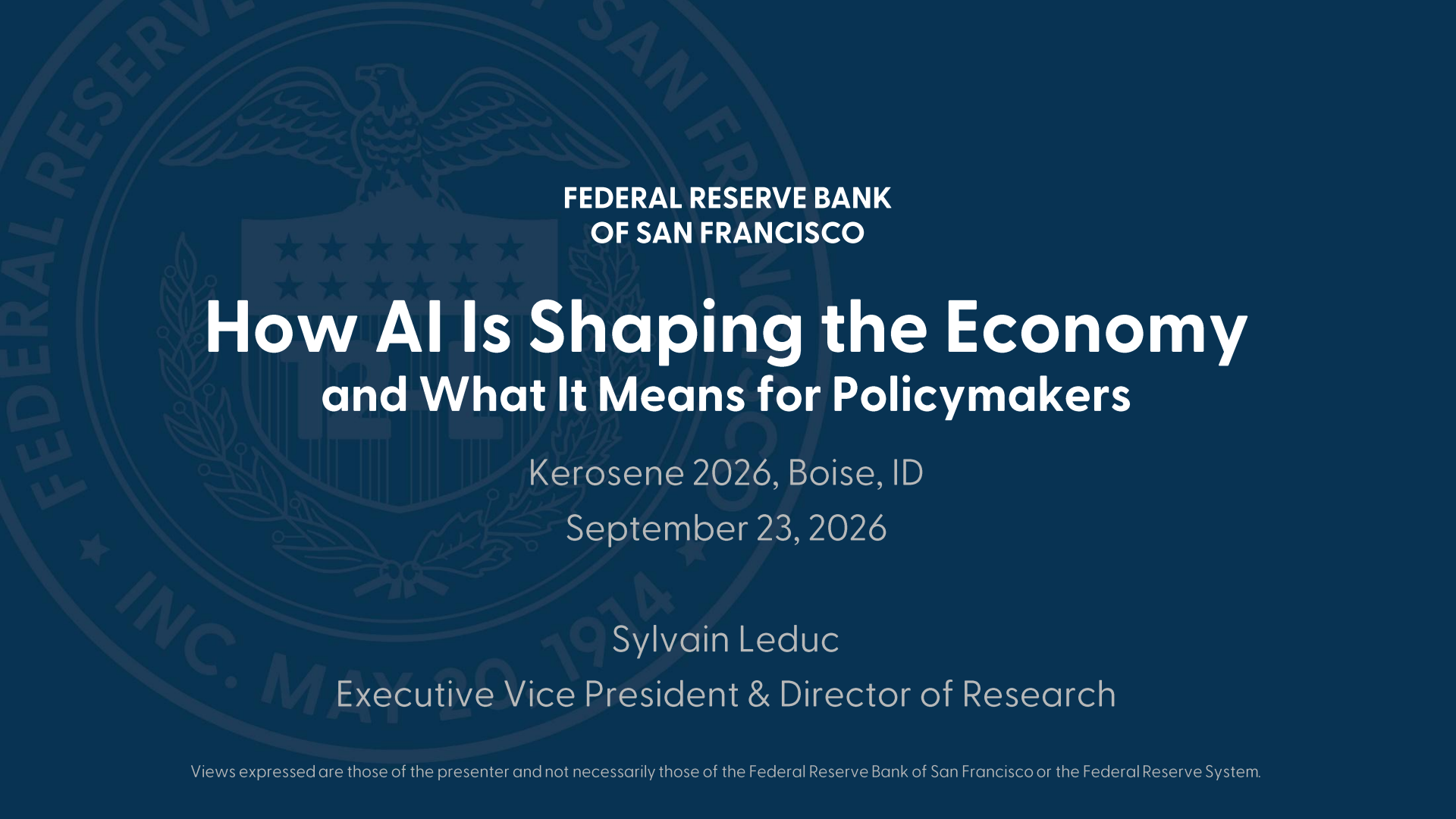




FEDERAL RESERVE BANK
OF SAN FRANCISCO

How AI Is Shaping the Economy and What It Means for Policymakers

Kerosene 2026, Boise, ID
September 23, 2026

Sylvain Leduc
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Views expressed are those of the presenter and not necessarily those of the Federal Reserve Bank of San Francisco or the Federal Reserve System.

The Fed has two mandates



The diagram consists of two side-by-side squares. The left square is light blue and contains the text 'Maximum Employment'. The right square is orange and contains the text 'Price Stability'.

Maximum
Employment

Price
Stability

To see the speed limit, look at the stars

Current growth
(g)



Potential growth
(speed limit: g^*)

g^* depends on:

- Number of workers
- Worker productivity
 - Capital
 - Technology

Over a century of innovations

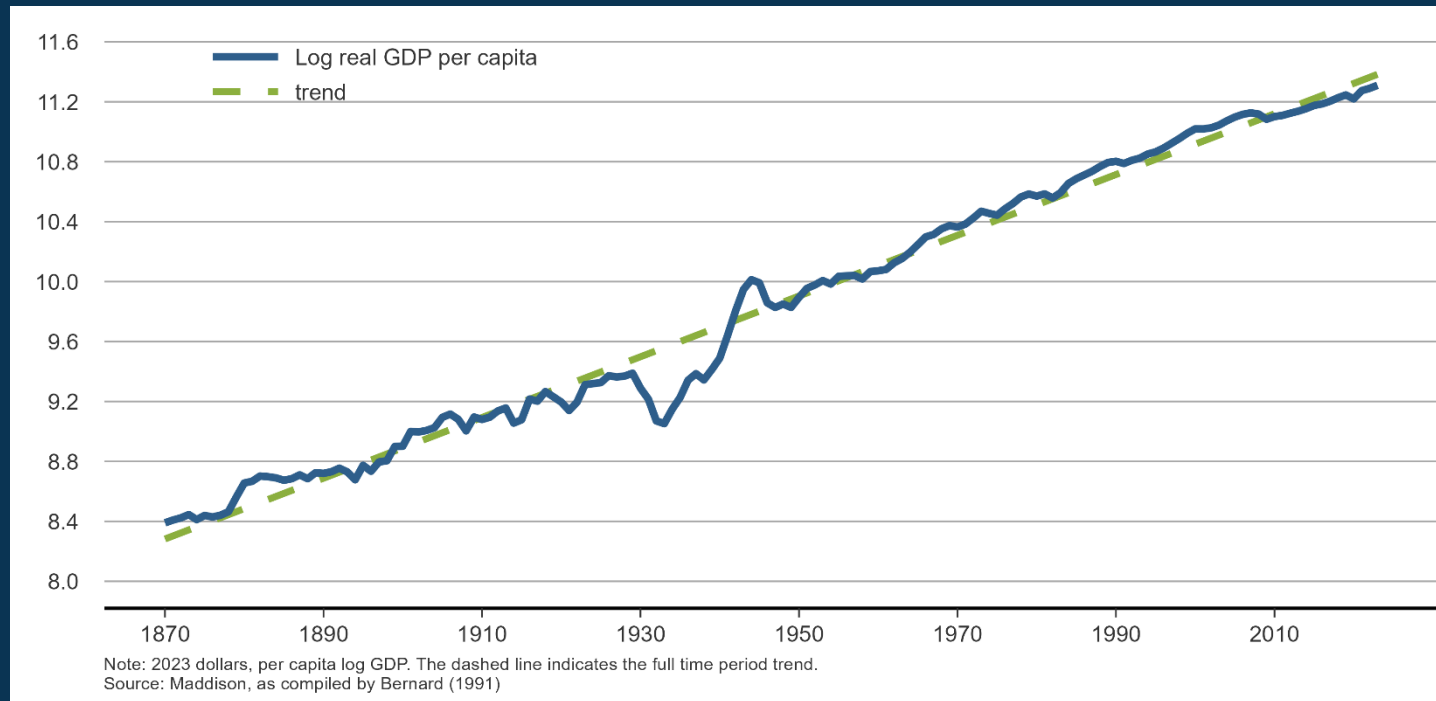
Electric power generation
Internal combustion engine
Airplane
Telephone
Transistor
Computer
Internet

