticism is thrown to the side, and the bubble inflates more.

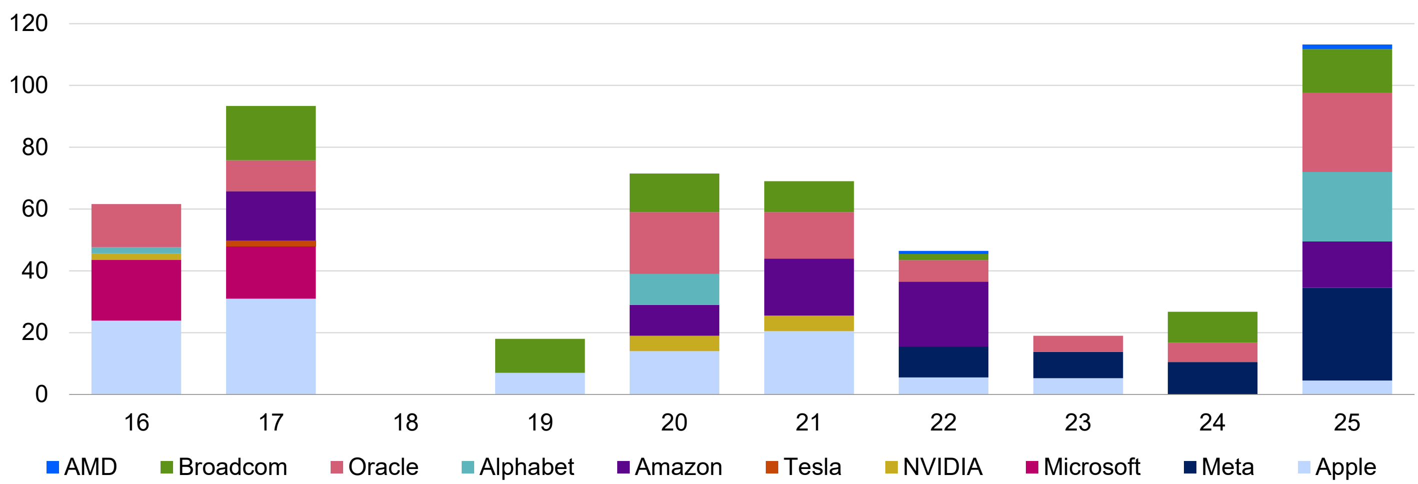
The soaring stock market has been a powerful tailwind for the economy. The wealthy, who own the bulk of the stocks, are now much wealthier and are spending accordingly. This newfound wealth supports significant spending, which, in turn, supports a substantial number of jobs. This highlights a considerable threat to the economy; if the stock market is in fact a bubble and it bursts, consumer spending will suffer a massive blow, triggering a recession. This is precisely what happened in the wake of the bursting Y2K bubble, and it is the basis for this scenario.

The recession after the Y2K bubble burst was modest, largely because internet companies at the time had little debt. Shareholders in these companies suffered badly when their stock prices collapsed, but credit markets and the broader financial system were not severely impacted, mitigating the fallout on the economy.

Until last year, the AI hyperscalers had more than enough operating cash flow to fund their increasingly ambitious capital spending plans without increasing their borrowing. Their leverage was low. However, this is no longer the case, as hyperscalers increasingly turn to debt markets to finance their expansion. The 10 largest companies issued a stunning $120 billion in bonds last year, up from an average of $45 billion per annum in the decade before (see Chart 6). Bond issuance by all technology companies, excluding refinancings, soared to an all-time high at the end of 2025.

Chart 6: AI Companies Ramp Up Their Borrowing

Bond issuance of top-10 technology companies, $ bil



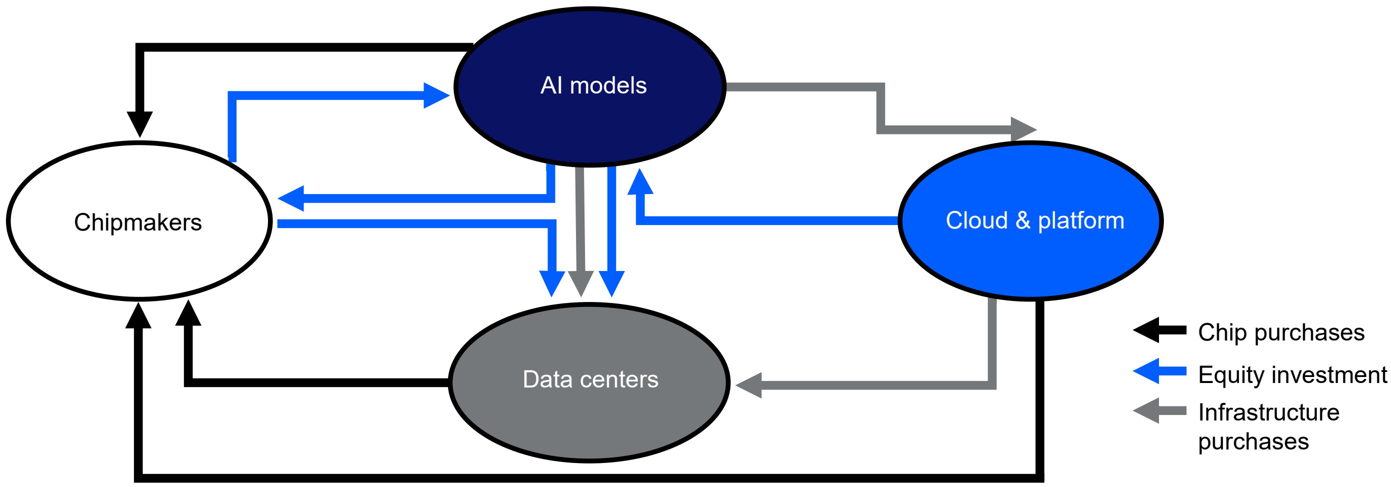
Source: Moody's Analytics

The hyperscalers are also becoming increasingly creative in structuring the financing to avoid adding debt to their balance sheets. They are teaming up with private credit funds via special-purpose vehicles, adding to the opacity of the arrangements. There is also circular financing, with hyperscalers taking stakes in and purchasing services from one another, making it difficult to evaluate the financial interdependencies between them (see Chart 7).

There are many potential catalysts for the bursting of the AI stock market bubble. Investors might grow impatient and sell their holdings as long-awaited returns from firms' AI bets get pushed further into the future. If firms' and individuals' adoption rates slow, profitable use cases at the scale AI proponents have promised would seem impossible to realize. Additionally, the speed with which semiconductors and other AI-related intellectual

Chart 7: Circular Financing in the AI Ecosystem

Relationships of businesses in the AI build-out



Source: Moody's Analytics

property become obsolete may be underappreciated. This would significantly dent investors' evaluation of firms' future earnings and spark a broad-based selloff in stocks.

In this scenario, stock prices ultimately fall some 25% from their current peak this year (see Table 4). Nearly $20 trillion in shareholder wealth evaporates, causing the wealth effects to quickly swing from a tailwind for consumer spending and economic growth to a powerful headwind. Businesses begin laying off workers in response, causing lower- and middle-income consumers to pull back further on spending, which, in turn, leads to more layoffs. This self-reinforcing negative dynamic intensifies, leading to a recession. Exacerbating the downturn are rising corporate bond defaults and bankruptcies, particularly of AI companies that struggle to service their substantial debt loads. Credit availability tightens, and the cost of capital rises across all industries.

This scenario also anticipates weaker productivity and economic growth in the longer term. This differs from the wake of the bursting internet stock market bubble, when the economy recovered quickly, and the internet expansion and strong productivity growth continued. In this case, the expectation is that AI's potential negative externalities—such as more widespread and sophisticated cybercrime and heightened threats to national security—will become more evident. To date, there has been little to no government oversight of the AI industry, increasing the prospects of such a possibility. Mitigating these risks and responding to them will add meaningfully to the costs of doing business and national defense, weighing on productivity.

Productivity growth is also impaired as the current massive investments in AI infrastructure raise costs for non-AI-related businesses, including the costs of chips, other technology, labor, construction, energy and critical minerals. The diversion of capital to AI companies also makes it particularly hard for non-AI businesses to raise the capital necessary to invest in their own productivity-enhancing activities. In this scenario, productivity growth over the next decade is close to 2% per annum, consistent with long-run productivity gains, but well short of those in the baseline scenario (see Table 5).

