AI adoption: the economy, jobs and the next graduating class

FinzData Research | November 12, 2026

Adoption, investment, productivity, employment, entry-level work and college graduates. Data through October 2026.

FinzData

Capital first, output second, jobs last

56.8%

of US businesses pay for AI tools, up from 7.5% in January 2023 and 43.5% a year ago

5.3%

of GDP in tech investment ($1.77 trillion a year), above the dot-com peak of 4.5%

-381k

information-sector jobs since November 2022 (-12.2%), while total payrolls added 5.1 million

6.6%

unemployment for bachelor's graduates aged 20-24, against 4.3% for all workers

Spending and productivity have accelerated, total employment has held, and the strain is concentrated at white-collar entry points. The graduate gap is 2.3 points; it averaged 0.3 over 2001-2019.

Source: FinzData (Ramp, BEA, BLS; point-in-time vintages). Jobless rates are 12-month averages.

FinzData

Scorecard: where the AI economy stands

Latest reading against a year ago and against November 2022, the month generative AI went mainstream

Indicator	Latest	A year ago	Nov 2022
Businesses paying for AI, %	56.8	43.5	7.5 (Jan 2023)
Workers using generative AI at work, %	40.5	37.4	n/a
Tech investment, % of GDP	5.35	4.57	4.09
Tech investment, % y/y	23.8	16.2	7.6
Taiwan ICT exports, 12m, $bn	393	218	65
Output per hour, % y/y	2.1	2.7	-1.4
Nonfarm payrolls, millions	159.3	158.4	154.2
Information-sector jobs, thousands	2,734	2,853	3,115
Unemployment rate, all, %	4.3	4.2	3.7
Unemployment, bachelor's 20-24, %	6.6	6.9	5.3
Unemployed new entrants, thousands	782	749	482
High school minus college jobless gap, pts	1.6	1.7	2.0

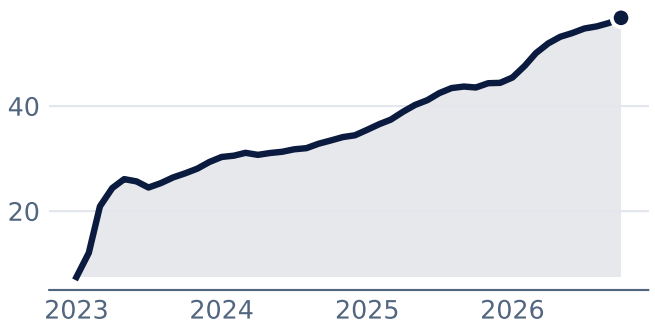
Source: FinzData (Ramp, St. Louis Fed, BEA, BLS, Taiwan Ministry of Finance). Jobless rates and new entrants are 12-month averages.

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The AI economy in six charts

Businesses paying for AI

56.8%



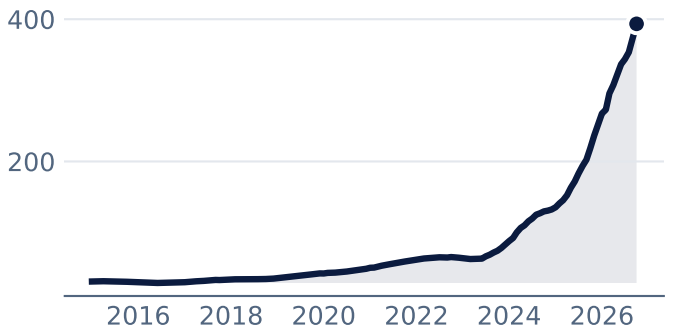
Tech investment, share of GDP

5.35%



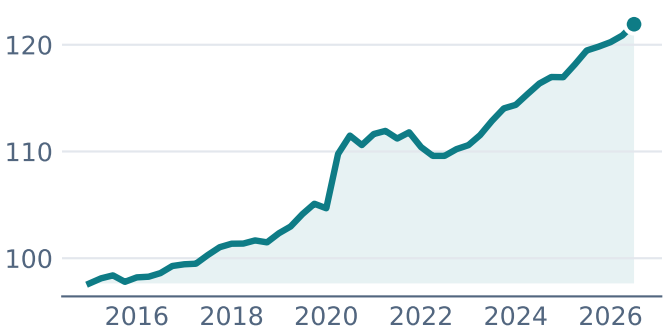
Taiwan ICT exports, 12 months

$393bn



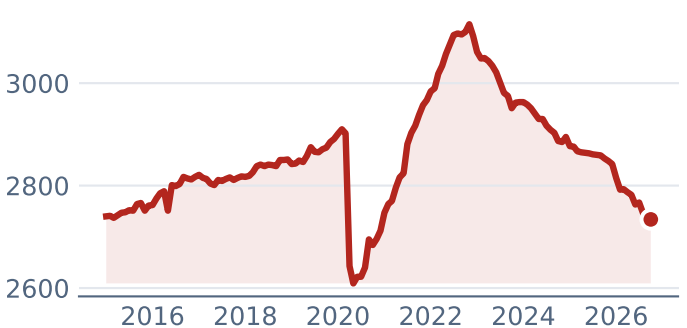
Output per hour, 2017 = 100

121.9



Information-sector jobs, thousands

2,734



Jobless rate, bachelor's 20-24

6.6%



Source: FinzData (Ramp, BEA, BLS, Taiwan Ministry of Finance). Jobless rate is a 12-month average.

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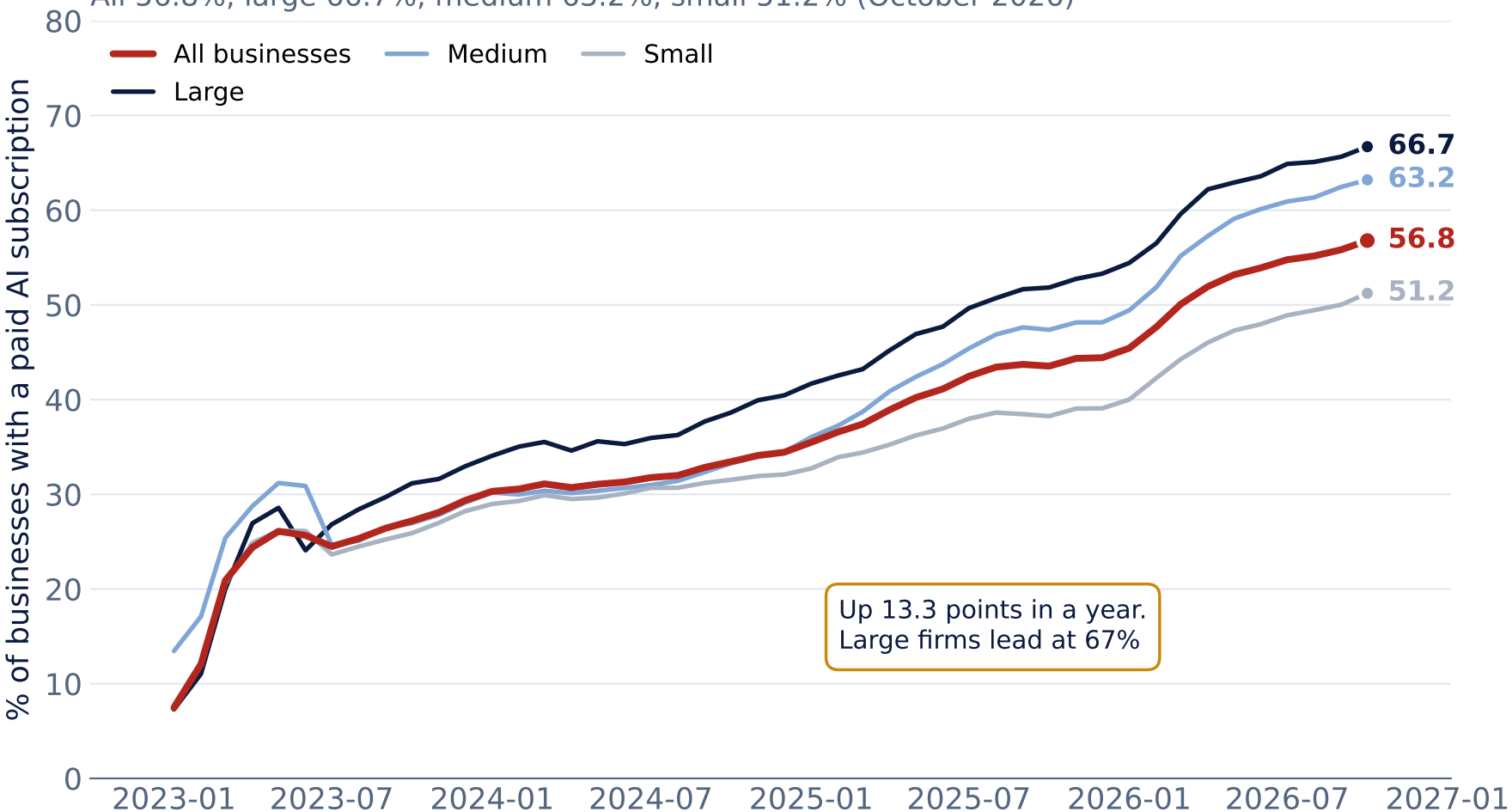
Adoption

Who is using AI: businesses by size, workers on the job, and how much time it saves by industry and occupation.