Mobile and smartphones
Antibiotics
Plastics
Semiconductors
MRI
Cloud computing
ATMs

Over the last 150 years, was the growth rate of productivity mostly accelerating, constant, or decelerating?

Steady 2% productivity growth since 1880!

Annual growth rate of real GDP per capita and trend

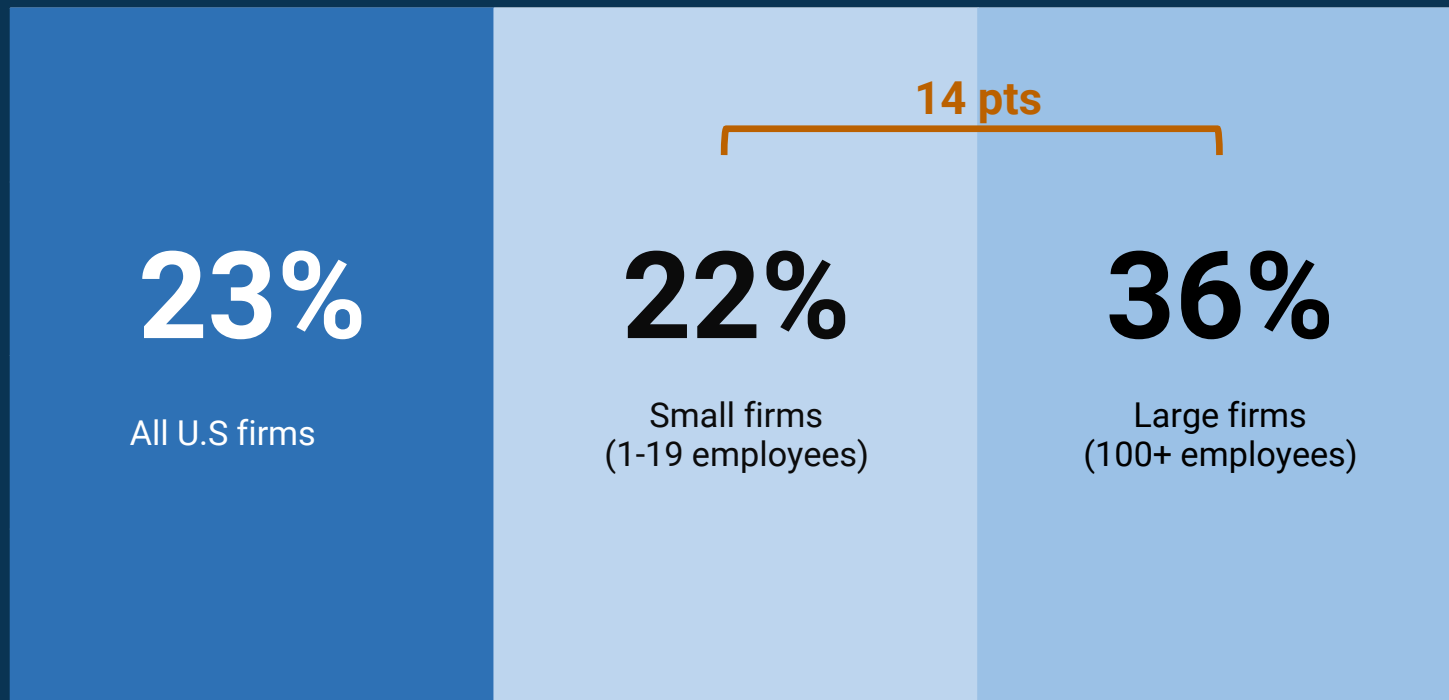




Will AI boost this trend?