Table 4: Economic Outlook Under AI Falls Flat Scenario

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
Real GDP													Avg annual growth		
2017$ bil	23,885.8	24,077.0	24,174.4	24,959.5	25,732.5	26,393.5	27,056.3	27,660.6	28,238.7	28,814.6	29,405.7	2.4	2.0	2.2	2.1
% change	*2.3*	*0.8*	*0.4*	*3.2*	*3.1*	*2.6*	*2.5*	*2.2*	*2.1*	*2.0*	*2.1*				
Nonfarm employment															
Mil	159.4	157.2	155.9	158.8	161.1	161.7	162.3	162.7	162.9	163.0	163.4	1.2	0.3	0.2	0.2
Change, ths	*1,441*	*-2,180*	*-1,354*	*2,949*	*2,240*	*687*	*577*	*418*	*115*	*164*	*383*				
Nonfarm business productivity															
Index	117.2	119.9	121.5	123.4	125.9	128.5	131.4	134.6	138.1	141.4	144.6	1.8	1.9	2.4	2.1
% change	*1.8*	*2.3*	*1.3*	*1.6*	*2.0*	*2.1*	*2.2*	*2.5*	*2.5*	*2.4*	*2.3*				
Labor force															
Mil	170.9	170.6	170.4	171.0	171.7	172.5	173.1	173.5	173.7	174.0	174.3	0.8	0.2	0.2	0.2
Change, ths	*2,770*	*-248*	*-218*	*563*	*762*	*751*	*587*	*398*	*268*	*234*	*288*				
													Avg		
Unemployment rate, %	4.3	5.8	6.3	5.1	4.4	4.6	4.7	4.7	4.8	4.8	4.8	4.6	5.1	4.7	4.9
													Avg annual growth		
Consumer Price Index															
% change	*2.7*	*3.0*	*2.3*	*1.7*	*1.5*	*1.6*	*1.7*	*1.6*	*1.5*	*1.6*	*1.7*	*3.1*	*2.0*	*1.6*	*1.8*
													Avg		
Federal funds rate, %	4.2	2.7	2.0	2.3	2.7	3.0	3.0	3.1	3.0	3.0	3.0	2.0	2.8	3.0	2.9
10-yr Treasury yield, %	4.3	4.0	3.9	4.0	4.1	4.2	4.3	4.3	4.3	4.3	4.4	2.6	4.1	4.3	4.2
													Avg annual growth		
Real disposable income per household															
2017$ bil	135,310	136,563	138,321	140,201	143,218	146,584	149,892	152,755	155,118	156,860	158,167	1.8	1.6	1.5	1.6
% change	*0.5*	*0.9*	*1.3*	*1.4*	*2.2*	*2.4*	*2.3*	*1.9*	*1.5*	*1.1*	*0.8*				
Corporate profits after taxes															
$ bil	3,484.2	3,531.1	3,573.4	3,880.7	4,094.4	4,217.4	4,413.8	4,646.5	4,834.7	4,981.2	5,116.7	6.6	3.9	3.9	3.9
% change	*-0.4*	*1.3*	*1.2*	*8.6*	*5.5*	*3.0*	*4.7*	*5.3*	*4.0*	*3.0*	*2.7*				
S&P Stock Price Index															
Index	6,211.0	4,834.7	5,437.0	5,893.1	6,438.0	7,006.8	7,471.3	7,757.0	7,995.8	8,270.6	8,590.2	11.7	2.4	4.2	3.3
% change	*14.5*	*-22.2*	*12.5*	*8.4*	*9.2*	*8.8*	*6.6*	*3.8*	*3.1*	*3.4*	*3.9*				
FHFA House Price Index															
Index	429.8	434.0	439.0	450.8	466.7	481.1	493.0	503.8	514.3	525.1	536.7	7.3	2.3	2.2	2.2
% change	*2.8*	*1.0*	*1.2*	*2.7*	*3.5*	*3.1*	*2.5*	*2.2*	*2.1*	*2.1*	*2.2*				
													Avg		
Federal budget deficit, $ bil	-1,666.8	-2,434.3	-3,077.6	-3,002.7	-2,904.0	-3,081.4	-3,341.5	-3,598.6	-3,822.6	-3,949.2	-3,972.4				
% of GDP	*-5.4*	*-7.6*	*-9.4*	*-8.7*	*-8.1*	*-8.3*	*-8.6*	*-9.0*	*-9.2*	*-9.2*	*-9.0*	*-6.3*	*-7.9*	*-8.9*	*-8.4*
Federal debt-to-GDP ratio, %	100.2	109.1	115.1	117.4	118.6	120.6	123.1	126.6	130.3	132.3	133.7	88.5	113.5	127.7	120.6

Sources: BEA, BLS, Census Bureau, Treasury, Moody's Analytics

Table 5: Economic Outlook Under Various Scenarios

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
Real GDP												Avg annual growth			
Baseline, 2017$ bil	23,885.8	24,584.8	25,023.7	25,514.1	26,121.6	26,806.6	27,519.7	28,208.8	28,874.4	29,496.2	30,097.5	2.4	2.3	2.3	2.3
% change	*2.3*	*2.9*	*1.8*	*2.0*	*2.4*	*2.6*	*2.7*	*2.5*	*2.4*	*2.2*	*2.0*				
AI Falls Flat, 2017$ bil	23,885.8	24,077.0	24,174.4	24,959.5	25,732.5	26,393.5	27,056.3	27,660.6	28,238.7	28,814.6	29,405.7	2.4	2.0	2.2	2.1
% change	*2.3*	*0.8*	*0.4*	*3.2*	*3.1*	*2.6*	*2.5*	*2.2*	*2.1*	*2.0*	*2.1*				
Difference from baseline, %	*0.0*	*-2.1*	*-3.4*	*-2.2*	*-1.5*	*-1.5*	*-1.7*	*-1.9*	*-2.2*	*-2.3*	*-2.3*				
Job Market Upheaval, 2017$ bil	23,885.8	24,633.1	24,878.5	25,098.0	25,675.0	26,403.6	27,195.5	27,941.8	28,633.2	29,263.2	29,854.7	2.4	2.0	2.5	2.3
% change	*2.3*	*3.1*	*1.0*	*0.9*	*2.3*	*2.8*	*3.0*	*2.7*	*2.5*	*2.2*	*2.0*				
Difference from baseline, %	*0.0*	*0.2*	*-0.6*	*-1.6*	*-1.7*	*-1.5*	*-1.2*	*-0.9*	*-0.8*	*-0.8*	*-0.8*				
Productivity Boon, 2017$ bil	23,885.8	24,672.4	25,354.1	26,062.2	26,813.5	27,595.5	28,382.7	29,150.2	29,911.4	30,650.1	31,378.7	2.4	2.9	2.6	2.8
% change	*2.3*	*3.3*	*2.8*	*2.8*	*2.9*	*2.9*	*2.9*	*2.7*	*2.6*	*2.5*	*2.4*				
Difference from baseline, %	*0.0*	*0.4*	*1.3*	*2.1*	*2.6*	*2.9*	*3.1*	*3.3*	*3.6*	*3.9*	*4.3*				
Nonfarm employment															
Baseline, mil	159.4	159.9	160.7	161.5	162.3	163.2	164.1	164.8	165.4	165.9	166.4	1.2	0.5	0.4	0.4
Change, ths	*1,441.1*	*501.7*	*784.2*	*770.3*	*841.2*	*872.2*	*895.6*	*768.5*	*564.2*	*508.4*	*478.6*				
AI Falls Flat, mil	159.4	157.2	155.9	158.8	161.1	161.7	162.3	162.7	162.9	163.0	163.4	1.2	0.3	0.2	0.2
Change, ths	*1,441.1*	*-2,180.3*	*-1,354.1*	*2,949.1*	*2,239.7*	*687.0*	*576.6*	*418.4*	*114.8*	*163.8*	*383.0*				
Difference from baseline, ths	*0*	*-2,682*	*-4,820*	*-2,641*	*-1,243*	*-1,428*	*-1,747*	*-2,097*	*-2,547*	*-2,891*	*-2,987*				
Job Market Upheaval, mil	159.4	158.5	158.1	158.1	158.7	159.6	160.4	161.0	161.3	161.5	161.7	1.2	0.0	0.3	0.1
Change, ths	*1,441.1*	*-870.6*	*-477.4*	*42.1*	*651.0*	*837.4*	*841.8*	*554.3*	*319.5*	*186.8*	*252.4*				
Difference from baseline, ths	*0*	*-1,372*	*-2,634*	*-3,362*	*-3,552*	*-3,587*	*-3,641*	*-3,855*	*-4,100*	*-4,421*	*-4,648*				
Productivity Boon, mil	159.4	159.7	160.3	161.2	162.3	163.7	165.0	165.9	166.5	167.1	167.7	1.2	0.5	0.5	0.5
Change, ths	*1,441.1*	*322.6*	*587.0*	*839.8*	*1,108.9*	*1,402.6*	*1,343.2*	*868.4*	*651.7*	*618.7*	*593.8*				
Difference from baseline, ths	*0*	*-179*	*-376*	*-307*	*-39*	*491*	*939*	*1,039*	*1,126*	*1,236*	*1,352*				
Nonfarm business productivity															
Baseline, index	117.2	121.0	123.6	126.6	130.0	133.5	137.0	140.5	144.0	147.3	150.5	1.8	2.6	2.4	2.5
% change	*1.8*	*3.2*	*2.2*	*2.4*	*2.7*	*2.7*	*2.6*	*2.5*	*2.5*	*2.3*	*2.1*				
AI Falls Flat, index	117.2	119.9	121.5	123.4	125.9	128.5	131.4	134.6	138.1	141.4	144.6	1.8	1.9	2.4	2.1
% change	*1.8*	*2.3*	*1.3*	*1.6*	*2.0*	*2.1*	*2.2*	*2.5*	*2.5*	*2.4*	*2.3*				
Difference from baseline, %	*0.0*	*-0.8*	*-1.7*	*-2.5*	*-3.1*	*-3.7*	*-4.1*	*-4.2*	*-4.1*	*-4.1*	*-3.9*				
Job Market Upheaval, index	117.2	122.5	126.0	129.1	132.4	135.7	139.1	142.9	146.8	150.6	154.1	1.8	3.0	2.6	2.8
% change	*1.8*	*4.5*	*2.9*	*2.4*	*2.6*	*2.5*	*2.6*	*2.7*	*2.8*	*2.6*	*2.3*				
Difference from baseline, %	*0.0*	*1.2*	*2.0*	*2.0*	*1.9*	*1.6*	*1.5*	*1.7*	*1.9*	*2.2*	*2.4*				
Productivity Boon, index	117.2	122.4	126.4	129.9	133.5	136.8	140.2	143.9	147.9	151.7	155.3	1.8	3.1	2.6	2.9
% change	*1.8*	*4.4*	*3.3*	*2.8*	*2.7*	*2.5*	*2.5*	*2.6*	*2.7*	*2.6*	*2.4*				
Difference from baseline, %	*0.0*	*1.2*	*2.3*	*2.7*	*2.7*	*2.4*	*2.3*	*2.4*	*2.7*	*3.0*	*3.2*				
Labor force															
Baseline, mil	170.9	170.8	170.9	171.6	172.3	173.0	173.9	174.7	175.2	175.7	176.1	0.8	0.3	0.3	0.3
Change, ths	*2,770.4*	*-101.9*	*151.6*	*636.5*	*699.4*	*779.7*	*849.7*	*755.1*	*573.1*	*439.0*	*389.4*				
AI Falls Flat, mil	170.9	170.6	170.4	171.0	171.7	172.5	173.1	173.5	173.7	174.0	174.3	0.8	0.2	0.2	0.2
Change, ths	*2,770.4*	*-248.2*	*-218.5*	*562.7*	*762.3*	*751.3*	*586.9*	*397.5*	*267.7*	*233.7*	*288.4*				
Difference from baseline, ths	*0.0*	*-146.3*	*-516.3*	*-590.1*	*-527.2*	*-555.6*	*-818.4*	*-1176.0*	*-1481.4*	*-1686.8*	*-1787.7*				
Job Market Upheaval, mil	170.9	170.7	170.7	171.0	171.2	171.5	171.9	172.3	172.6	172.9	173.2	0.8	0.1	0.2	0.1
Change, ths	*2,770.4*	*-171.7*	*-13.5*	*280.7*	*245.2*	*267.2*	*397.6*	*378.6*	*335.0*	*313.1*	*303.3*				
Difference from baseline, ths	*0.0*	*-69.8*	*-234.9*	*-590.8*	*-1044.9*	*-1557.5*	*-2009.6*	*-2386.1*	*-2624.2*	*-2750.1*	*-2836.2*				
Productivity Boon, mil	170.9	170.8	171.0	171.6	172.3	173.2	174.1	174.9	175.6	176.2	176.7	0.8	0.3	0.4	0.3
Change, ths	*2,770.4*	*-121.6*	*230.3*	*619.6*	*736.5*	*875.4*	*883.3*	*827.4*	*681.5*	*557.0*	*511.7*				
Difference from baseline, ths	*0.0*	*-19.7*	*59.0*	*42.1*	*79.2*	*174.8*	*208.5*	*280.8*	*389.2*	*507.2*	*629.5*				
												Avg			
Unemployment rate															
Baseline, %	4.3	4.5	4.4	4.4	4.4	4.5	4.5	4.6	4.6	4.6	4.5	4.6	4.4	4.5	4.5
AI Falls Flat, %	4.3	5.8	6.3	5.1	4.4	4.6	4.7	4.7	4.8	4.8	4.8	4.6	5.1	4.7	4.9
Difference from baseline, ppt	*0.0*	*1.3*	*1.9*	*0.7*	*-0.1*	*0.1*	*0.2*	*0.2*	*0.2*	*0.2*	*0.3*				
Job Market Upheaval, %	4.3	4.7	5.6	5.9	5.6	5.3	5.0	4.8	4.8	4.9	5.0	4.6	5.2	5.0	5.1
Difference from baseline, ppt	*0.0*	*0.2*	*1.2*	*1.5*	*1.2*	*0.8*	*0.4*	*0.2*	*0.2*	*0.4*	*0.5*				
Productivity Boon, %	4.3	4.4	4.5	4.5	4.3	4.0	3.8	3.9	4.0	4.2	4.4	4.6	4.3	4.1	4.2
Difference from baseline, ppt	*0.0*	*-0.1*	*0.1*	*0.1*	*-0.1*	*-0.4*	*-0.7*	*-0.7*	*-0.6*	*-0.3*	*-0.1*				
												Avg annual growth			