FinzData

More than half of US businesses now pay for AI

All 56.8%, large 66.7%, medium 63.2%, small 51.2% (October 2026)



57%

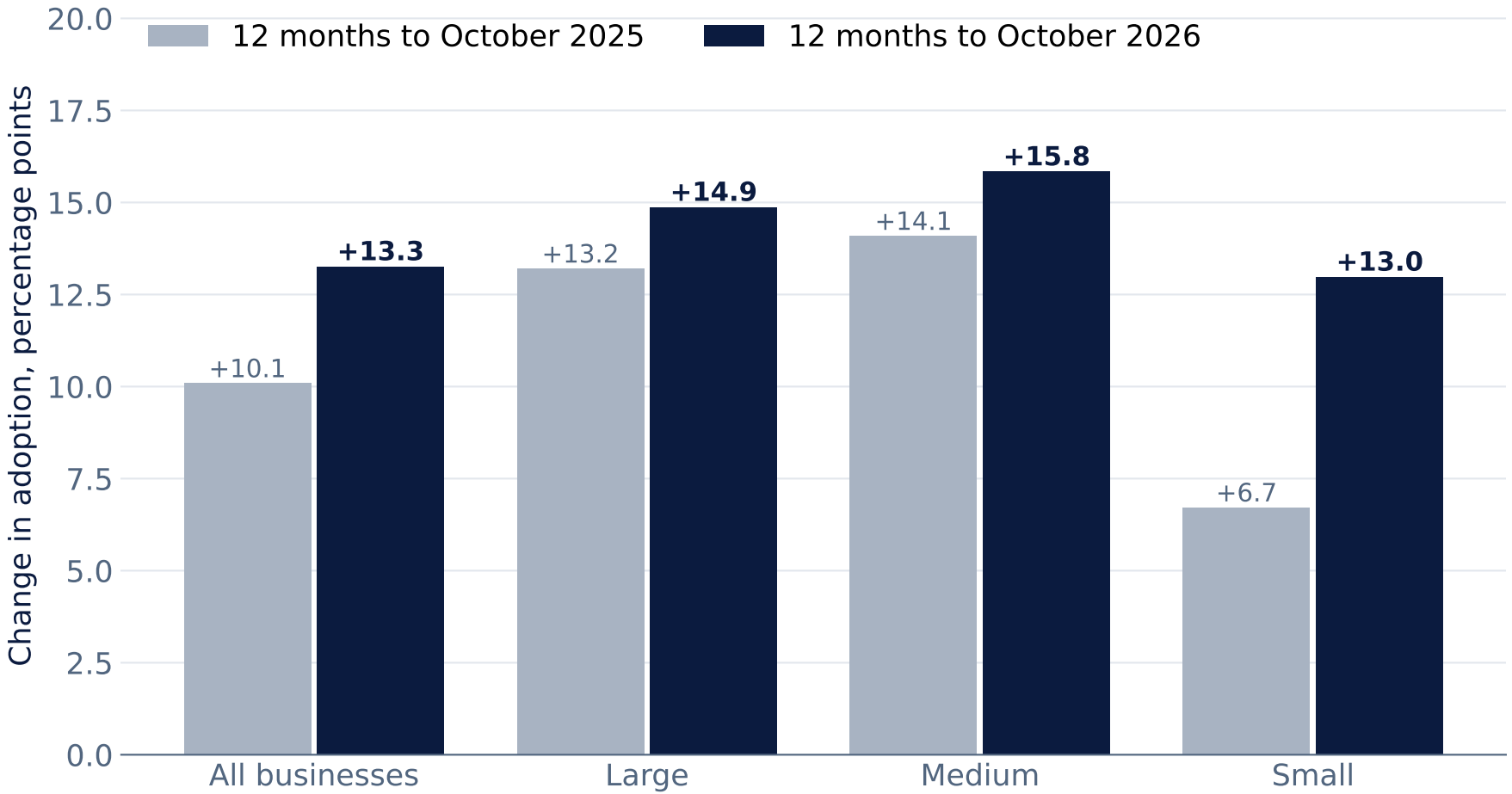
of US businesses now pay for AI

Source: FinzData (Ramp AI Index, monthly, to October 2026).

FinzData

Adoption is still accelerating

All businesses +13.3 points in the past year against +10.1 the year before; large firms +14.9



+13.3 pts

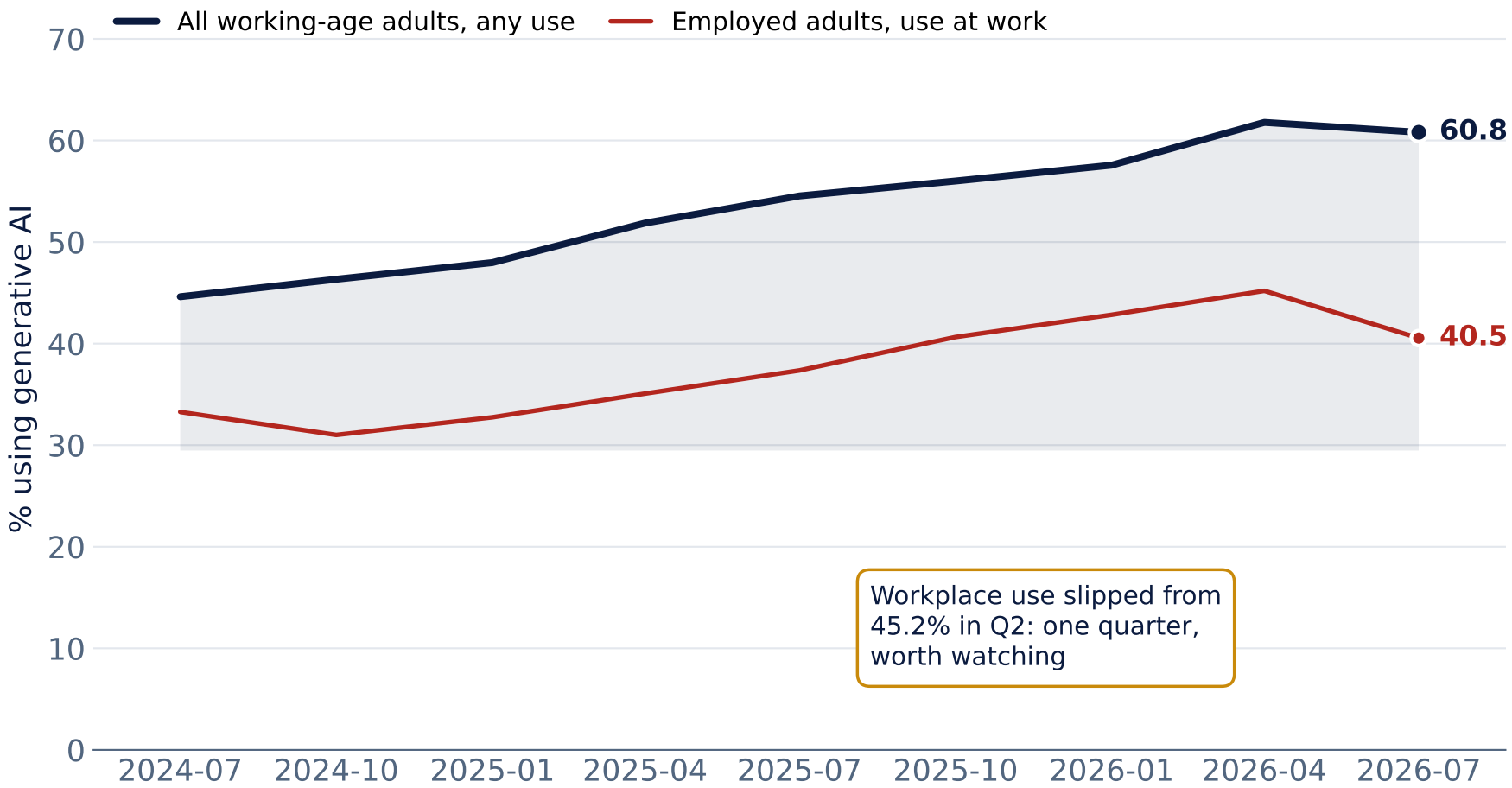
adoption gain in the past 12 months

Source: FinzData (Ramp AI Index, monthly, to October 2026).