Small firms lag large firms in AI adoption

AI adoption rises sharply with firm size

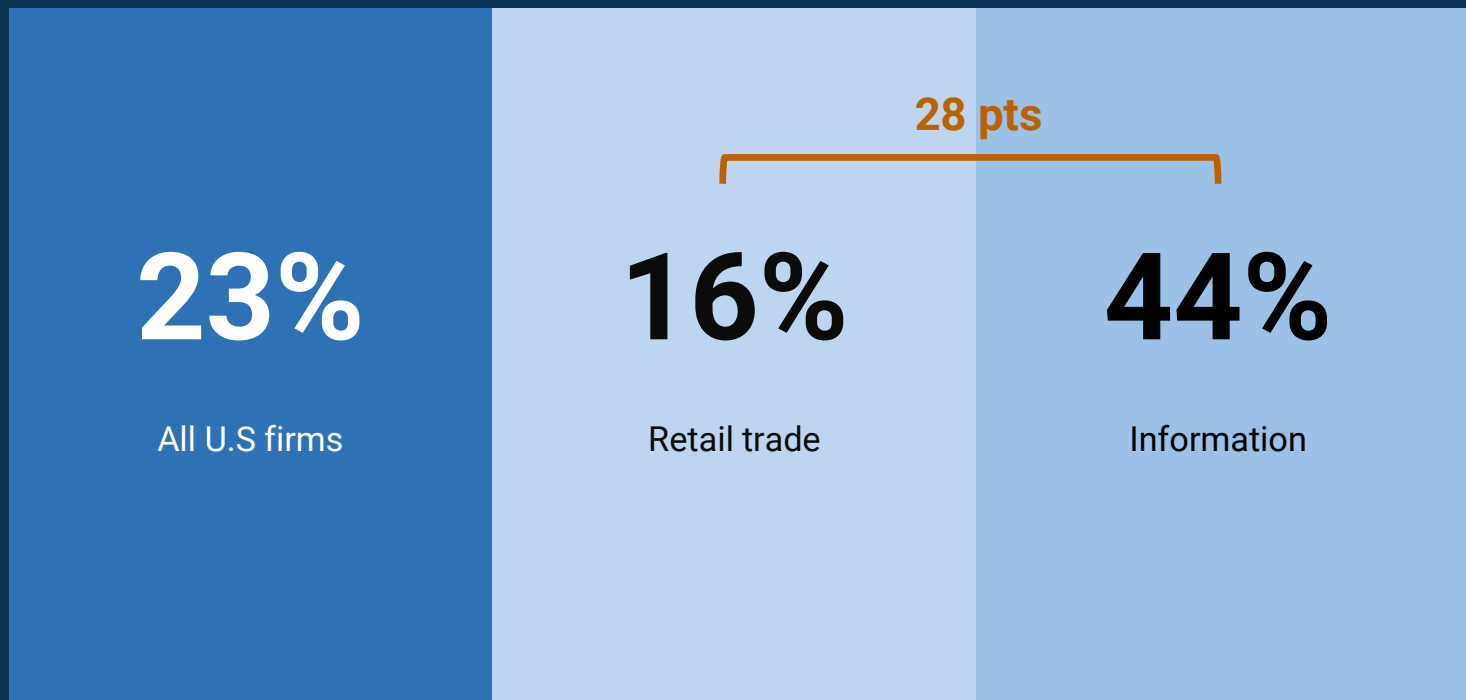


Note: Data as of September 6, 2026.

Source: Census Bureau Business Trends and Outlook Survey (BTOS).

AI adoption rates vary a lot by sectors

AI adoption rates

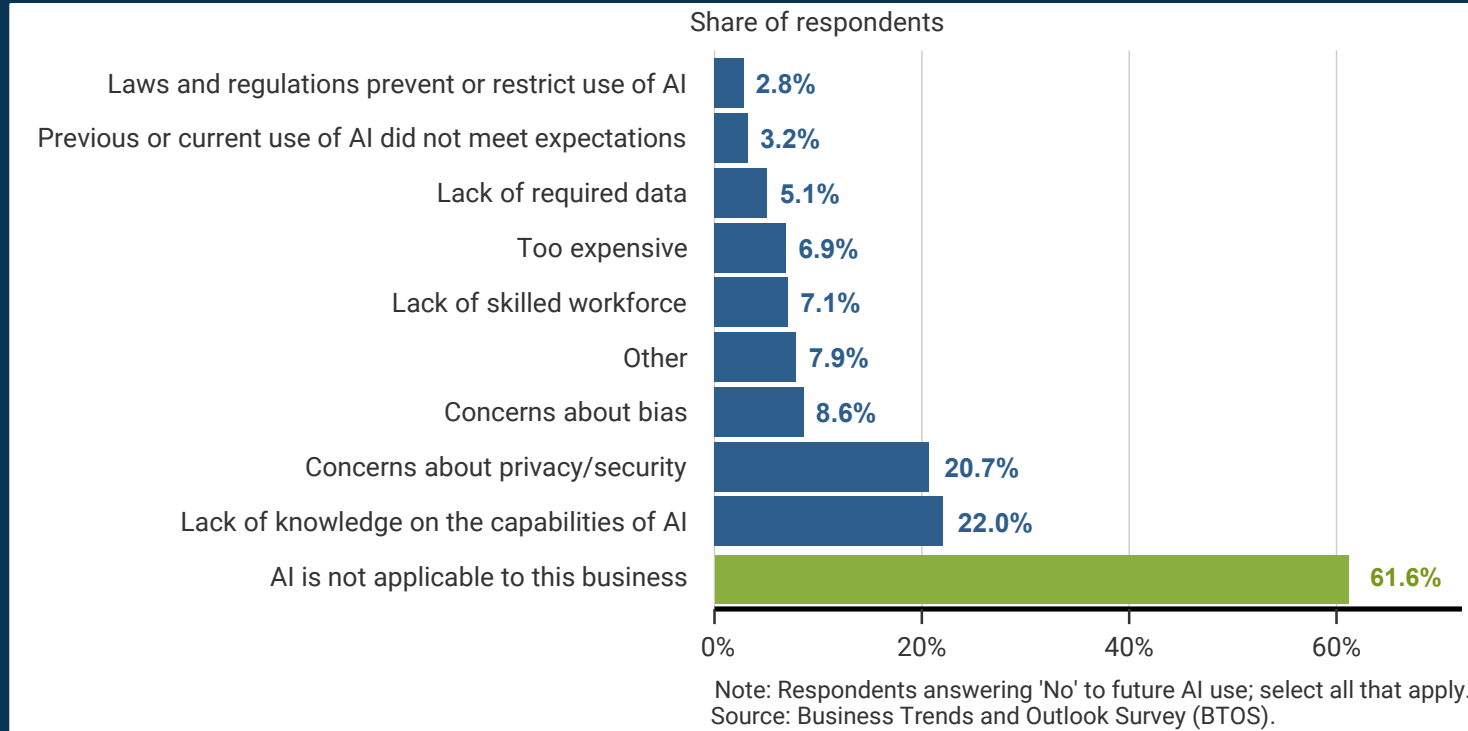


Note: Data as of September 6, 2026.

Source: Census Bureau Business Trends and Outlook Survey (BTOS).