Table 5: Economic Outlook Under Various Scenarios (Cont.)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
Consumer Price Index															
Baseline, % change yr ago	2.7	3.1	2.7	2.2	1.9	1.9	1.9	1.8	1.8	1.9	2.0	3.1	2.4	1.9	2.1
AI Falls Flat, % change	2.7	3.0	2.3	1.7	1.5	1.6	1.7	1.6	1.5	1.6	1.7	3.1	2.0	1.6	1.8
Difference from baseline, ppt	*0.0*	*-0.2*	*-0.4*	*-0.5*	*-0.4*	*-0.2*	*-0.2*	*-0.3*	*-0.3*	*-0.3*	*-0.3*				
Job Market Upheaval, % change	2.7	3.1	2.7	2.2	1.8	1.7	1.8	1.9	2.0	2.1	2.1	3.1	2.3	2.0	2.1
Difference from baseline, ppt	*0.0*	*-0.0*	*-0.0*	*-0.0*	*-0.1*	*-0.2*	*-0.0*	*0.1*	*0.1*	*0.1*	*0.1*				
Productivity Boon, % change	2.7	2.9	2.4	2.0	1.9	1.8	1.7	1.7	1.8	2.0	2.0	3.1	2.2	1.8	2.0
Difference from baseline, ppt	*0.0*	*-0.2*	*-0.3*	*-0.2*	*-0.0*	*-0.1*	*-0.2*	*-0.1*	*-0.0*	*0.0*	*0.0*				
													Avg		
Federal funds rate															
Baseline, %	4.2	3.2	3.0	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.3	3.0	3.1
AI Falls Flat, %	4.2	2.7	2.0	2.3	2.7	3.0	3.0	3.1	3.0	3.0	3.0	2.0	2.8	3.0	2.9
Difference from baseline, ppt	*0.0*	*-0.5*	*-0.9*	*-0.9*	*-0.4*	*-0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*				
Job Market Upheaval, %	4.2	3.1	2.7	2.7	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.0	3.0	2.5	2.8
Difference from baseline, ppt	*0.0*	*-0.1*	*-0.3*	*-0.5*	*-0.5*	*-0.4*	*-0.4*	*-0.5*	*-0.5*	*-0.5*	*-0.5*				
Productivity Boon, %	4.2	3.2	2.4	2.3	2.8	3.1	3.1	3.1	3.1	3.1	3.0	2.0	3.0	3.1	3.0
Difference from baseline, ppt	*0.0*	*-0.0*	*-0.5*	*-0.8*	*-0.3*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*-0.0*				
10-yr Treasury yield															
Baseline, %	4.3	4.2	4.3	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	2.6	4.3	4.2	4.3
AI Falls Flat, %	4.3	4.0	3.9	4.0	4.1	4.2	4.3	4.3	4.3	4.3	4.4	2.6	4.1	4.3	4.2
Difference from baseline, ppt	*0.0*	*-0.2*	*-0.4*	*-0.4*	*-0.2*	*-0.1*	*0.0*	*0.1*	*0.1*	*0.1*	*0.1*				
Job Market Upheaval, %	4.3	4.1	4.0	3.9	3.8	3.8	3.7	3.7	3.7	3.7	3.7	2.6	4.0	3.7	3.8
Difference from baseline, ppt	*0.0*	*-0.1*	*-0.3*	*-0.5*	*-0.5*	*-0.5*	*-0.5*	*-0.5*	*-0.5*	*-0.5*	*-0.6*				
Productivity Boon, %	4.3	4.2	4.1	3.9	4.0	4.2	4.2	4.1	4.1	4.1	4.1	2.6	4.1	4.1	4.1
Difference from baseline, ppt	*0.0*	*-0.0*	*-0.2*	*-0.5*	*-0.3*	*-0.1*	*-0.1*	*-0.1*	*-0.1*	*-0.2*	*-0.2*				
Real disposable income per household													**Avg annual growth**		
Baseline, 2017$ bil	135,310	137,017	139,677	141,804	144,831	148,152	151,600	154,834	157,559	159,564	160,996	1.8	1.8	1.7	1.8
% change	*0.5*	*1.3*	*1.9*	*1.5*	*2.1*	*2.3*	*2.3*	*2.1*	*1.8*	*1.3*	*0.9*				
AI Falls Flat, 2017$ bil	135,310	136,563	138,321	140,201	143,218	146,584	149,892	152,755	155,118	156,860	158,167	1.8	1.6	1.5	1.6
% change	*0.5*	*0.9*	*1.3*	*1.4*	*2.2*	*2.4*	*2.3*	*1.9*	*1.5*	*1.1*	*0.8*				
Difference from baseline, %	*0.0*	*-0.3*	*-1.0*	*-1.1*	*-1.1*	*-1.1*	*-1.1*	*-1.3*	*-1.5*	*-1.7*	*-1.8*				
Job Market Upheaval, 2017$ bil	135,310	136,626	139,782	142,215	145,052	147,935	150,628	153,008	155,044	156,593	157,736	1.8	1.8	1.3	1.5
% change	*0.5*	*1.0*	*2.3*	*1.7*	*2.0*	*2.0*	*1.8*	*1.6*	*1.3*	*1.0*	*0.7*				
Difference from baseline, %	*0.0*	*-0.3*	*0.1*	*0.3*	*0.2*	*-0.1*	*-0.6*	*-1.2*	*-1.6*	*-1.9*	*-2.0*				
Productivity Boon, 2017$ bil	135,310	137,986	141,848	144,830	148,643	152,818	156,735	160,283	163,569	166,180	168,119	1.8	2.5	1.9	2.2
% change	*0.5*	*2.0*	*2.8*	*2.1*	*2.6*	*2.8*	*2.6*	*2.3*	*2.1*	*1.6*	*1.2*				
Difference from baseline, %	*0.0*	*0.7*	*1.6*	*2.1*	*2.6*	*3.1*	*3.4*	*3.5*	*3.8*	*4.1*	*4.4*				
Corporate profits after taxes															
Baseline, $ bil	3,484.2	3,760.4	3,933.1	4,108.8	4,258.3	4,411.9	4,627.5	4,867.5	5,059.7	5,191.1	5,296.2	6.6	4.8	3.7	4.3
% change	*-0.4*	*7.9*	*4.6*	*4.5*	*3.6*	*3.6*	*4.9*	*5.2*	*3.9*	*2.6*	*2.0*				
AI Falls Flat, $ bil	3,484.2	3,531.1	3,573.4	3,880.7	4,094.4	4,217.4	4,413.8	4,646.5	4,834.7	4,981.2	5,116.7	6.6	3.9	3.9	3.9
% change	*-0.4*	*1.3*	*1.2*	*8.6*	*5.5*	*3.0*	*4.7*	*5.3*	*4.0*	*3.0*	*2.7*				
Difference from baseline, %	*0.0*	*-6.1*	*-9.1*	*-5.6*	*-3.8*	*-4.4*	*-4.6*	*-4.5*	*-4.4*	*-4.0*	*-3.4*				
Job Market Upheaval, $ bil	3,484.2	3,782.7	3,910.8	4,027.2	4,137.1	4,257.3	4,457.0	4,705.4	4,916.2	5,057.9	5,154.3	6.6	4.1	3.9	4.0
% change	*-0.4*	*8.6*	*3.4*	*3.0*	*2.7*	*2.9*	*4.7*	*5.6*	*4.5*	*2.9*	*1.9*				
Difference from baseline, %	*0.0*	*0.6*	*-0.6*	*-2.0*	*-2.8*	*-3.5*	*-3.7*	*-3.3*	*-2.8*	*-2.6*	*-2.7*				
Productivity Boon, $ bil	3,484.2	3,801.6	4,050.7	4,222.5	4,357.9	4,509.9	4,710.2	4,976.6	5,217.6	5,412.7	5,576.1	6.6	5.3	4.3	4.8
% change	*-0.4*	*9.1*	*6.6*	*4.2*	*3.2*	*3.5*	*4.4*	*5.7*	*4.8*	*3.7*	*3.0*				
Difference from baseline, %	*0.0*	*1.1*	*3.0*	*2.8*	*2.3*	*2.2*	*1.8*	*2.2*	*3.1*	*4.3*	*5.3*				

Table 5: Economic Outlook Under Various Scenarios (Cont.)