FinzData

Four in ten workers use generative AI on the job

At work 40.5% in Q3 2026 (33.3% in Q3 2024, peak 45.2%); any use 60.8%



41%

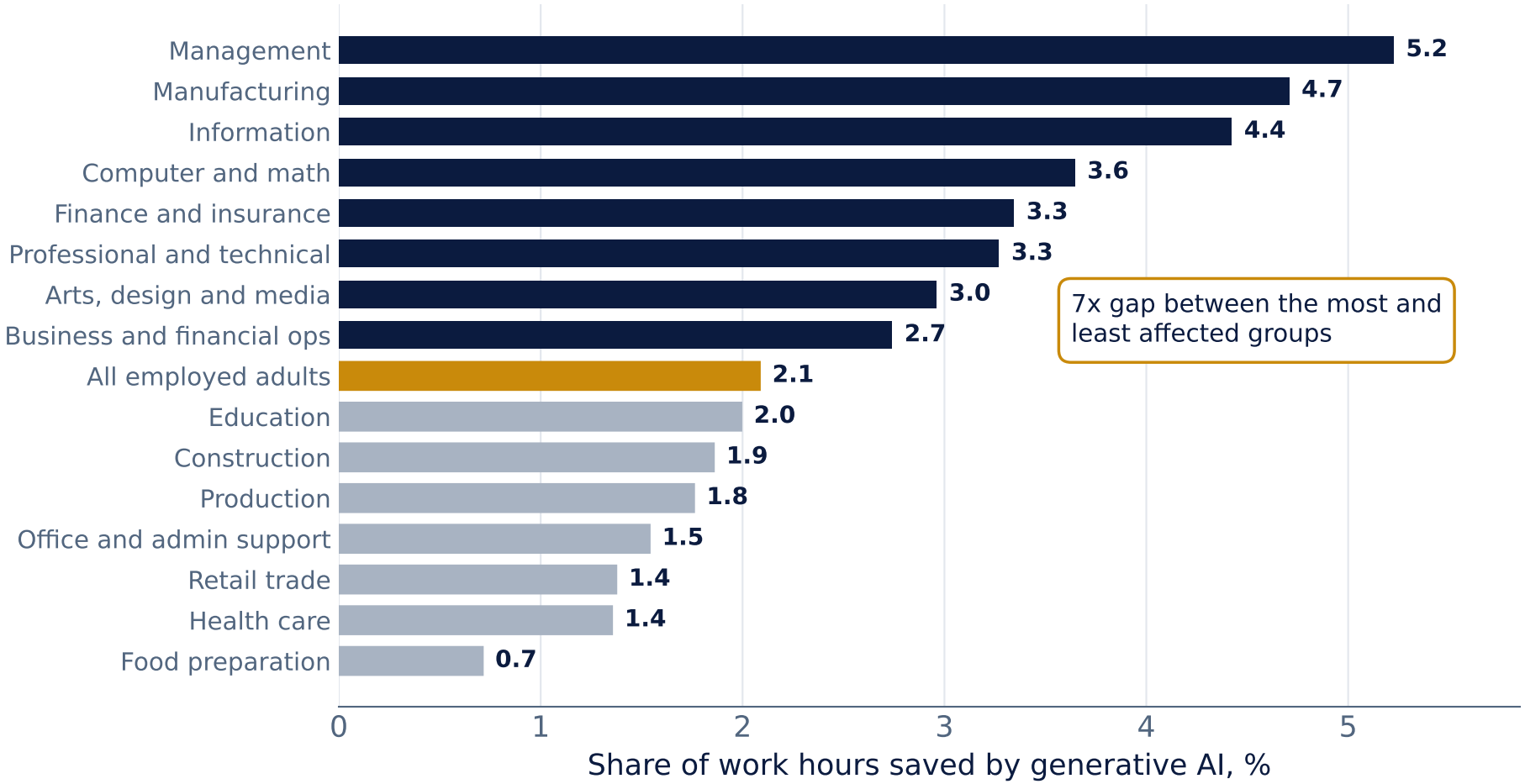
of workers use generative AI on the job

Source: FinzData (St. Louis Fed Real-Time Population Survey, quarterly, to Q3 2026).

FinzData

Time saved is largest in management and knowledge work

Management 5.2% of hours, all workers 2.1%, food preparation 0.7%



2.1%

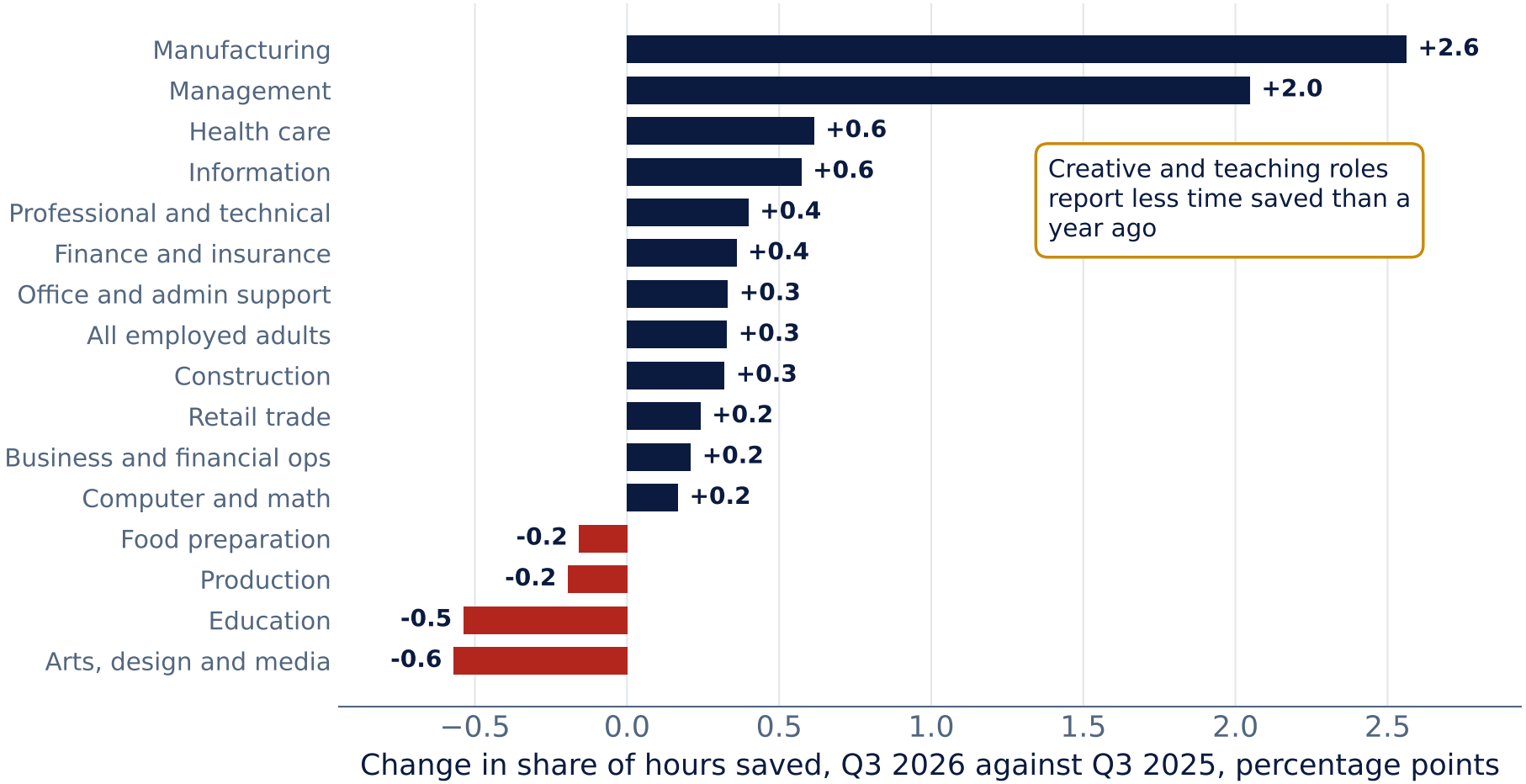
of all US work hours saved by generative AI

Source: FinzData (St. Louis Fed Real-Time Population Survey, Q3 2026; selected industries and occupations).

FinzData

Gains are spreading unevenly: some fields doubled, some slipped

Manufacturing +2.6 points in a year, all workers +0.3, arts, design and media -0.6



+2.6 pts

Manufacturing: the biggest gain in a year

Source: FinzData (St. Louis Fed Real-Time Population Survey, Q3 2026; selected industries and occupations).