AI non-adopters note lack of applicability

Share of respondents (%)



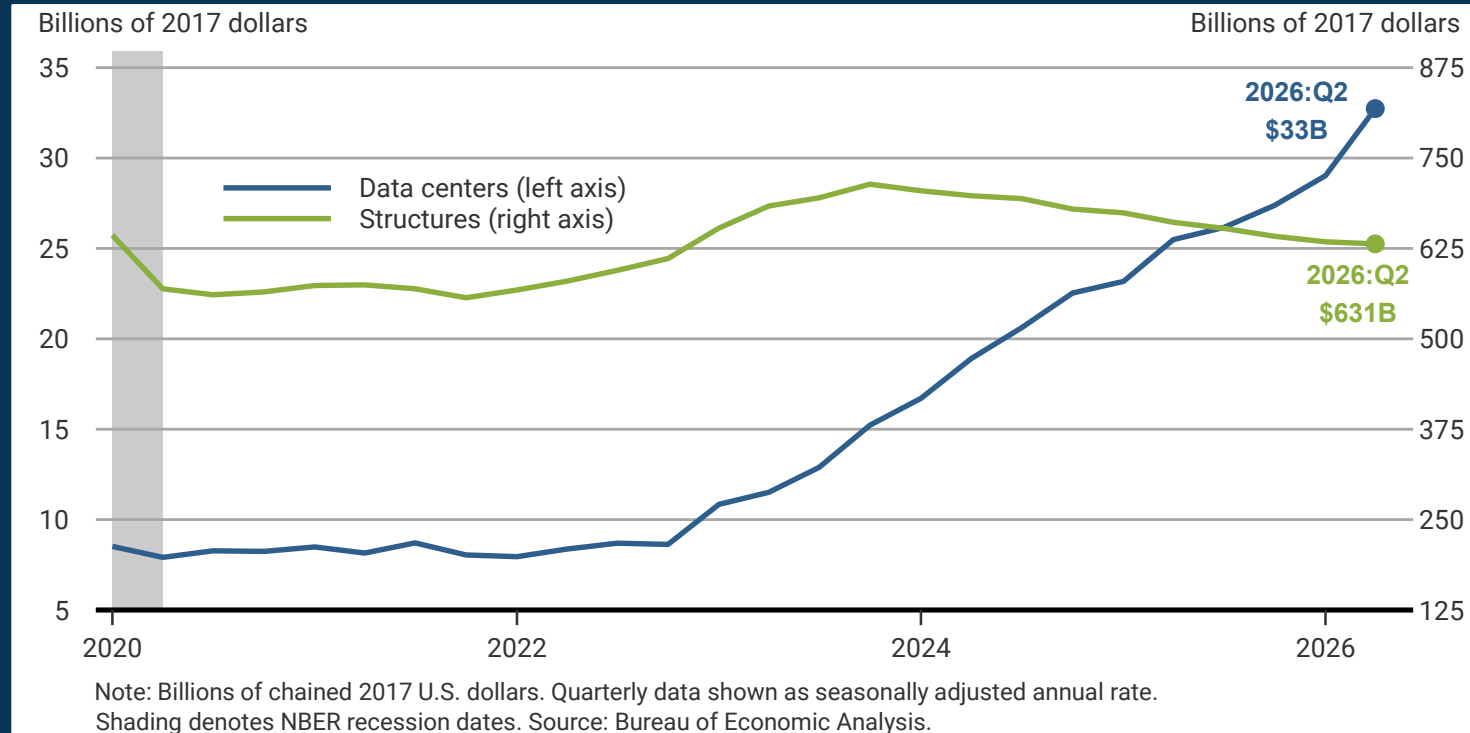
A few firms are gaining from AI enthusiasm

Top five S&P 500 companies as share of S&P 500 market cap



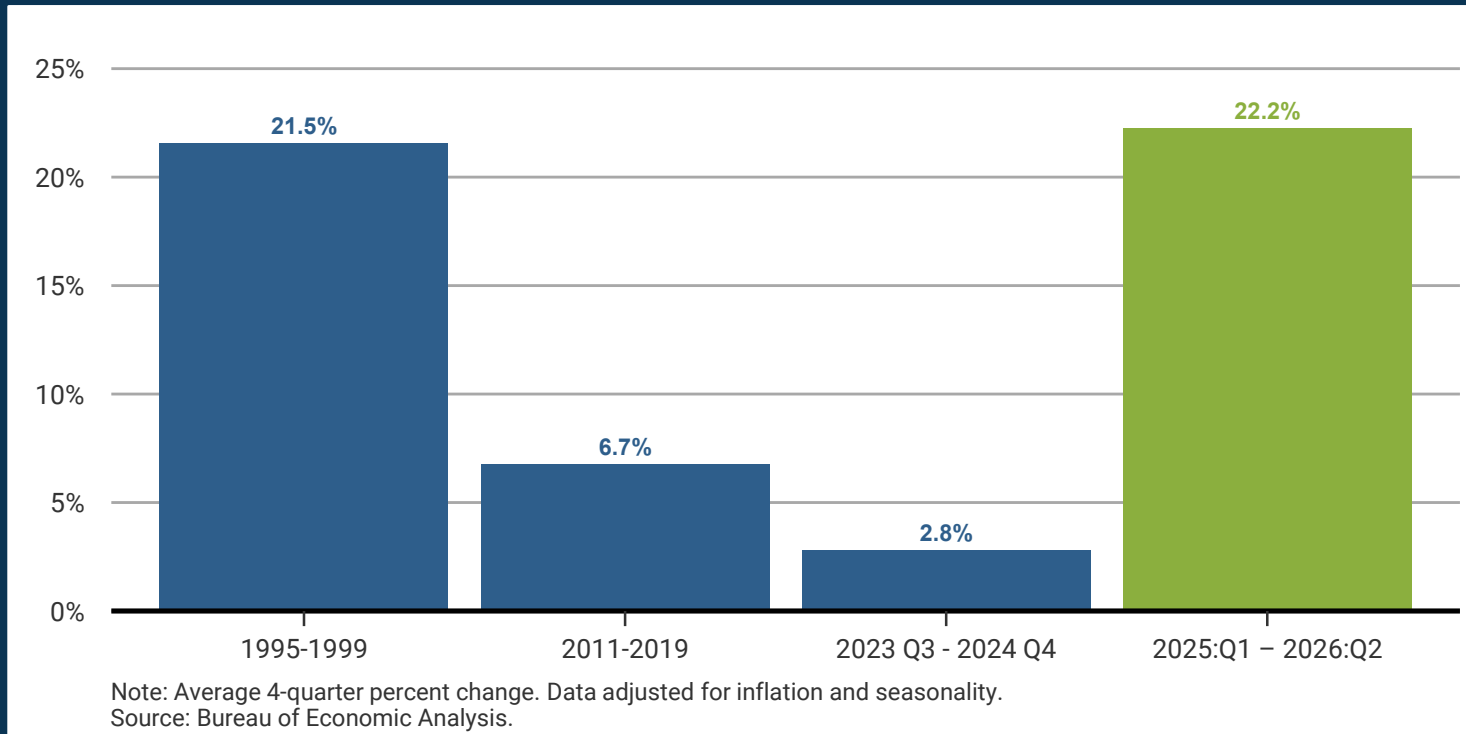
Investment in data centers is rising sharply