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
S&P Stock Price Index															
Baseline, index	6,211.0	6,773.6	6,656.2	6,869.0	7,375.3	7,964.3	8,450.4	8,746.1	8,990.1	9,268.3	9,625.8	11.7	5.1	3.9	4.5
% change	*14.5*	*9.1*	*-1.7*	*3.2*	*7.4*	*8.0*	*6.1*	*3.5*	*2.8*	*3.1*	*3.9*				
AI Falls Flat, index	6,211.0	4,834.7	5,437.0	5,893.1	6,438.0	7,006.8	7,471.3	7,757.0	7,995.8	8,270.6	8,590.2	11.7	2.4	4.2	3.3
% change	*14.5*	*-22.2*	*12.5*	*8.4*	*9.2*	*8.8*	*6.6*	*3.8*	*3.1*	*3.4*	*3.9*				
Difference from baseline, %	*0.0*	*-28.6*	*-18.3*	*-14.2*	*-12.7*	*-12.0*	*-11.6*	*-11.3*	*-11.1*	*-10.8*	*-10.8*				
Job Market Upheaval, index	6,211.0	7,092.0	6,942.2	6,643.5	6,921.4	7,435.1	7,899.9	8,185.7	8,424.7	8,699.7	9,033.9	11.7	3.7	4.0	3.8
% change	*14.5*	*14.2*	*-2.1*	*-4.3*	*4.2*	*7.4*	*6.3*	*3.6*	*2.9*	*3.3*	*3.8*				
Difference from baseline, %	*0.0*	*4.7*	*4.3*	*-3.3*	*-6.2*	*-6.6*	*-6.5*	*-6.4*	*-6.3*	*-6.1*	*-6.1*				
Productivity Boon, index	6,211.0	7,384.7	7,787.0	8,293.1	8,913.0	9,556.9	10,071.5	10,382.3	10,621.3	10,896.3	11,317.4	11.7	9.0	3.4	6.2
% change	*14.5*	*18.9*	*5.4*	*6.5*	*7.5*	*7.2*	*5.4*	*3.1*	*2.3*	*2.6*	*3.9*				
Difference from baseline, %	*0.0*	*9.0*	*17.0*	*20.7*	*20.8*	*20.0*	*19.2*	*18.7*	*18.1*	*17.6*	*17.6*				
FHFA House Price Index															
Baseline, index	429.8	436.1	444.1	455.9	469.5	483.7	497.4	510.9	524.5	538.8	554.1	7.3	2.4	2.8	2.6
% change	*2.8*	*1.5*	*1.8*	*2.7*	*3.0*	*3.0*	*2.8*	*2.7*	*2.7*	*2.7*	*2.8*				
AI Falls Flat, index	429.8	434.0	439.0	450.8	466.7	481.1	493.0	503.8	514.3	525.1	536.7	7.3	2.3	2.2	2.2
% change	*2.8*	*1.0*	*1.2*	*2.7*	*3.5*	*3.1*	*2.5*	*2.2*	*2.1*	*2.1*	*2.2*				
Difference from baseline, %	*0.0*	*-0.5*	*-1.1*	*-1.1*	*-0.6*	*-0.5*	*-0.9*	*-1.4*	*-2.0*	*-2.6*	*-3.2*				
Job Market Upheaval, index	429.8	436.3	443.0	452.6	465.4	480.4	496.1	511.8	526.6	540.4	553.4	7.3	2.3	2.9	2.6
% change	*2.8*	*1.5*	*1.5*	*2.2*	*2.8*	*3.2*	*3.3*	*3.1*	*2.9*	*2.6*	*2.4*				
Difference from baseline, %	*0.0*	*0.0*	*-0.3*	*-0.7*	*-0.9*	*-0.7*	*-0.3*	*0.2*	*0.4*	*0.3*	*-0.1*				
Productivity Boon, index	429.8	436.3	444.9	458.8	474.8	491.3	508.7	526.8	544.9	563.1	581.6	7.3	2.7	3.4	3.1
% change	*2.8*	*1.5*	*2.0*	*3.1*	*3.5*	*3.5*	*3.5*	*3.6*	*3.4*	*3.3*	*3.3*				
Difference from baseline, %	*0.0*	*0.1*	*0.2*	*0.6*	*1.1*	*1.6*	*2.3*	*3.1*	*3.9*	*4.5*	*5.0*				
													Avg		
Federal budget deficit															
Baseline, $ bil	-1,666.8	-2,073.1	-2,440.0	-2,655.7	-2,876.3	-3,122.6	-3,384.0	-3,653.4	-3,880.5	-4,011.0	-4,032.9				
% of GDP	*-5.4*	*-6.4*	*-7.2*	*-7.5*	*-7.8*	*-8.1*	*-8.5*	*-8.8*	*-9.0*	*-9.0*	*-8.7*	*-6.3*	*-7.1*	*-8.7*	*-7.8*
AI Falls Flat, $ bil	-1,666.8	-2,434.3	-3,077.6	-3,002.7	-2,904.0	-3,081.4	-3,341.5	-3,598.6	-3,822.6	-3,949.2	-3,972.4				
% of GDP	*-5.4*	*-7.6*	*-9.4*	*-8.7*	*-8.1*	*-8.3*	*-8.6*	*-9.0*	*-9.2*	*-9.2*	*-9.0*	*-6.3*	*-7.9*	*-8.9*	*-8.4*
Difference from baseline, %	*0.0*	*17.4*	*26.1*	*13.1*	*1.0*	*-1.3*	*-1.3*	*-1.5*	*-1.5*	*-1.5*	*-1.5*				
Job Market Upheaval, $ bil	-1,666.8	-2,100.4	-2,639.5	-3,051.1	-3,313.4	-3,488.7	-3,631.4	-3,800.3	-3,980.7	-4,128.4	-4,197.8				
% of GDP	*-5.4*	*-6.4*	*-7.8*	*-8.8*	*-9.2*	*-9.3*	*-9.2*	*-9.3*	*-9.3*	*-9.3*	*-9.1*	*-6.3*	*-7.8*	*-9.3*	*-8.5*
Difference from baseline, %	*0.0*	*1.3*	*8.2*	*14.9*	*15.2*	*11.7*	*7.3*	*4.0*	*2.6*	*2.9*	*4.1*				
Productivity Boon, $ bil	-1,666.8	-2,006.6	-2,314.4	-2,460.9	-2,619.7	-2,815.7	-2,997.4	-3,195.9	-3,402.0	-3,540.2	-3,575.2				
% of GDP	*-5.4*	*-6.1*	*-6.7*	*-6.8*	*-7.0*	*-7.2*	*-7.3*	*-7.5*	*-7.7*	*-7.7*	*-7.4*	*-6.3*	*-6.5*	*-7.5*	*-7.0*
Difference from baseline, %	*0.0*	*-3.2*	*-5.1*	*-7.3*	*-8.9*	*-9.8*	*-11.4*	*-12.5*	*-12.3*	*-11.7*	*-11.3*				
Federal debt-to-GDP ratio															
Baseline, %	100.2	100.6	103.2	105.6	107.6	109.8	112.3	115.5	118.9	121.0	122.5	88.5	104.5	116.6	110.6
AI Falls Flat, %	100.2	109.1	115.1	117.4	118.6	120.6	123.1	126.6	130.3	132.3	133.7	88.5	113.5	127.7	120.6
Difference from baseline, ppt	*0.0*	*8.5*	*11.9*	*11.8*	*11.0*	*10.8*	*10.8*	*11.0*	*11.3*	*11.4*	*11.2*				
Job Market Upheaval, %	100.2	100.2	104.5	109.9	113.4	116.2	118.8	121.8	125.0	126.9	128.4	88.5	107.4	122.9	115.0
Difference from baseline, ppt	*0.0*	*-0.4*	*1.4*	*4.3*	*5.8*	*6.5*	*6.5*	*6.3*	*6.1*	*5.9*	*5.9*				
Productivity Boon, %	100.2	99.6	100.5	101.6	102.5	103.8	105.5	107.8	110.1	111.1	111.6	88.5	101.4	108.3	104.9
Difference from baseline, ppt	*0.0*	*-1.0*	*-2.6*	*-4.0*	*-5.1*	*-6.0*	*-6.8*	*-7.8*	*-8.9*	*-9.9*	*-10.9*				

Sources: BEA, BLS, Census Bureau, Treasury, Federal Reserve, S&P, FHFA, Moody's Analytics

JOB MARKET UPHEAVAL (20% PROBABILITY)

A scenario even further out on the downside tail of the distribution of possible outcomes envisages that investors who have bid up the AI companies' stock prices are, in a sense, correct and that businesses rapidly adopt quickly improving AI in their workflows. The resulting productivity gains are so large and occur so quickly that the economy suffers significant job losses and much higher unemployment.

Big, productivity-enhancing technologies of the past have not led to this undesirable kind of job loss. Their adoption occurred slowly enough to allow companies and the economy to adjust. Existing companies, in particular, had difficulty adopting the new technology. They lacked the appropriate workforce, were poorly organized to leverage it, and were concerned about cannibalizing existing products and services. These new technologies—for example, the internal combustion engine, electricity, the personal computer, and the internet—primarily diffused through the economy as new businesses formed and optimized around the technology, but this did not happen quickly.

Moreover, the economic benefits of past technologies were widely spread across households and businesses, supporting additional demand for goods and services and creating more jobs. The technology lowered barriers to entry in many industries, enhanced competition, reduced inflation, and lifted incomes and wealth across the distribution. Income and wealth inequality became less pronounced. While there was a lot of churn in the job market, in the end, there was not a dystopian loss of jobs or sustained higher unemployment.

In the **Job Market Upheaval** scenario, this hopeful history is not a good guide to understanding how AI plays out. This time is different. One reason is that the job market is struggling even before AI-powered productivity gains have begun in earnest. Job growth is at a standstill, as heavy-handed immigration policy has curtailed labor supply, and the global trade war and broader economic policy uncertainty are weighing on labor demand.