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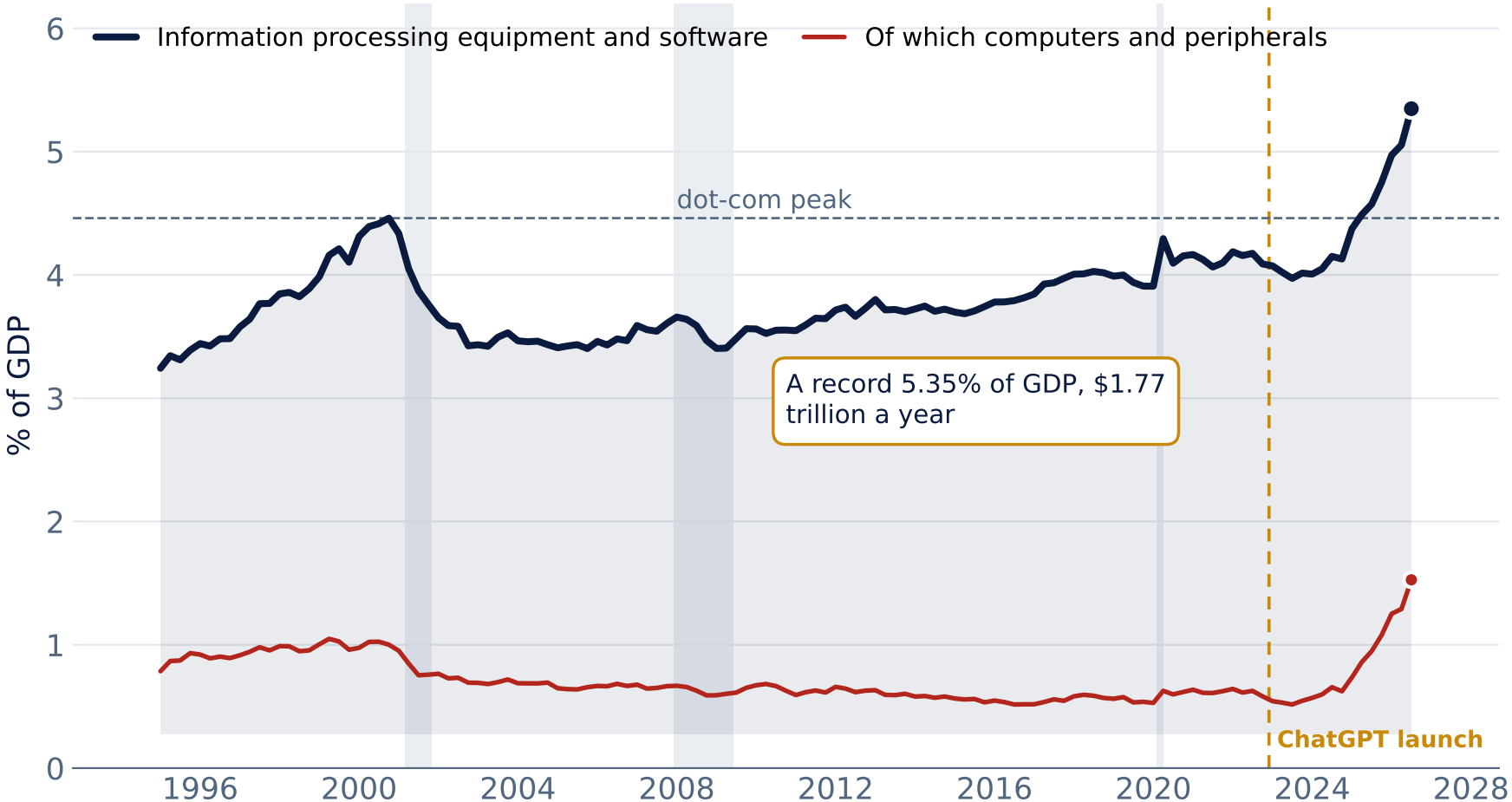
The economy

Investment, the Asian hardware supply chain, electricity demand, productivity, and who is capturing the gains.

FinzData

Tech investment has passed its dot-com share of GDP

5.35% of GDP in Q3 2026 against 4.46% at the 2000 peak; computers 1.53% against 1.05%



5.3%

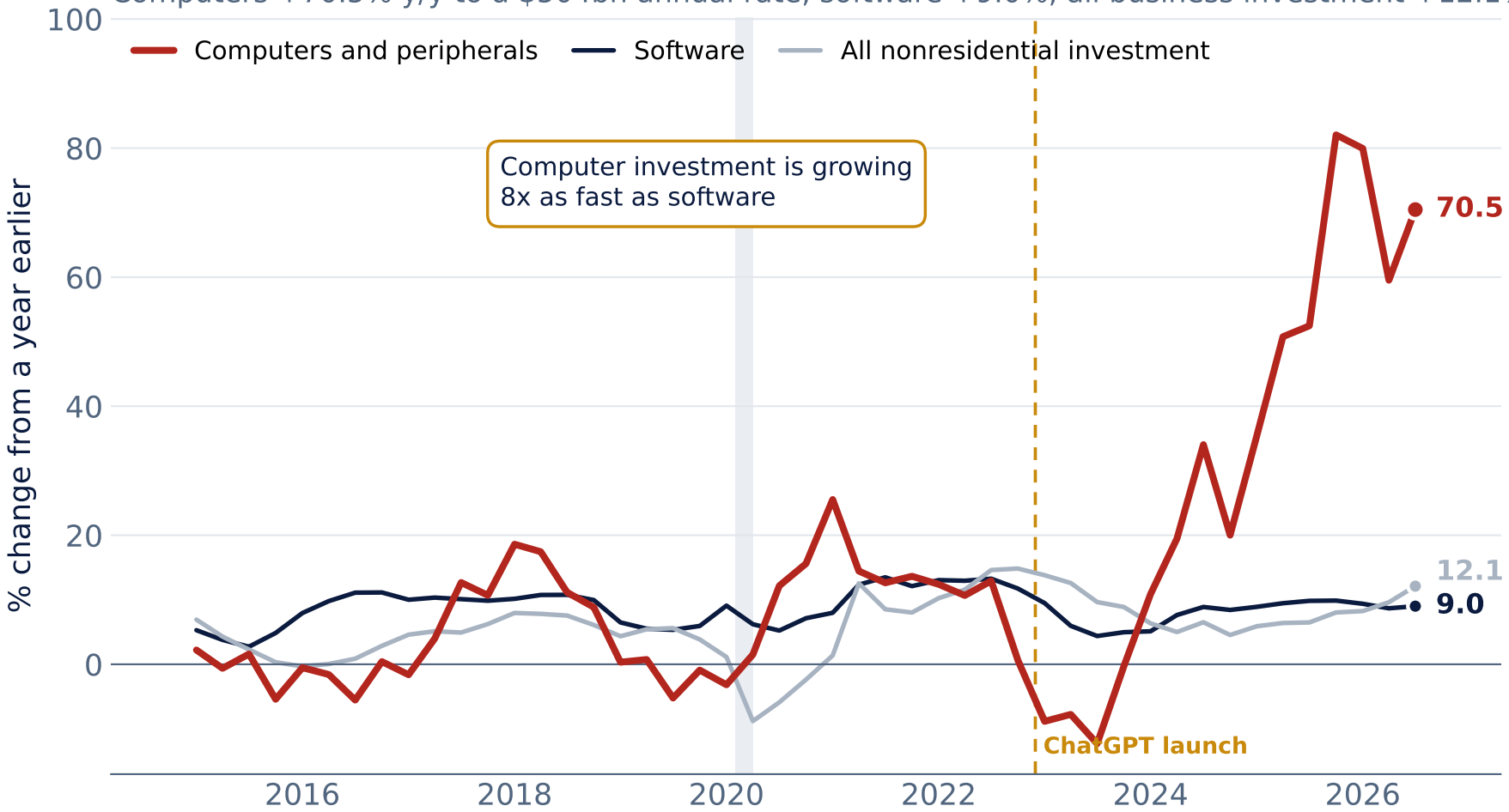
of GDP: a record, above the dot-com peak

Source: FinzData (BEA national accounts, nominal, quarterly to Q3 2026).

FinzData

Hardware is leading the build-out; software trails

Computers +70.5% y/y to a $504bn annual rate, software +9.0%, all business investment +12.1%