Real investment in information-processing equipment



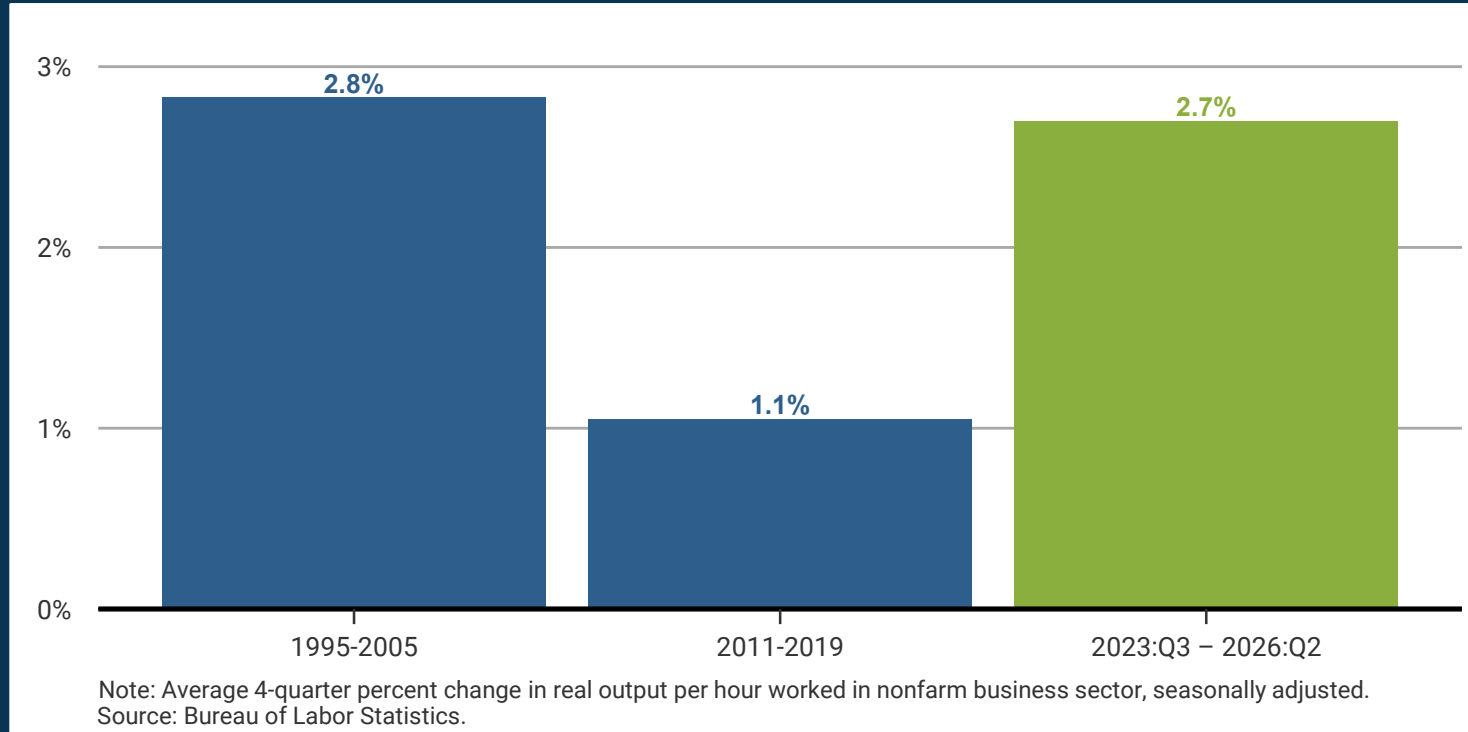
Strong AI-induced equipment investment

Real investment in information-processing equipment



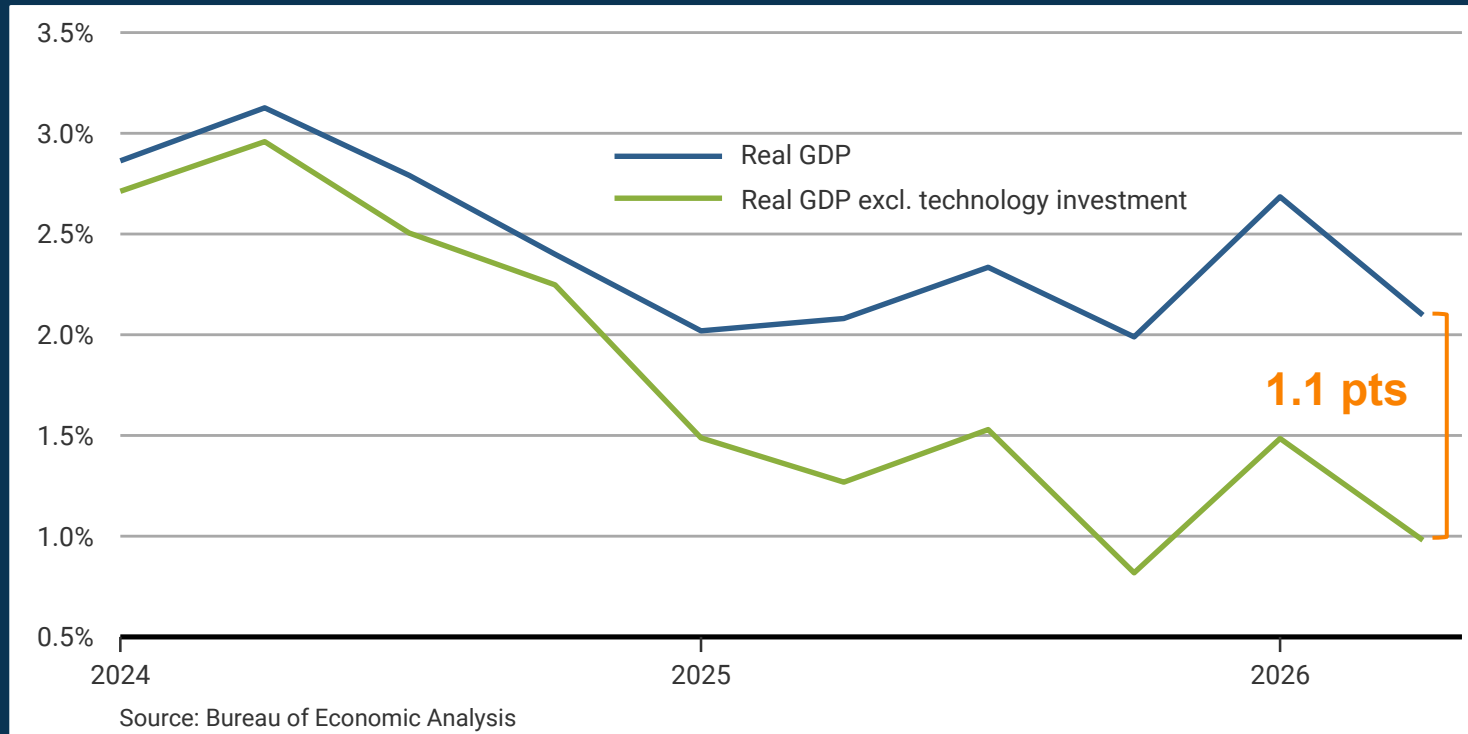
Investment boosting productivity growth