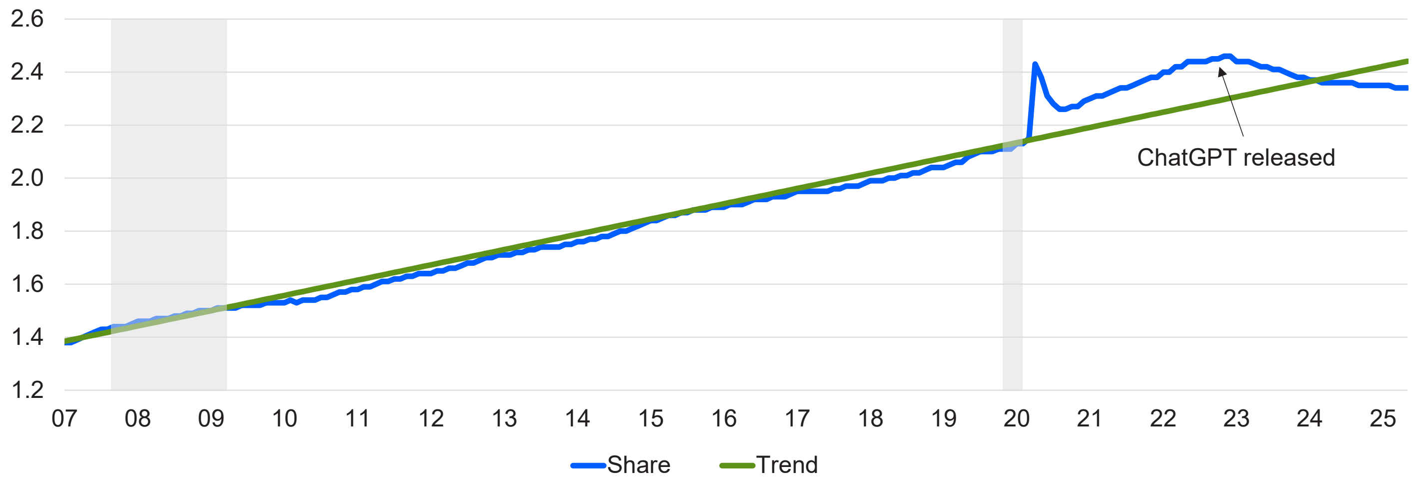
While there are signs that AI is lifting productivity and weakening labor demand, they are nascent. The declining share of jobs in the technology industry, which coincided with the introduction of ChatGPT in late 2022, is consistent with AI's impact (see Chart 8). Computer programmers in the tech industry are notably vulnerable to being displaced by AI. Recession-like hiring rates across many industries are consistent, as businesses try to figure out whether AI can help them replace workers. Academic research has also loosely connected the dots between AI and the tough job market for younger workers in the technology and customer support industries.

But this changes quickly in the Job Market Upheaval scenario, as AI adoption takes off and AI-powered productivity gains accelerate. Enabling AI adoption is the historically high rate of business formations since the pandemic. Formations are strong across most industries and from coast to coast. Many of these new companies will need to fully embrace AI to compete successfully.

Unlike in past periods of rapid technological change, the economic benefits of AI are not widely distributed in this scenario. And, to date, this appears to be the case, as a small number of massive hyperscalers and their shareholders have been the big economic winners (see Chart 9). The wage gap between high- and middle-skilled workers is widening as AI adoption accelerates. AI complements the skills of highly educated, creative and technical workers, enabling them to command higher pay. As demand and pay weaken for middle-skilled jobs such as administrative and clerical roles, the job market hollows out.[11] Lower-skilled workers cannot avoid the fallout, as they must now compete with downscaled middle-skilled workers seeking jobs.

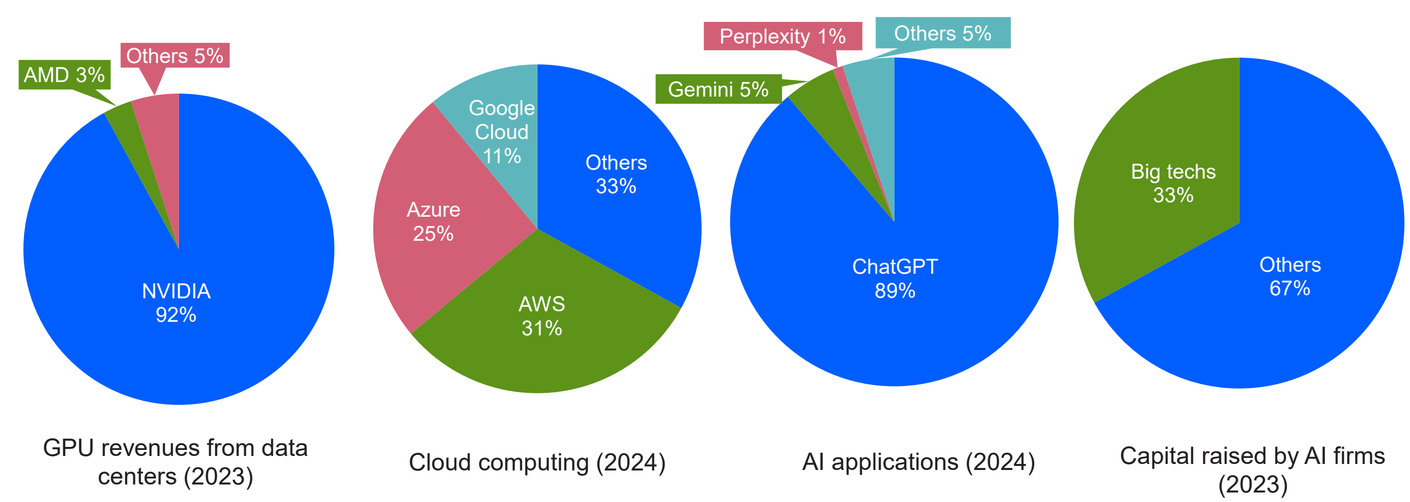
Chart 8: Is AI Friend or Foe?

Technology share of nonfarm payroll employment, %



Sources: BLS, Moody's Analytics

Chart 9: AI Value Chain's Market Structure Is Highly Concentrated



Sources: Bank for Intl. Settlements, Center for Strategic and Intl. Studies, Moody's Analytics

In this scenario, the job market retrenches, and a recession ensues (see Table 6). There are significant job losses in industries and occupations for which AI can perform most tasks, but there are few job gains in other industries, as consumer demand is stunted by the skewed distribution of income and wealth generated by AI (see Box 4 and Table 7). The economy suffers from hysteresis, as the long bout of higher unemployment and the persistent structural mismatch between the skills workers have and those they need to use AI effectively leads to greater structural unemployment.

Table 6: Economic Outlook Under Job Market Upheaval Scenario

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
Real GDP													**Avg annual growth**		
2017$ bil	23,885.8	24,633.1	24,878.5	25,098.0	25,675.0	26,403.6	27,195.5	27,941.8	28,633.2	29,263.2	29,854.7	2.4	2.0	2.5	2.3
% change	*2.3*	*3.1*	*1.0*	*0.9*	*2.3*	*2.8*	*3.0*	*2.7*	*2.5*	*2.2*	*2.0*				
Nonfarm employment															
Mil	159.4	158.5	158.1	158.1	158.7	159.6	160.4	161.0	161.3	161.5	161.7	1.2	0.0	0.3	0.1
Change, ths	*1,441*	*-871*	*-477*	*42*	*651*	*837*	*842*	*554*	*320*	*187*	*252*				
Nonfarm business productivity															
Index	117.2	122.5	126.0	129.1	132.4	135.7	139.1	142.9	146.8	150.6	154.1	1.8	3.0	2.6	2.8
% change	*1.8*	*4.5*	*2.9*	*2.4*	*2.6*	*2.5*	*2.6*	*2.7*	*2.8*	*2.6*	*2.3*				
Labor force															
Mil	170.9	170.7	170.7	171.0	171.2	171.5	171.9	172.3	172.6	172.9	173.2	0.8	0.1	0.2	0.1
Change, ths	*2,770*	*-172*	*-13*	*281*	*245*	*267*	*398*	*379*	*335*	*313*	*303*				
													Avg		
Unemployment rate, %	4.3	4.7	5.6	5.9	5.6	5.3	5.0	4.8	4.8	4.9	5.0	4.6	5.2	5.0	5.1
													Avg annual growth		
Consumer Price Index															
% change	*2.7*	*3.1*	*2.7*	*2.2*	*1.8*	*1.7*	*1.8*	*1.9*	*2.0*	*2.1*	*2.1*	*3.1*	*2.3*	*2.0*	*2.1*
															Avg
Federal funds rate, %	4.2	3.1	2.7	2.7	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.0	3.0	2.5	2.8
10-yr Treasury yield, %	4.3	4.1	4.0	3.9	3.8	3.8	3.7	3.7	3.7	3.7	3.7	2.6	4.0	3.7	3.8
													Avg annual growth		
Real disposable income per household															
2017$ bil	135,310	136,626	139,782	142,215	145,052	147,935	150,628	153,008	155,044	156,593	157,736	1.8	1.8	1.3	1.5
% change	*0.5*	*1.0*	*2.3*	*1.7*	*2.0*	*2.0*	*1.8*	*1.6*	*1.3*	*1.0*	*0.7*				
Corporate profits after taxes															
$ bil	3,484.2	3,782.7	3,910.8	4,027.2	4,137.1	4,257.3	4,457.0	4,705.4	4,916.2	5,057.9	5,154.3	6.6	4.1	3.9	4.0
% change	*-0.4*	*8.6*	*3.4*	*3.0*	*2.7*	*2.9*	*4.7*	*5.6*	*4.5*	*2.9*	*1.9*				
S&P Stock Price Index															
Index	6,211.0	7,092.0	6,942.2	6,643.5	6,921.4	7,435.1	7,899.9	8,185.7	8,424.7	8,699.7	9,033.9	11.7	3.7	4.0	3.8
% change	*14.5*	*14.2*	*-2.1*	*-4.3*	*4.2*	*7.4*	*6.3*	*3.6*	*2.9*	*3.3*	*3.8*				
FHFA House Price Index															
Index	429.8	436.3	443.0	452.6	465.4	480.4	496.1	511.8	526.6	540.4	553.4	7.3	2.3	2.9	2.6
% change	*2.8*	*1.5*	*1.5*	*2.2*	*2.8*	*3.2*	*3.3*	*3.1*	*2.9*	*2.6*	*2.4*				
													Avg		
Federal budget deficit, $ bil	-1,666.8	-2,100.4	-2,639.5	-3,051.1	-3,313.4	-3,488.7	-3,631.4	-3,800.3	-3,980.7	-4,128.4	-4,197.8				
% of GDP	*-5.4*	*-6.4*	*-7.8*	*-8.8*	*-9.2*	*-9.3*	*-9.2*	*-9.3*	*-9.3*	*-9.3*	*-9.1*	*-6.3*	*-7.8*	*-9.3*	*-8.5*
Federal debt-to-GDP ratio, %	100.2	100.2	104.5	109.9	113.4	116.2	118.8	121.8	125.0	126.9	128.4	88.5	107.4	122.9	115.0