+70%

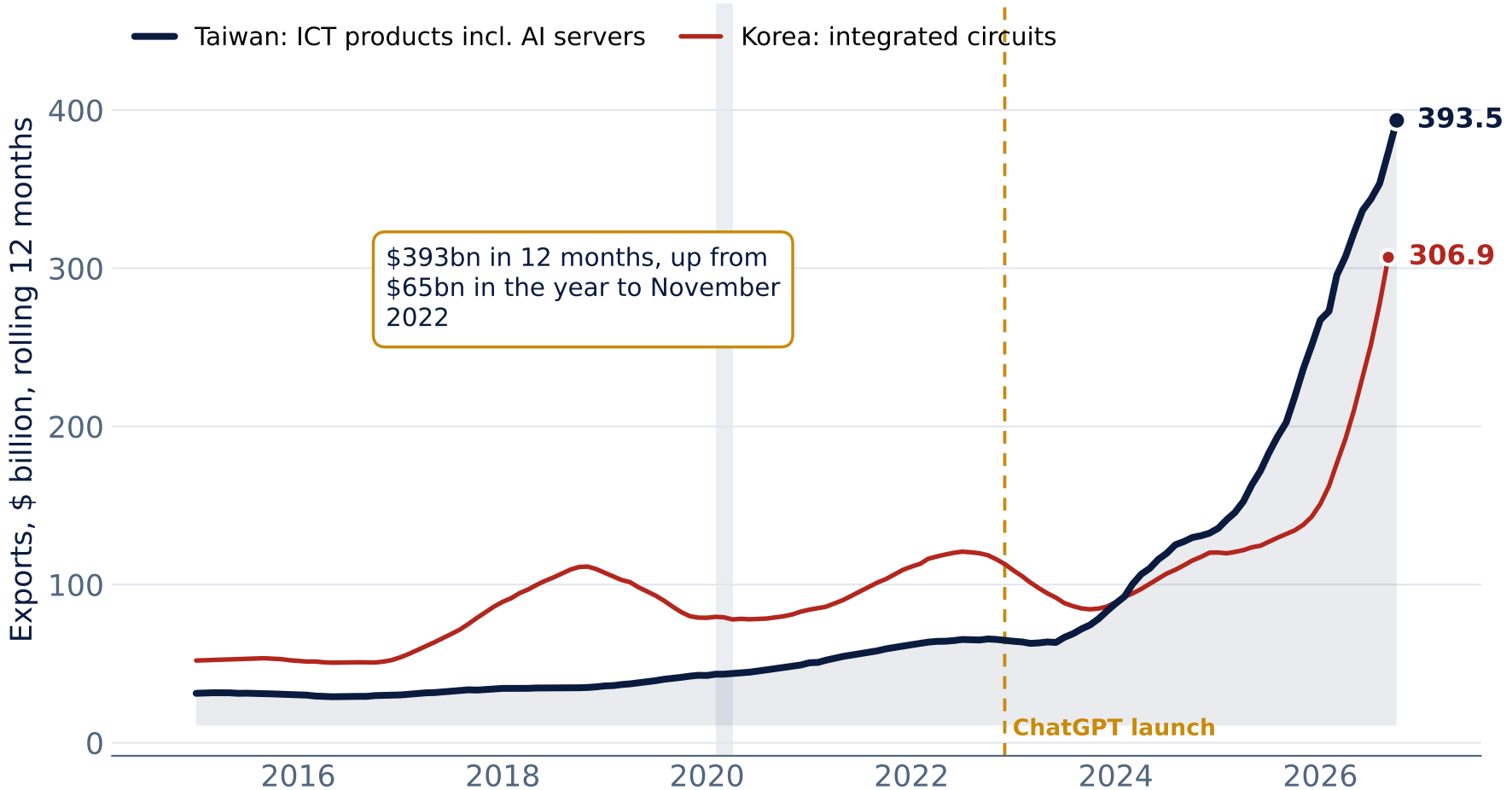
computer investment, year over year

Source: FinzData (BEA national accounts, nominal, quarterly to Q3 2026).

FinzData

The hardware trail runs through Taiwan and Korea

Taiwan ICT $393bn, 6.0x the year to November 2022; Korea chips $307bn, 2.6x



6x

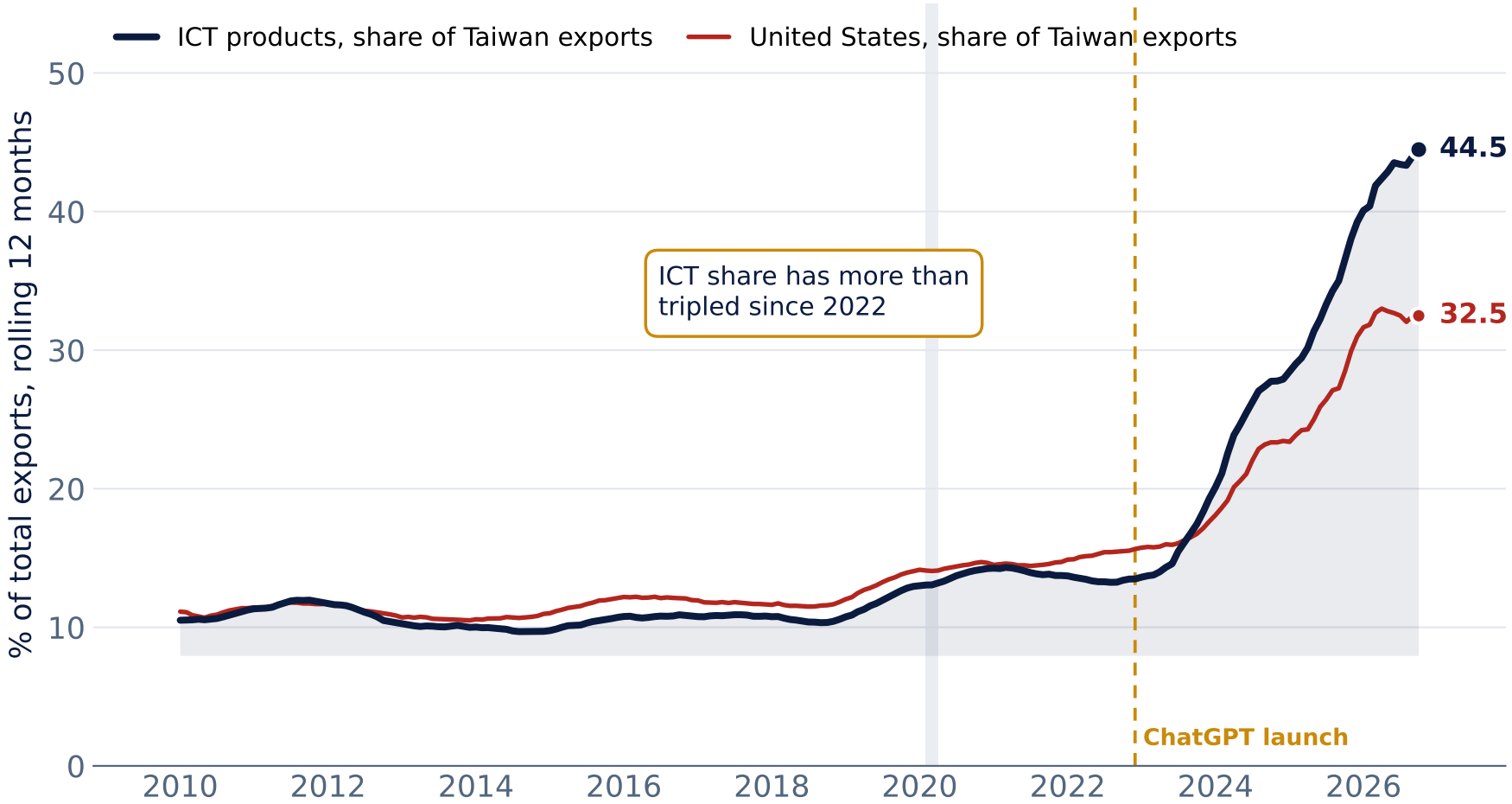
Taiwan ICT exports against late 2022

Source: FinzData (Taiwan Ministry of Finance, Korea customs; rolling 12-month sums).

FinzData

AI hardware has rewired Taiwan's trade toward the US

ICT is 44% of exports (was 13% in 2022); the US takes 32% (was 16%)



44%

of Taiwan's exports are now ICT products

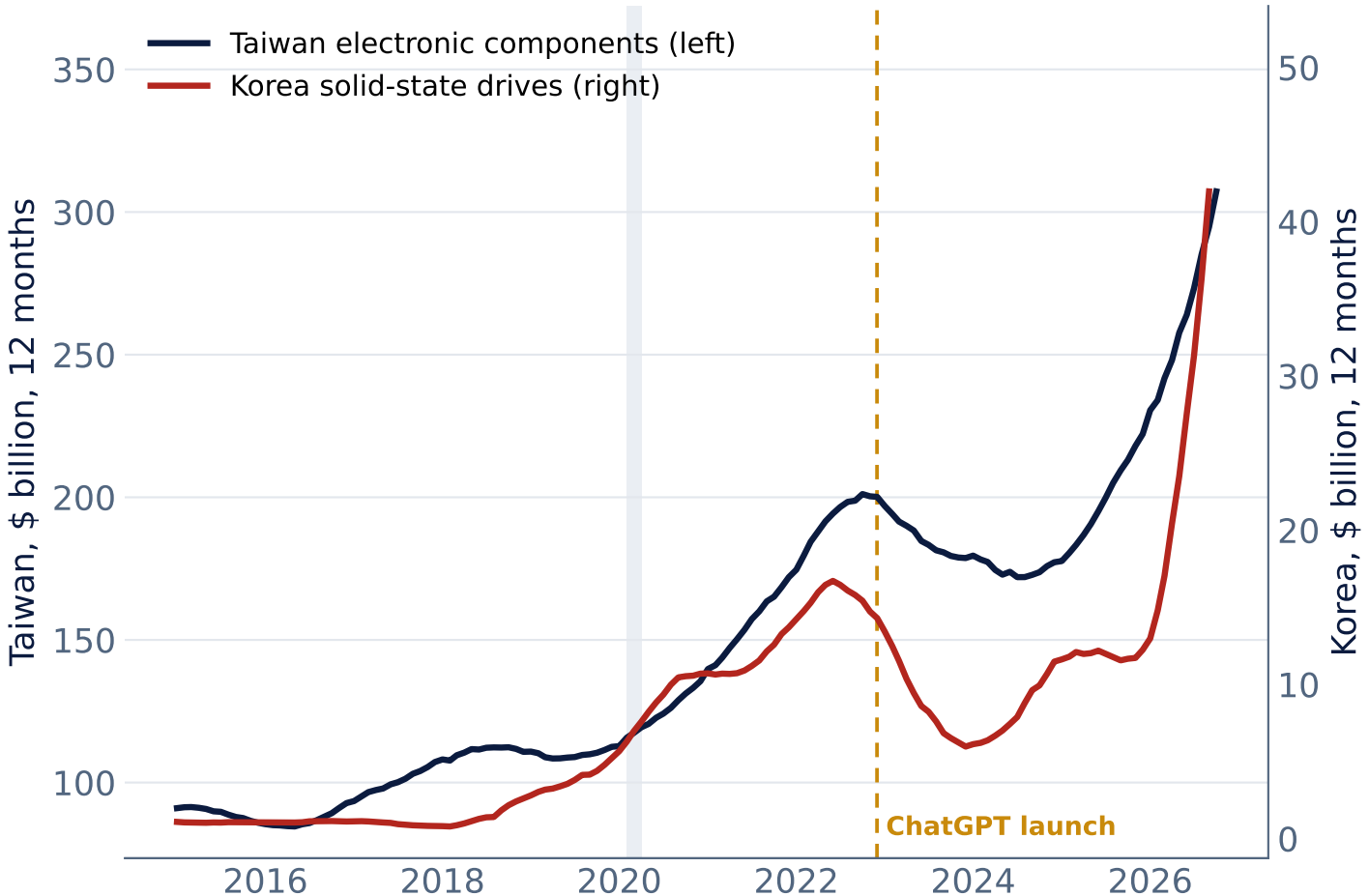
Source: FinzData (Taiwan Ministry of Finance, Korea customs; rolling 12-month sums).