Labor productivity



AI investments supporting GDP growth

Real GDP, 4-quarter change

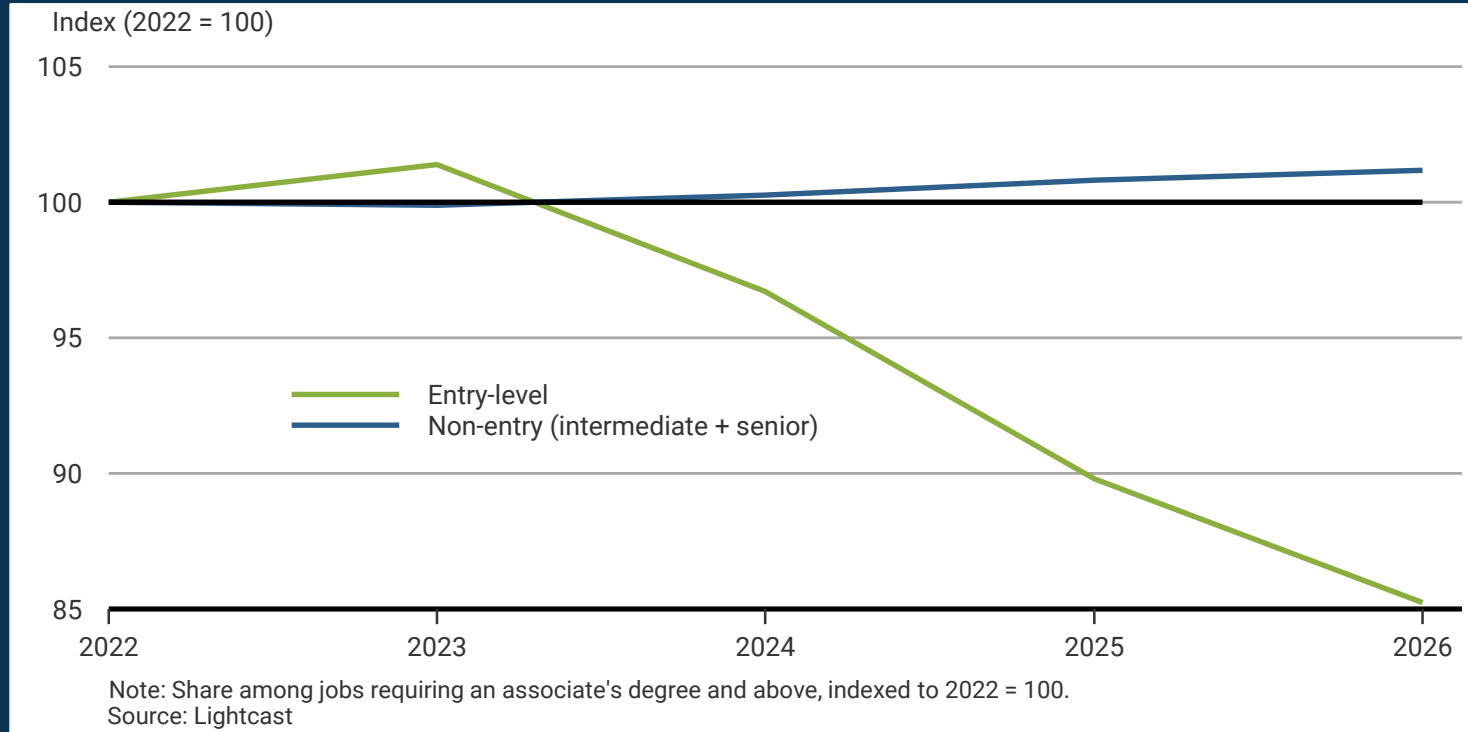




Impact on the labor market

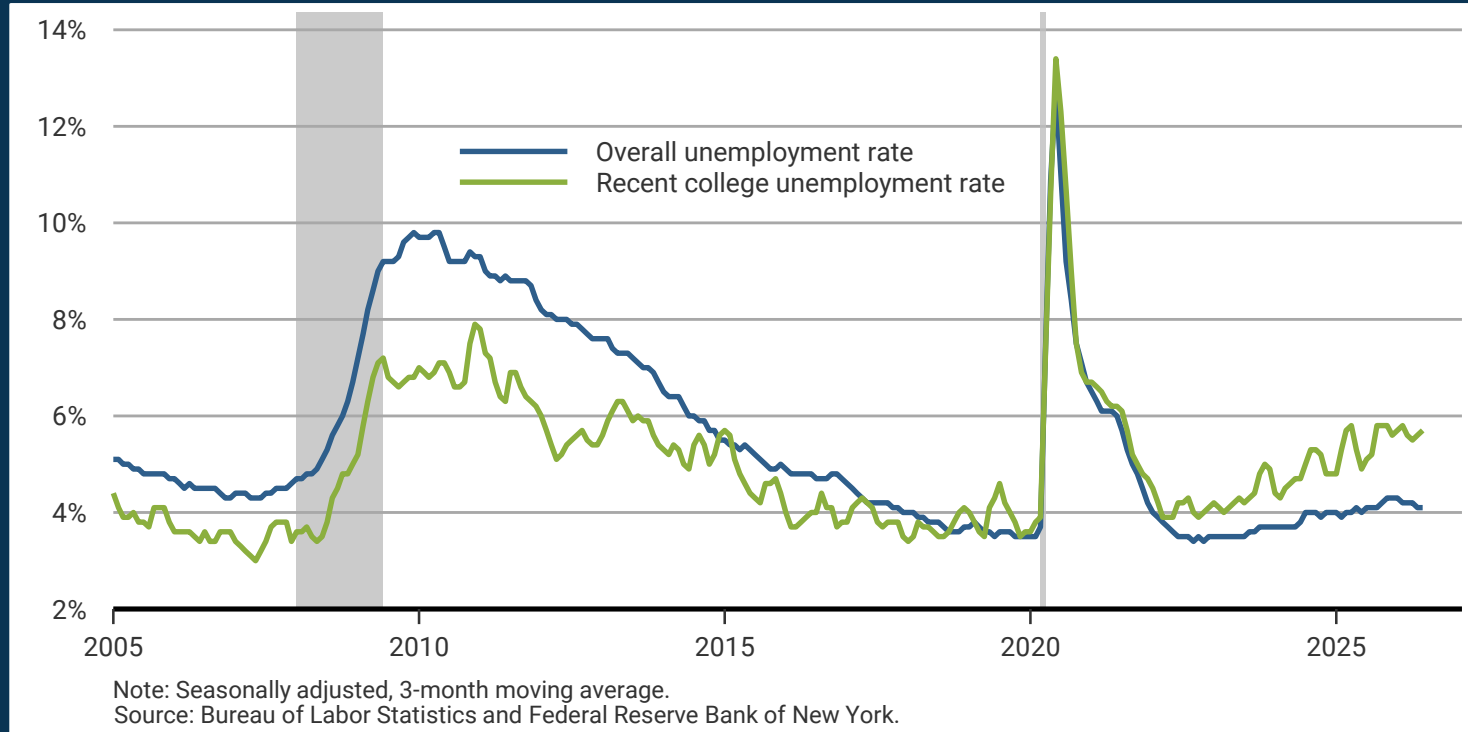
Post-2023 fall in entry-level job postings