Sources: BEA, BLS, Census Bureau, Treasury, Moody's Analytics

Table 7: Payrolls by Industry in Job Market Upheaval Scenario

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	10-yr change
Natural resouces and mining													
Baseline, mil	0.63	0.62	0.61	0.60	0.60	0.59	0.59	0.58	0.58	0.58	0.58	0.57	-46.85
Change, ths		*-9.25*	*-9.91*	*-4.96*	*-5.20*	*-4.87*	*-5.00*	*-2.79*	*-1.27*	*-2.81*	*-4.01*	*-6.03*	
Job Market Upheaval, mil	0.63	0.62	0.61	0.60	0.60	0.59	0.58	0.58	0.57	0.57	0.56	0.55	-65.41
Change, ths		*-9.25*	*-11.21*	*-4.41*	*-5.95*	*-7.99*	*-7.55*	*-5.10*	*-3.88*	*-5.21*	*-6.47*	*-7.62*	
Difference from baseline, ths	*0.00*	*0.00*	*-1.31*	*-0.76*	*-1.51*	*-4.63*	*-7.18*	*-9.50*	*-12.11*	*-14.50*	*-16.96*	*-18.56*	
Construction													
Baseline, mil	8.21	8.30	8.29	8.25	8.21	8.15	8.10	8.06	8.05	8.03	8.01	8.01	-288.36
Change, ths		*88.33*	*-11.33*	*-35.39*	*-44.72*	*-59.57*	*-52.77*	*-33.81*	*-10.17*	*-21.52*	*-16.21*	*-2.87*	
Job Market Upheaval, mil	8.21	8.30	8.26	8.23	8.19	8.10	8.03	7.97	7.93	7.87	7.81	7.78	-523.01
Change, ths		*88.33*	*-36.35*	*-33.26*	*-41.20*	*-85.15*	*-77.74*	*-58.97*	*-41.32*	*-55.20*	*-57.95*	*-35.88*	
Difference from baseline, ths	*0.00*	*0.00*	*-25.02*	*-22.88*	*-19.36*	*-44.94*	*-69.91*	*-95.06*	*-126.22*	*-159.90*	*-201.64*	*-234.65*	
Manufacturing													
Baseline, mil	12.82	12.73	12.69	12.69	12.68	12.64	12.59	12.52	12.44	12.34	12.23	12.14	-594.35
Change, ths		*-85.75*	*-45.53*	*4.37*	*-13.06*	*-39.11*	*-51.90*	*-66.21*	*-83.64*	*-101.55*	*-102.24*	*-95.48*	
Job Market Upheaval, mil	12.82	12.73	12.63	12.61	12.58	12.51	12.44	12.34	12.21	12.06	11.91	11.78	-948.38
Change, ths		*-85.75*	*-103.60*	*-20.93*	*-31.35*	*-70.19*	*-70.43*	*-92.10*	*-129.24*	*-149.21*	*-152.59*	*-128.75*	
Difference from baseline, ths	*0.00*	*0.00*	*-58.07*	*-83.37*	*-101.65*	*-132.74*	*-151.26*	*-177.16*	*-222.76*	*-270.41*	*-320.76*	*-354.03*	
Wholesale trade													
Baseline, mil	6.14	6.17	6.18	6.23	6.27	6.29	6.30	6.30	6.31	6.30	6.30	6.29	125.29
Change, ths		*24.65*	*12.32*	*43.73*	*41.76*	*25.16*	*8.95*	*3.34*	*1.61*	*-4.82*	*-4.21*	*-2.55*	
Job Market Upheaval, mil	6.14	6.17	6.11	6.13	6.17	6.18	6.17	6.16	6.14	6.12	6.09	6.07	-96.79
Change, ths		*24.65*	*-55.46*	*14.79*	*40.51*	*9.62*	*-3.88*	*-12.42*	*-20.11*	*-25.74*	*-26.65*	*-17.44*	
Difference from baseline, ths	*0.00*	*0.00*	*-67.78*	*-96.72*	*-97.97*	*-113.51*	*-126.34*	*-142.10*	*-163.83*	*-184.76*	*-207.19*	*-222.08*	
Retail trade													
Baseline, mil	15.53	15.58	15.60	15.63	15.68	15.72	15.76	15.79	15.82	15.83	15.85	15.86	282.49
Change, ths		*46.93*	*22.64*	*35.96*	*42.64*	*38.93*	*40.32*	*37.84*	*24.63*	*12.20*	*14.13*	*13.19*	
Job Market Upheaval, mil	15.53	15.58	15.43	15.41	15.45	15.46	15.46	15.45	15.41	15.37	15.34	15.33	-243.56
Change, ths		*46.93*	*-145.60*	*-16.54*	*38.79*	*5.15*	*1.55*	*-11.18*	*-37.80*	*-39.00*	*-30.73*	*-8.21*	
Difference from baseline, ths	*0.00*	*0.00*	*-168.25*	*-220.74*	*-224.59*	*-258.37*	*-297.15*	*-346.17*	*-408.59*	*-459.79*	*-504.66*	*-526.06*	
Transportation and utilities													
Baseline, mil	7.25	7.32	7.31	7.37	7.43	7.48	7.53	7.56	7.59	7.60	7.60	7.62	296.57
Change, ths		*73.92*	*-9.37*	*61.49*	*58.99*	*52.55*	*45.43*	*34.93*	*22.03*	*10.27*	*8.85*	*11.40*	
Job Market Upheaval, mil	7.25	7.32	7.23	7.25	7.32	7.37	7.42	7.45	7.45	7.44	7.43	7.42	103.18
Change, ths		*73.92*	*-89.16*	*24.08*	*60.72*	*52.53*	*48.11*	*29.32*	*3.95*	*-10.04*	*-13.87*	*-2.48*	
Difference from baseline, ths	*0.00*	*0.00*	*-79.78*	*-117.19*	*-115.46*	*-115.47*	*-112.79*	*-118.41*	*-136.49*	*-156.80*	*-179.52*	*-193.39*	
Information													
Baseline, mil	2.94	2.93	2.92	2.92	2.92	2.92	2.92	2.91	2.91	2.91	2.91	2.90	-26.23
Change, ths		*-14.08*	*-13.25*	*3.14*	*2.81*	*-2.29*	*-2.97*	*-2.78*	*-3.08*	*-2.63*	*-1.79*	*-3.38*	
Job Market Upheaval, mil	2.94	2.93	2.88	2.88	2.89	2.88	2.87	2.86	2.84	2.83	2.82	2.81	-125.09
Change, ths		*-14.08*	*-45.61*	*-2.26*	*5.86*	*-9.44*	*-10.54*	*-11.82*	*-14.68*	*-13.46*	*-12.81*	*-10.32*	
Difference from baseline, ths	*0.00*	*0.00*	*-32.36*	*-37.77*	*-34.72*	*-41.87*	*-49.45*	*-58.49*	*-70.08*	*-80.92*	*-91.93*	*-98.86*	

Table 7: Payrolls by Industry in Job Market Upheaval Scenario (Cont.)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	10-yr change
Financial activities													
Baseline, mil	9.17	9.24	9.28	9.37	9.45	9.51	9.55	9.58	9.62	9.65	9.68	9.73	488.62
Change, ths		*68.50*	*44.24*	*88.77*	*83.31*	*53.95*	*38.32*	*35.79*	*35.22*	*29.64*	*36.76*	*42.63*	
Job Market Upheaval, mil	9.17	9.24	9.14	9.18	9.27	9.30	9.31	9.33	9.33	9.33	9.34	9.36	118.97
Change, ths		*68.50*	*-101.34*	*38.19*	*91.87*	*30.20*	*16.71*	*11.69*	*4.44*	*0.96*	*4.86*	*21.39*	
Difference from baseline, ths	*0.00*	*0.00*	*-145.58*	*-196.15*	*-187.59*	*-211.35*	*-232.96*	*-257.06*	*-287.84*	*-316.52*	*-348.41*	*-369.65*	
Professional and business services													
Baseline, mil	22.62	22.56	22.67	22.99	23.34	23.69	24.02	24.33	24.62	24.88	25.15	25.42	2,858.49
Change, ths		*-61.58*	*110.86*	*322.99*	*352.13*	*345.76*	*333.08*	*310.30*	*283.00*	*267.78*	*269.12*	*263.46*	
Job Market Upheaval, mil	22.62	22.56	22.32	22.42	22.72	23.06	23.41	23.71	23.96	24.16	24.36	24.57	2,015.04
Change, ths		*-61.58*	*-240.46*	*100.09*	*305.87*	*338.36*	*346.12*	*307.53*	*240.42*	*209.67*	*195.50*	*211.94*	
Difference from baseline, ths	*0.00*	*0.00*	*-351.32*	*-574.22*	*-620.48*	*-627.88*	*-614.84*	*-617.61*	*-660.18*	*-718.30*	*-791.93*	*-843.45*	
Education and healthcare													
Baseline, mil	26.49	27.34	27.68	27.85	27.99	28.13	28.31	28.48	28.63	28.72	28.81	28.89	1,547.74
Change, ths		*852.58*	*340.50*	*163.70*	*139.04*	*147.08*	*171.65*	*177.78*	*144.35*	*96.17*	*87.52*	*79.96*	
Job Market Upheaval, mil	26.49	27.34	27.38	27.39	27.51	27.65	27.82	27.98	28.06	28.09	28.10	28.13	788.77
Change, ths		*852.58*	*37.99*	*7.27*	*119.77*	*142.23*	*174.06*	*155.62*	*82.18*	*26.34*	*8.90*	*34.41*	
Difference from baseline, ths	*0.00*	*0.00*	*-302.51*	*-458.94*	*-478.21*	*-483.06*	*-480.65*	*-502.81*	*-564.97*	*-634.80*	*-713.42*	*-758.97*	
Leisure and hospitality													
Baseline, mil	16.82	17.04	17.20	17.24	17.28	17.41	17.56	17.73	17.90	18.04	18.16	18.27	1,228.77
Change, ths		*219.92*	*159.24*	*41.28*	*41.21*	*131.38*	*144.41*	*175.68*	*169.33*	*138.37*	*121.12*	*106.75*	
Job Market Upheaval, mil	16.82	17.04	17.06	16.57	16.21	16.39	16.67	17.01	17.31	17.54	17.72	17.86	816.06
Change, ths		*219.92*	*16.22*	*-485.92*	*-356.09*	*172.51*	*280.96*	*338.26*	*303.47*	*232.31*	*181.02*	*133.32*	
Difference from baseline, ths	*0.00*	*0.00*	*-143.02*	*-670.22*	*-1,067.53*	*-1,026.40*	*-889.85*	*-727.28*	*-593.13*	*-499.18*	*-439.28*	*-412.71*	
Other services													
Baseline, mil	5.97	6.04	6.05	6.07	6.09	6.12	6.16	6.21	6.25	6.27	6.28	6.30	257.30
Change, ths		*73.83*	*14.51*	*14.84*	*15.86*	*32.79*	*46.09*	*50.34*	*38.19*	*19.55*	*11.59*	*13.55*	
Job Market Upheaval, mil	5.97	6.04	6.03	5.98	5.95	5.99	6.05	6.12	6.16	6.18	6.18	6.19	148.91
Change, ths		*73.83*	*-11.19*	*-48.91*	*-32.18*	*38.19*	*63.71*	*66.93*	*44.35*	*18.21*	*3.53*	*6.26*	
Difference from baseline, ths	*0.00*	*0.00*	*-25.70*	*-89.45*	*-137.49*	*-132.09*	*-114.47*	*-97.87*	*-91.71*	*-93.05*	*-101.11*	*-108.39*	
Government													
Baseline, mil	23.38	23.54	23.43	23.47	23.53	23.65	23.80	23.98	24.13	24.25	24.34	24.39	855.59
Change, ths		*163.08*	*-113.12*	*44.35*	*55.49*	*119.48*	*156.59*	*175.19*	*148.29*	*123.55*	*87.81*	*57.96*	
Job Market Upheaval, mil	23.38	23.54	23.45	23.40	23.25	23.29	23.36	23.49	23.61	23.74	23.83	23.89	348.87
Change, ths		*163.08*	*-84.72*	*-49.60*	*-154.56*	*34.98*	*76.35*	*124.06*	*122.56*	*129.91*	*94.06*	*55.83*	
Difference from baseline, ths	*0.00*	*0.00*	*28.40*	*-65.54*	*-275.59*	*-360.09*	*-440.34*	*-491.46*	*-517.20*	*-510.84*	*-504.58*	*-506.72*	