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Demand reaches beyond GPUs into storage and components

Korea SSD exports $42bn (2.8x late 2022); Taiwan components $307bn (1.5x)



2.8x

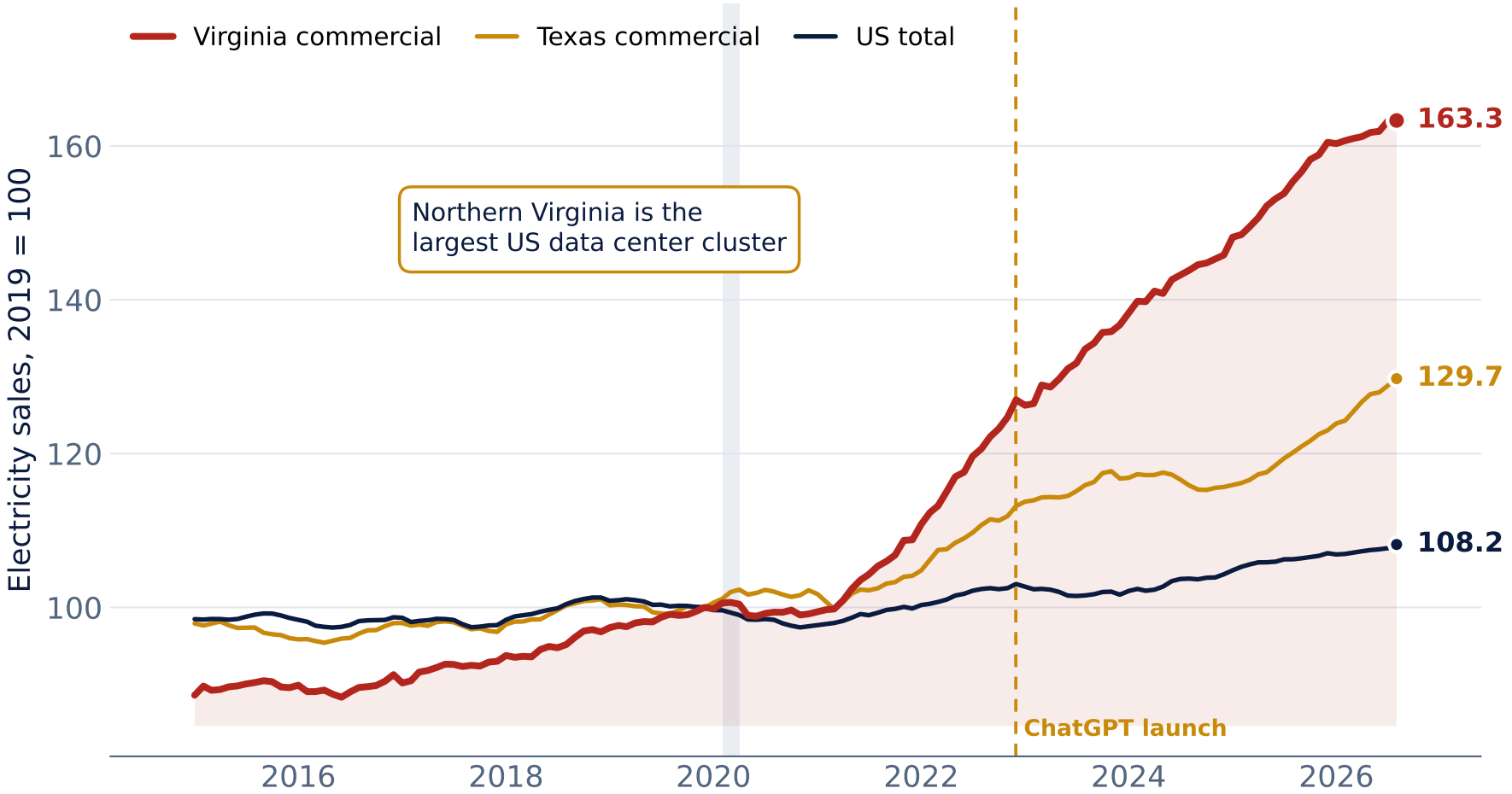
Korea SSD exports against late 2022

Source: FinzData (Taiwan Ministry of Finance, Korea customs; rolling 12-month sums).

FinzData

Data centers show up in the power bill

Virginia commercial load +65% since 2019, Texas +31%, all US electricity +8%



+65%

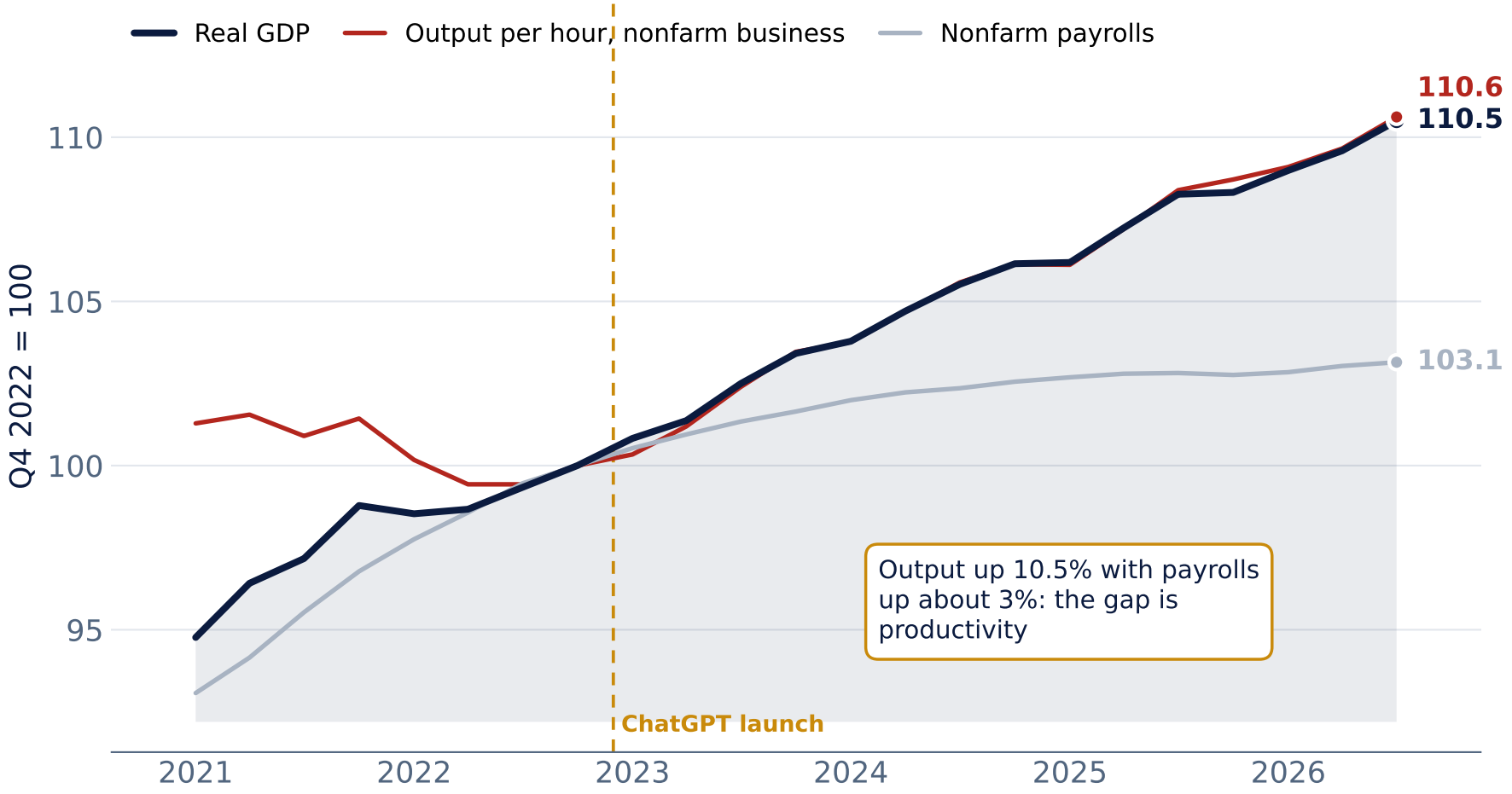
Virginia commercial power demand since 2019

Source: FinzData (EIA retail electricity sales; rolling 12-month sums to August 2026, 2019 = 100).