Degree-requiring job postings, all sectors



Rising unemployment for recent graduates

Unemployment rates

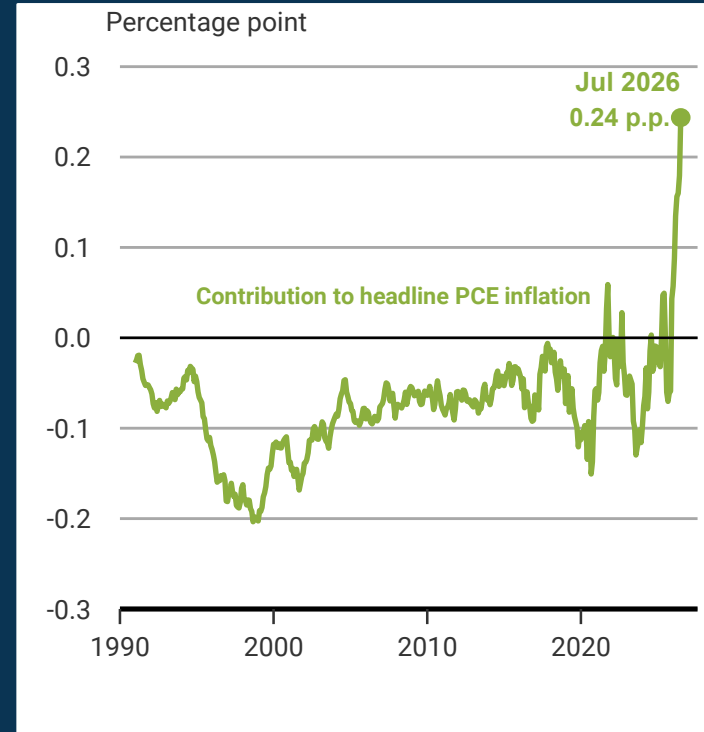
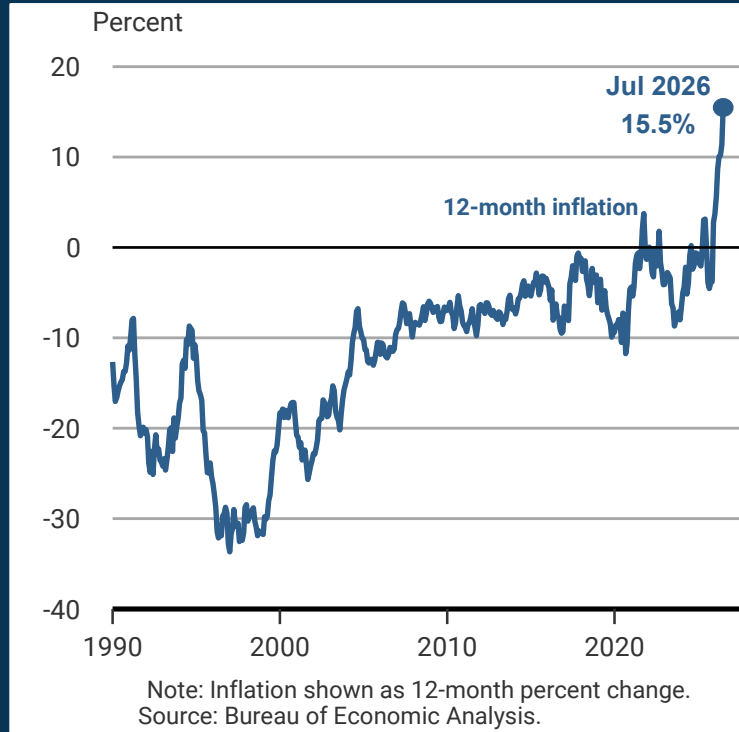