Sources: BLS, Moody's Analytics

BOX 4: ESTIMATING AI'S IMPACT ON DETAILED INDUSTRY EMPLOYMENT

In the **Job Market Upheaval** scenario, the detailed industry employment impacts of artificial intelligence are determined using a methodology that expands on the work of Arnon et al. and Eloundou et al. Most significantly, we leverage their work measuring occupations' exposure to AI automation by treating each occupation as a collection of tasks. We merge this with the Bureau of Labor Statistics' Occupational Employment and Wage Statistics dataset, which provides employment and wages for detailed occupations and industries. This combined dataset allows us to link each occupation's exposure to AI automation to the occupation within the broader industry, as defined by the North American Industry Classification System code and in our global model.

We assume that all occupations are at risk, regardless of exposure to AI automation, and that an occupation's exposure to AI directly determines the share of jobs that will be lost. For example, if 75% of an occupation's tasks are automatable, we assume that 75% of jobs within that occupation will be lost. Under this approach, we multiply each occupation by its AI exposure, then sum across occupations within each industry to compute total job losses for each industry. These industry totals are then divided by the total across all industries to compute an adjustment factor. We apply the adjustment factor to changes in total private industry payrolls to determine the employment impacts on each industry.

This methodology relies on several restrictive assumptions, including that all occupations are equally at risk from AI and that the share of automatable tasks directly translates into an equivalent share of job losses. This provides a conservative estimate of the potential impact on employment. As AI technology advances and companies increase their adoption of it, our understanding of AI's impact on the job market will deepen. This includes identifying which jobs or tasks may become obsolete, which new roles or responsibilities are emerging, and how workers can prepare for potential disruptions.

This is a dark scenario, perhaps too dark, as it assumes the Federal Reserve and fiscal policymakers fail to respond aggressively. The Fed does lower interest rates consistent with its historical behavior, as captured by its reaction function in our global model, and fiscal policy is supportive, given the progressive federal tax code and the automatic stabilizers in government income support programs. But that is the extent of the assumed policy response, as ballooning government deficits and a mounting debt load deplete any remaining fiscal space, restricting policymakers' ability to respond more aggressively, even if there was the political will to do so.[12]

PRODUCTIVITY BOON (15% PROBABILITY)

There are more optimistic scenarios in which, despite the rapid adoption of AI and the resulting big gains in productivity, the job market holds firm. This, after all, is the story of the late-1990s internet boom. Between 1996 and 2000, while nonfarm business productivity grew by a robust 3% per annum, payroll employment increased by nearly 2.5 million jobs per annum, and the unemployment rate steadily declined from 5.5% to just less than 4%. By the end of the period of rapid productivity growth, the economy had returned to full employment.

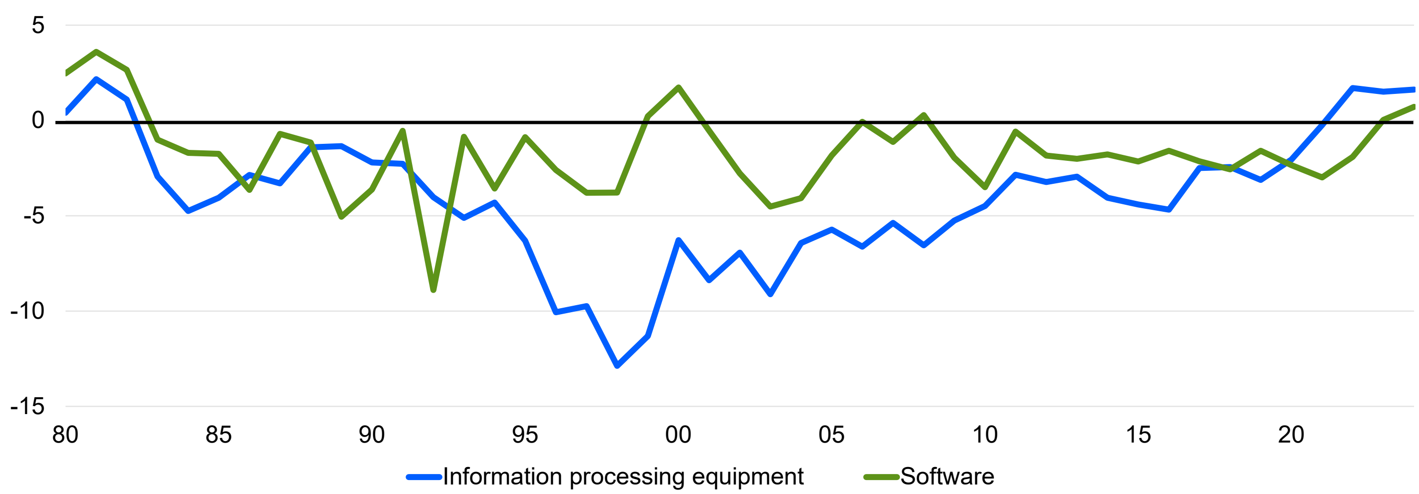
Of course, there are significant differences between now and then that make it much less likely that both productivity and job growth will perform well as the AI wave washes over the economy. At the start of the late-1990s productivity boom, there was a lot of slack in the job market, created by the recession a few years earlier. Businesses were still ramping up their payrolls. The labor force was also expanding rapidly, in part due to strong foreign immigration, keeping labor costs down. The rapid expansion of internet access, accompanied by a flood of capital into technology and online-focused companies, was also a boon to white-collar job growth, which more than offset job losses caused by the rapidly expanding internet.

Today's job market is fundamentally different. It follows a period of historically low unemployment, and even though the labor market has weakened more recently, unemployment remains low. Labor demand is also soft, as businesses have a limited appetite to hire amid elevated policy uncertainty. Plus, the supply of available labor remains tight with the heightened immigration restrictions and the large baby boom cohort aging out of the workforce. The AI wave seems more likely to substitute for and eliminate existing jobs than the internet boom ever did.

The robust productivity growth of the late 1990s was, in significant part, an artifact of declining prices for technology capital goods, reflecting gains in the power and quality of that capital. The lower prices lifted measured real investment and GDP, with no impact on jobs and hours worked. Thus, there were big, measured gains in productivity. However, prices for these capital goods have stabilized since the pandemic and are therefore no longer providing the same boost to real investment, GDP and productivity (see Chart 10). It seems unlikely that the power of capital goods is not improving as quickly today; the more likely explanation is that it is difficult to measure those improvements. Until the government's statistical agencies catch up to this reality, productivity growth in the AI wave will struggle to match that of the internet boom.

Chart 10: Prices for Investment Goods Are No Longer Falling

Investment price deflators, % change



Sources: BEA, Moody's Analytics

But while it is difficult to see how the strong productivity and job growth that coexisted in the late 1990s will be repeated, this possibility should not be dismissed. In the **Productivity Boon** scenario, AI is quickly adopted, lowering entry barriers across a wide range of industries. The heightened competition forces businesses to cut their profit margins to maintain sales and defend their market share. In this scenario, inflation comes largely to a standstill, lifting real incomes broadly across the income distribution, supporting consumer purchasing power and, in turn, jobs. Many jobs are lost to AI, but many others are created across the economy (see Table 8).