FinzData

Output and productivity have pulled away from payrolls

Since Q4 2022: real GDP +10.5%, output per hour +10.6%, payrolls +3.1%



7.4 pts

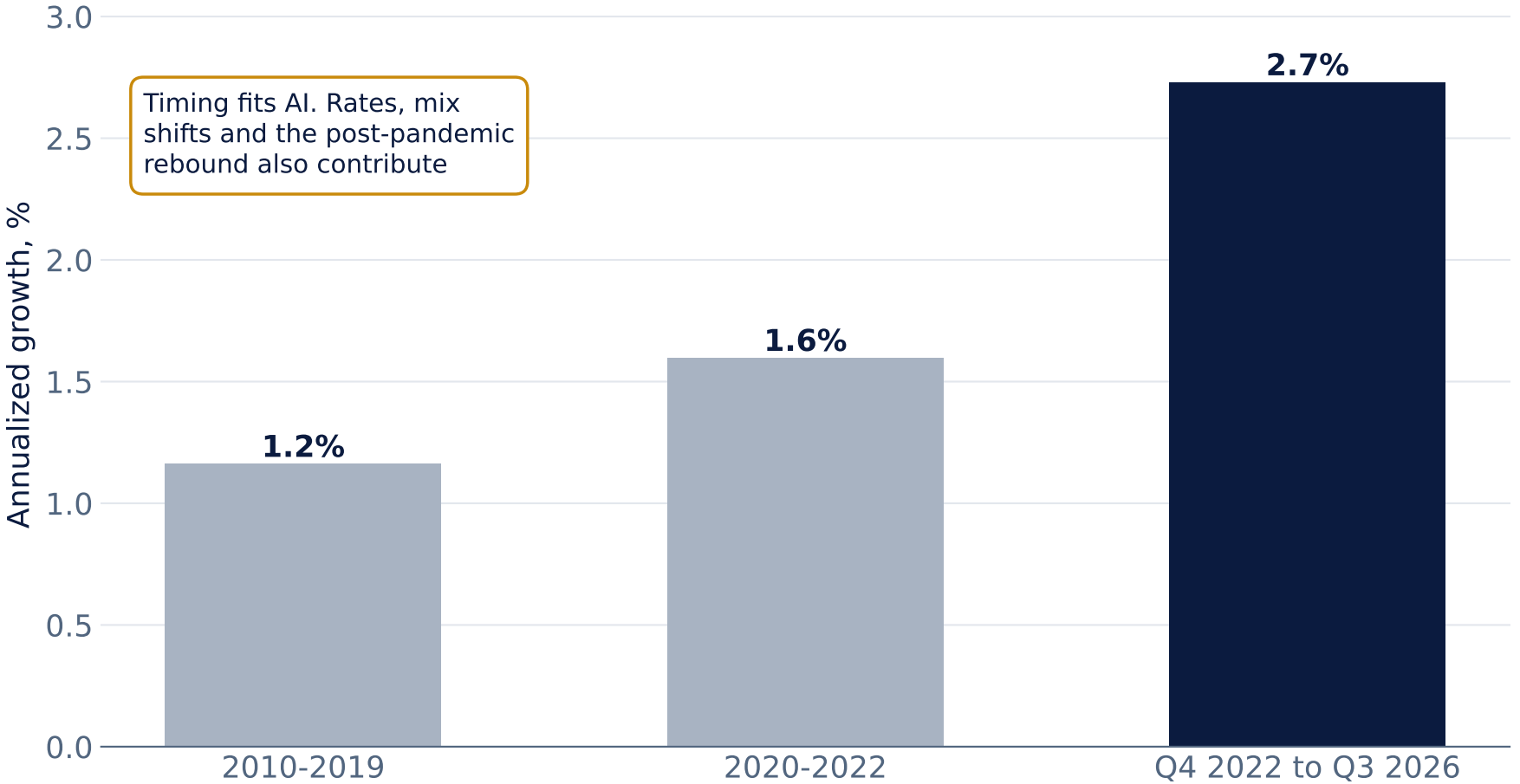
output growth ahead of payroll growth since Q4 2022

Source: FinzData (BEA, BLS; quarterly, Q4 2022 = 100, to Q3 2026).

FinzData

Productivity growth has more than doubled its 2010s pace

2.7% a year since Q4 2022 against 1.2% across 2010-2019. The timing fits AI; the cause is not proven



2.7%

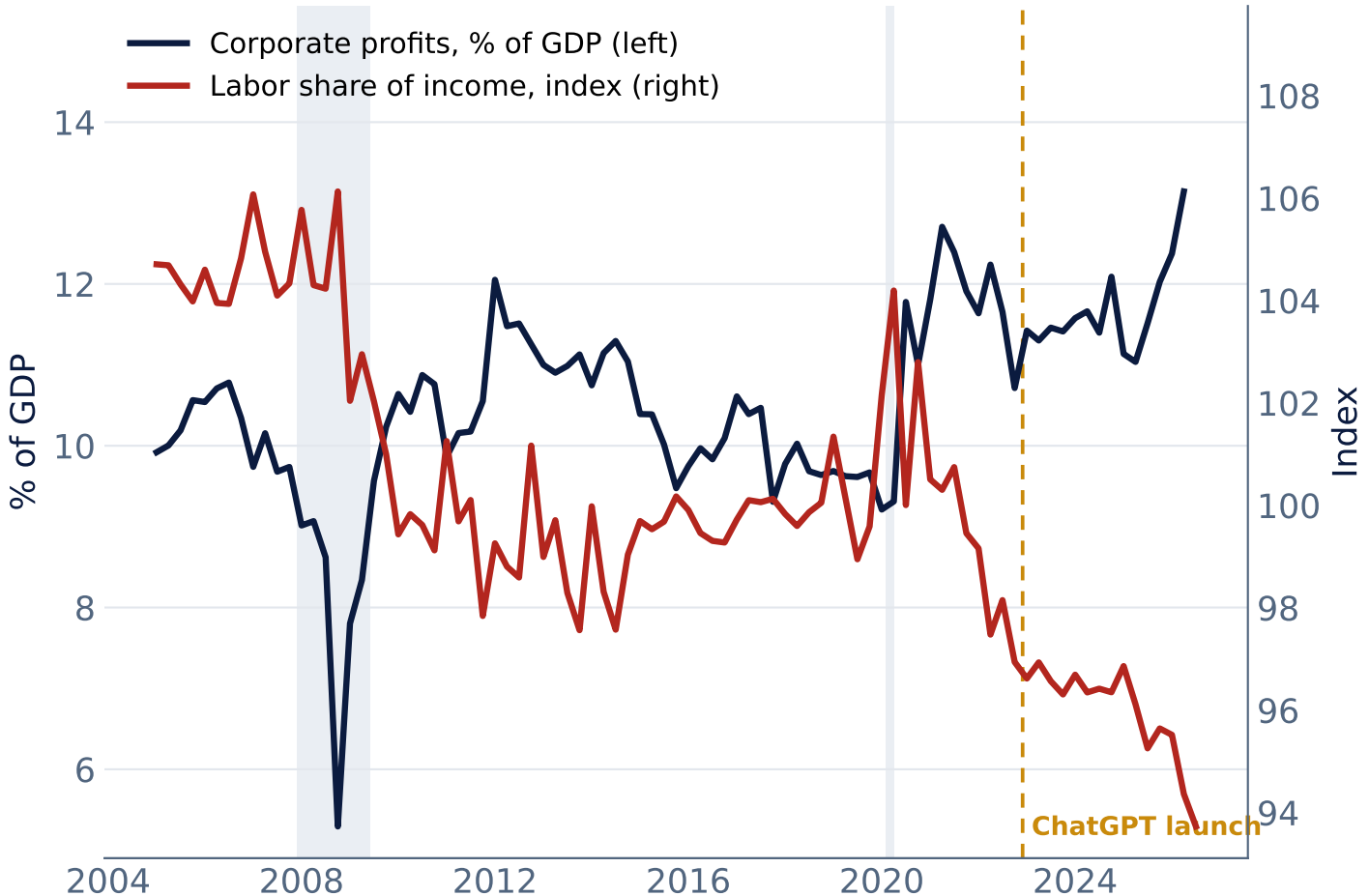
productivity growth a year since Q4 2022

Source: FinzData (BLS productivity and costs; nonfarm business output per hour, annualized).