Impact on inflation

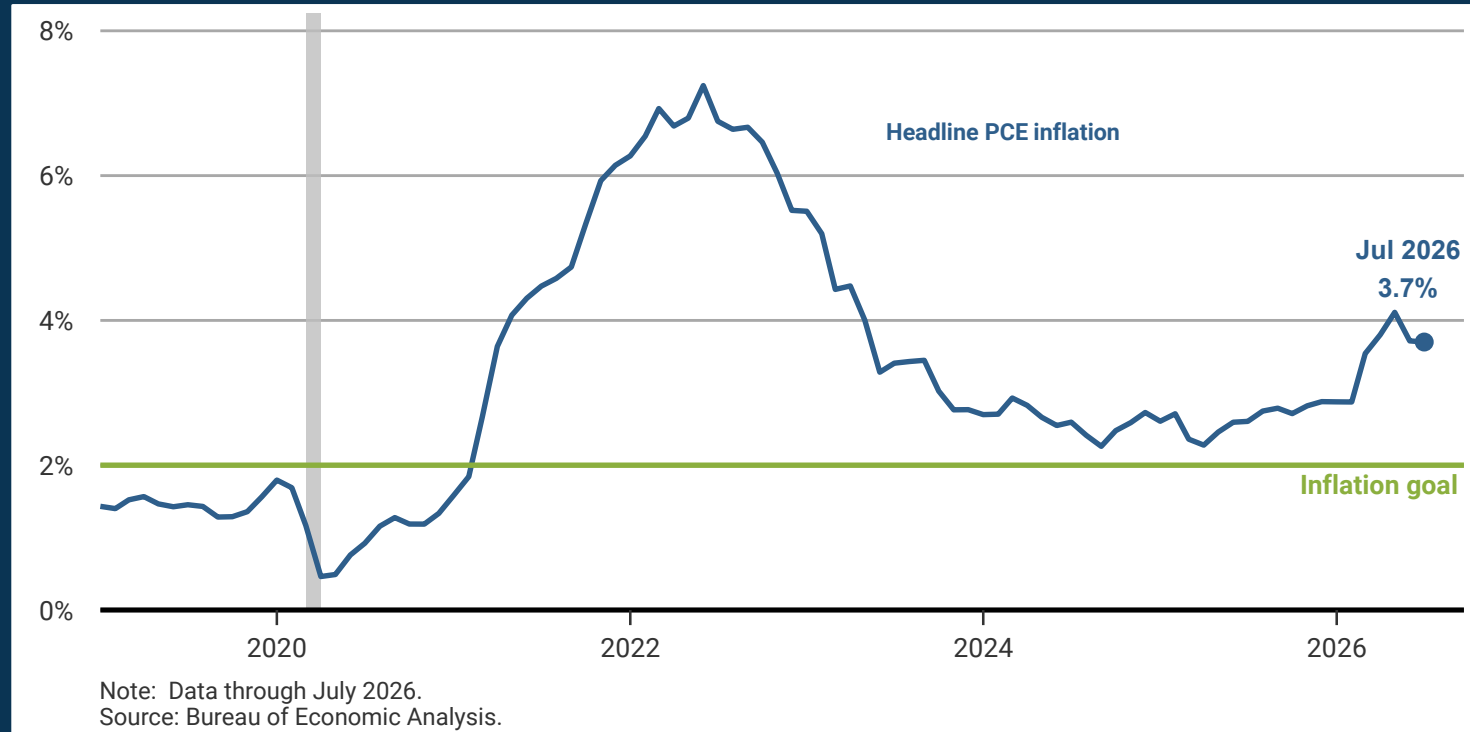
Tech prices pushing inflation up a bit

Technology equipment price inflation and contribution to PCE inflation



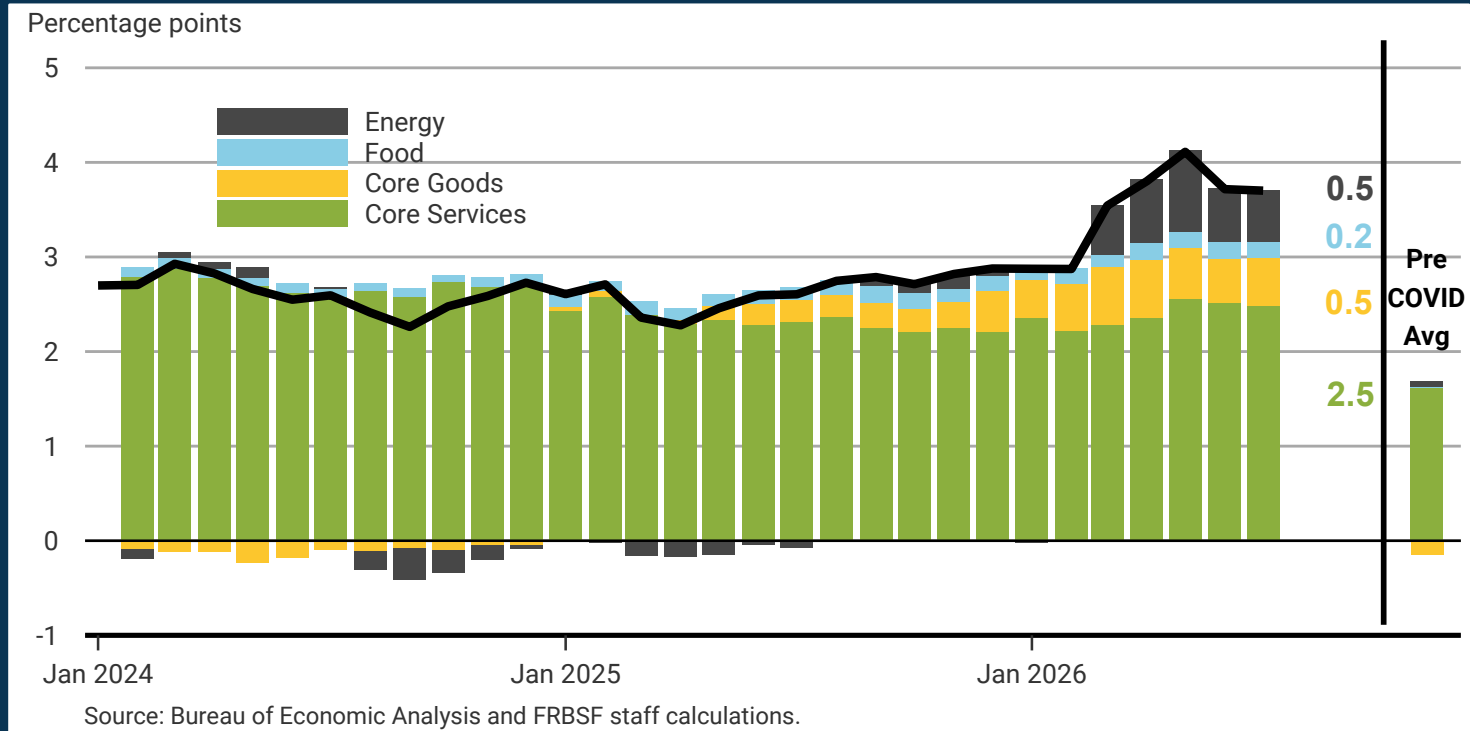
Inflation has been rising over the past year

Headline PCE inflation, 12-month change



Goods and energy prices boosting inflation

Contributions to 12-month headline PCE inflation





Impact on monetary policy?

AI has demand and supply effects

Demand effects push inflation up

- higher spending via wealth effects from higher stock prices
- higher investment demand
- pressures on inputs costs for all industries (e.g., memory chips)

Supply effects push inflation down

- higher productivity lowers costs and prices

Demand effects may outpace supply effects early on

Policymakers must net out these effects over time

Markets expect increases in the policy rate

Market-implied federal funds rate path