Table 8: Economic Outlook Under Productivity Boon Scenario

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2015-2025	2025-2030	2030-2035	2025-2035
Real GDP													**Avg annual growth**		
2017$ bil	23,885.8	24,672.4	25,354.1	26,062.2	26,813.5	27,595.5	28,382.7	29,150.2	29,911.4	30,650.1	31,378.7	2.4	2.9	2.6	2.8
% change	*2.3*	*3.3*	*2.8*	*2.8*	*2.9*	*2.9*	*2.9*	*2.7*	*2.6*	*2.5*	*2.4*				
Nonfarm employment															
Mil	159.4	159.7	160.3	161.2	162.3	163.7	165.0	165.9	166.5	167.1	167.7	1.2	0.5	0.5	0.5
Change, ths	*1,441*	*323*	*587*	*840*	*1,109*	*1,403*	*1,343*	*868*	*652*	*619*	*594*				
Nonfarm business productivity															
Index	117.2	122.4	126.4	129.9	133.5	136.8	140.2	143.9	147.9	151.7	155.3	1.8	3.1	2.6	2.9
% change	*1.8*	*4.4*	*3.3*	*2.8*	*2.7*	*2.5*	*2.5*	*2.6*	*2.7*	*2.6*	*2.4*				
Labor force															
Mil	170.9	170.8	171.0	171.6	172.3	173.2	174.1	174.9	175.6	176.2	176.7	0.8	0.3	0.4	0.3
Change, ths	*2,770*	*-122*	*230*	*620*	*737*	*875*	*883*	*827*	*682*	*557*	*512*				
													Avg		
Unemployment rate, %	4.3	4.4	4.5	4.5	4.3	4.0	3.8	3.9	4.0	4.2	4.4	4.6	4.3	4.1	4.2
													Avg annual growth		
Consumer Price Index															
% change	*2.7*	*2.9*	*2.4*	*2.0*	*1.9*	*1.8*	*1.7*	*1.7*	*1.8*	*2.0*	*2.0*	*3.1*	*2.2*	*1.8*	*2.0*
													Avg		
Federal funds rate, %	4.2	3.2	2.4	2.3	2.8	3.1	3.1	3.1	3.1	3.1	3.0	2.0	3.0	3.1	3.0
10-yr Treasury yield, %	4.3	4.2	4.1	3.9	4.0	4.2	4.2	4.1	4.1	4.1	4.1	2.6	4.1	4.1	4.1
													Avg annual growth		
Real disposable income per household															
2017$ bil	135,310	137,986	141,848	144,830	148,643	152,818	156,735	160,283	163,569	166,180	168,119	1.8	2.5	1.9	2.2
% change	*0.5*	*2.0*	*2.8*	*2.1*	*2.6*	*2.8*	*2.6*	*2.3*	*2.1*	*1.6*	*1.2*				
Corporate profits after taxes															
$ bil	3,484.2	3,801.6	4,050.7	4,222.5	4,357.9	4,509.9	4,710.2	4,976.6	5,217.6	5,412.7	5,576.1	6.6	5.3	4.3	4.8
% change	*-0.4*	*9.1*	*6.6*	*4.2*	*3.2*	*3.5*	*4.4*	*5.7*	*4.8*	*3.7*	*3.0*				
S&P Stock Price Index															
Index	6,211.0	7,384.7	7,787.0	8,293.1	8,913.0	9,556.9	10,071.5	10,382.3	10,621.3	10,896.3	11,317.4	11.7	9.0	3.4	6.2
% change	*14.5*	*18.9*	*5.4*	*6.5*	*7.5*	*7.2*	*5.4*	*3.1*	*2.3*	*2.6*	*3.9*				
FHFA House Price Index															
Index	429.8	436.3	444.9	458.8	474.8	491.3	508.7	526.8	544.9	563.1	581.6	7.3	2.7	3.4	3.1
% change	*2.8*	*1.5*	*2.0*	*3.1*	*3.5*	*3.5*	*3.5*	*3.6*	*3.4*	*3.3*	*3.3*				
													Avg		
Federal budget deficit, $ bil	-1,666.8	-2,006.6	-2,314.4	-2,460.9	-2,619.7	-2,815.7	-2,997.4	-3,195.9	-3,402.0	-3,540.2	-3,575.2				
% of GDP	*-5.4*	*-6.1*	*-6.7*	*-6.8*	*-7.0*	*-7.2*	*-7.3*	*-7.5*	*-7.7*	*-7.7*	*-7.4*	*-6.3*	*-6.5*	*-7.5*	*-7.0*
Federal debt-to-GDP ratio, %	100.2	99.6	100.5	101.6	102.5	103.8	105.5	107.8	110.1	111.1	111.6	88.5	101.4	108.3	104.9

Sources: BEA, BLS, Census Bureau, Treasury, Moody's Analytics

As inflation moderates, the Fed reduces short-term interest rates. This is what happened in the late 1990s, when the Alan Greenspan-led Fed accommodated the productivity surge and lower inflation by keeping rates much lower. Long-term interest rates declined substantially in that period, and they do so again in this scenario, supporting business investment. Consumer spending is boosted as lower rates help maintain stock, housing, and other asset values, and thus household wealth. Corporate and household debt burdens ease as borrowing costs decline. Productivity and real GDP growth are similar to those in the **Job Market Upheaval** scenario, but instead of losing jobs, the job market holds its own.

CONCLUSIONS

It is highly certain that AI will fundamentally reshape the economy. However, it is equally uncertain just how and when.

If the history of past technological advances is a reliable guide, we should be reasonably optimistic about AI. Technologies such as the internal combustion engine, electricity, the personal computer, and the internet were highly disruptive, making many existing jobs obsolete. However, these technologies also generated enormous gains in incomes, profits and wealth, driving greater demand for other goods and services and creating additional jobs, including some that were unimaginable at the time. The net result was enough jobs and low and stable unemployment. Luddite-like concerns about AI would be misplaced.

This hopeful perspective rests on the expectation that AI will diffuse slowly enough through the economy and that its improving capabilities will be modest enough that the job market can absorb the losses and adjust gracefully. In past technological revolutions, this occurred in significant part because existing companies struggled to quickly and effectively incorporate the technology into their workflows. The technology gained traction only when new companies emerged and optimized around it. And this took time.

But what if AI is adopted more rapidly or its capabilities improve more quickly than those of previous technologies and overwhelm the economy's ability to adjust? Or what if the economic benefits of AI are not distributed widely enough to support the increased demand necessary to support the creation of other jobs? And what about the potential negative externalities that AI may cause such as greater cybercrime and heightened national security threats? Or will the surge in AI investment starve other parts of the economy of much-needed investment and stunt productivity growth?

How AI plays out in the economy is impossible to know. The one sure thing is that we will learn soon enough. We hope the scenarios considered in this paper provide a framework for understanding the possibilities.

ENDNOTES

1 Michael Ferlez, a former economist at Moody's Analytics, was also a significant contributor to this research.

2 Based on recent, high-profile warnings in 2025 and early 2026, the most prominent, ardent AI technologists and researchers arguing that AI will be dystopian for the job market are Dario Amodei (CEO of Anthropic), Geoffrey Hinton ("Godfather of AI"), and Roman Yampolskiy (AI safety researcher). They argue that, unlike previous technological revolutions, AI is a "general labor substitute" rather than just a tool, threatening to cause mass, long-term unemployment and a severe, permanent contraction in the demand for human cognitive labor.

3 The scenario probabilities are the consensus average of the subjective probabilities provided by each of the authors of this whitepaper. We also included the probabilities determined by the large language model Claude based on this paper and other relevant analyses (see Table).

What Is the Probability of the AI Scenarios

	Mark Zandi	Cristian deRitis	Shandor Whitcher	Marisa DiNatale	Justin Begley	Dante DeAntonio	Matt Colyar	Claude AI	Consensus
AI-Empowered Economy (baseline)	35	40	40	45	35	45	40	35	39
AI Falls Flat	25	35	30	15	30	25	35	25	28
Job Market Upheaval	25	15	15	15	20	20	15	25	19
Productivity Boon	15	10	15	25	15	10	10	15	14
	100	100	100	100	100	100	100	100	100

Source: Moody's Analytics

4 Documentation describing our global model is available on request. We will extend this scenario analysis to other countries in the global model and to state and metropolitan area economies in the U.S. in the near future.

5 We also assume that monetary and fiscal policy are determined endogenously in the model—monetary policy via a reaction function for the federal funds rate, and fiscal policy via the automatic stabilizers in the tax code and in government support programs.

6 Data center development is the poster child for the AI-related investment boom, of which the U.S. leads the way globally.

7 This is based on the public announcements of Amazon, Google, Microsoft, Meta and Oracle, as of mid-February.

8 While the productivity gains anticipated over the next decade are substantially better than the 2% per annum growth observed since World War II, they still fall short of the closer to 3% per annum gains in the 1960s and the decade covering 1996-2005 when the internet was built out. This is partly due to the aforementioned measurement problems, but also because the 1960s were a period when the U.S. dominated the global economy, and the nation spent massively on everything from space exploration to substantially expanding the social safety net. The internet decade was also punctuated by a recession in the wake of the bursting stock market bubble and the 9/11 terrorist attack, which caused businesses to aggressively shed workers, lifting productivity. Our baseline does not feature an economic downturn or the resulting cyclical pressure on businesses to shed jobs quickly. However, productivity growth in the baseline outlook remains elevated above its long-run historical norm for longer than during the internet period.

9 One notable exception is Andrej Karpathy, co-founder of OpenAI, who has expressed views on AI and future productivity growth that are similar to those of most economists.

10 Of course, other measures of stock market valuation, including most prominently the cyclically adjusted price-to-earnings ratio, the ratio of the Wilshire 5000 to GDP, and the Buffett Indicator—named after the famed investor—are universally telling the same story.

11 The jobs with tasks most likely to be replaced by AI tend to fall in the 60th-80th percentiles of the wage distribution.

12 Lawmakers have many policy levers used in past crises—such as the Global Financial Crisis and pandemic—that they could use. In more extreme scenarios with even higher unemployment for longer, lawmakers could also consider more innovative policies such as a partial or quasi-universal basic income program that would provide predictable support for structurally displaced workers. However, such a program would be difficult to design. Identifying eligible recipients, setting appropriate benefit levels, and determining sustainable funding, likely through large capital-income tax increases, pose substantial challenges.

ABOUT THE AUTHORS

Mark Zandi is chief economist of Moody's Analytics, where he directs economic research. Moody's Analytics, a subsidiary of Moody's Corp., is a leading provider of economic research, data and analytical tools. Dr. Zandi is a cofounder of Economy.com, which Moody's purchased in 2005.

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Dr. Zandi is the author of Paying the Price: Ending the Great Recession and Beginning a New American Century, which provides an assessment of the monetary and fiscal policy response to the Great Recession. His other book, Financial Shock: A 360º Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis, is described by The New York Times as the "clearest guide" to the financial crisis. Dr. Zandi is host of the Inside Economics podcast.

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