FinzData

The gains so far have accrued to capital

Profits 13.1% of GDP (from 10.7% in Q4 2022); labor share index 93.7 (from 96.9)



13.1%

of GDP in corporate profits, and rising

Source: FinzData (BEA corporate profits after tax, to Q2 2026; BLS nonfarm business labor share index, to Q3 2026).

FinzData

03

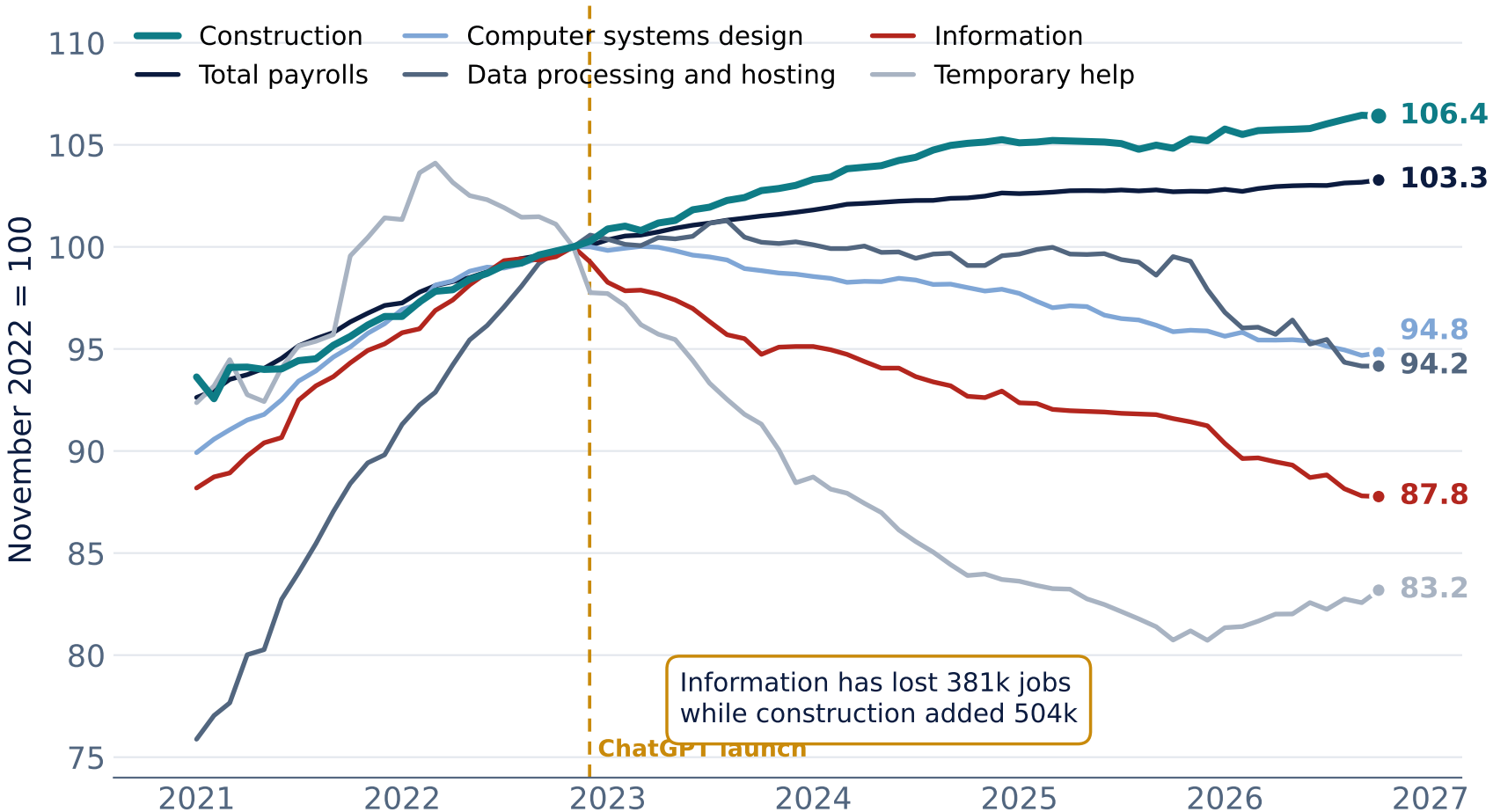
Employment

Which sectors are adding and losing jobs, how that lines up with AI time savings, and what hiring demand looks like.

FinzData

Jobs are shifting from screens to sites

Since November 2022: information -12.2%, computer systems design -5.2%, construction +6.4%, all payrolls +3.3%



-12%

information-sector jobs since November 2022

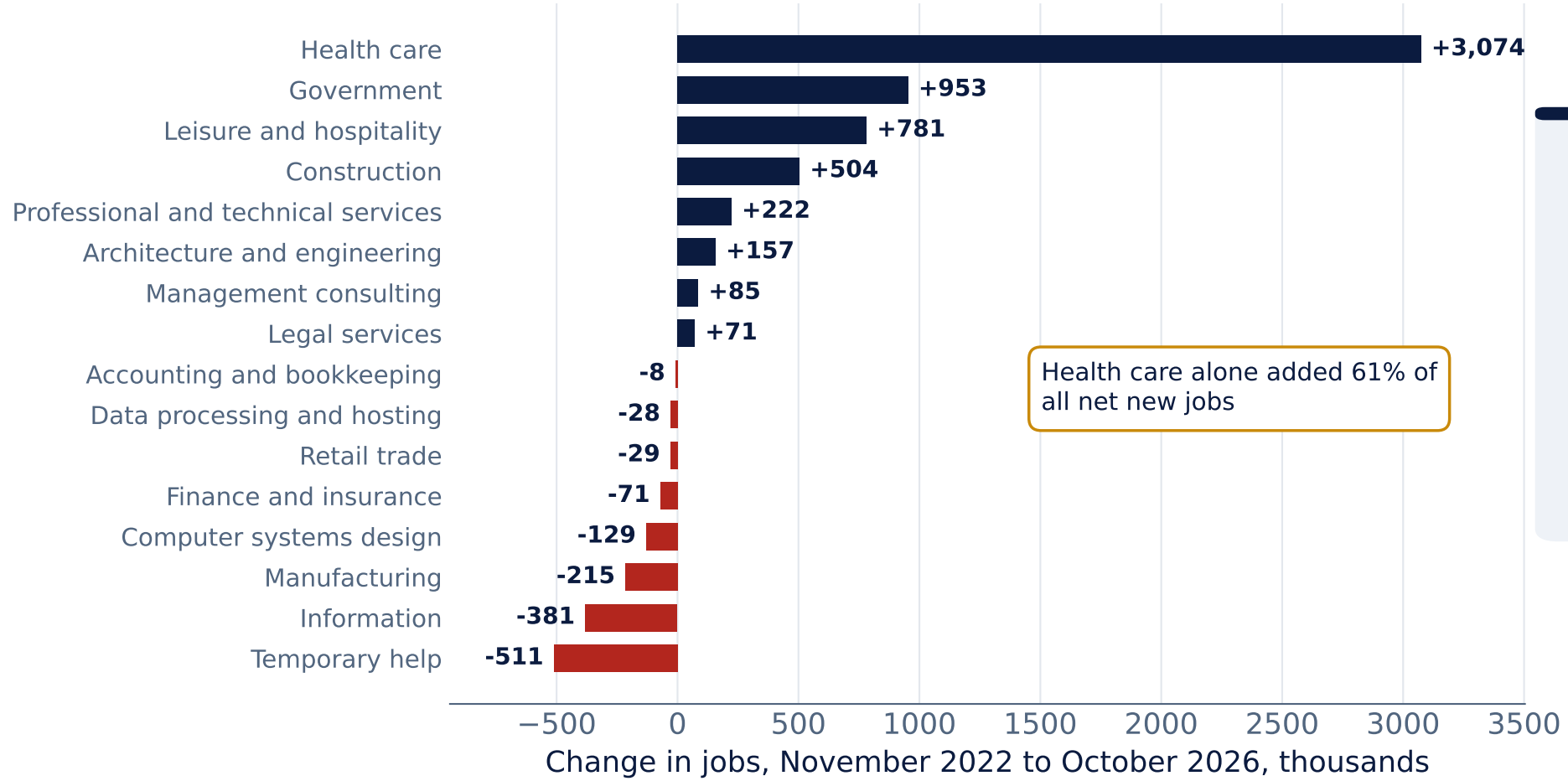
Source: FinzData (BLS establishment survey, point-in-time vintages).

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FinzData

Hiring is concentrated where AI saves the least time

Health care +3,074k and government +953k lead; temporary help -511k and information -381k trail



61%

of net new jobs came from health care

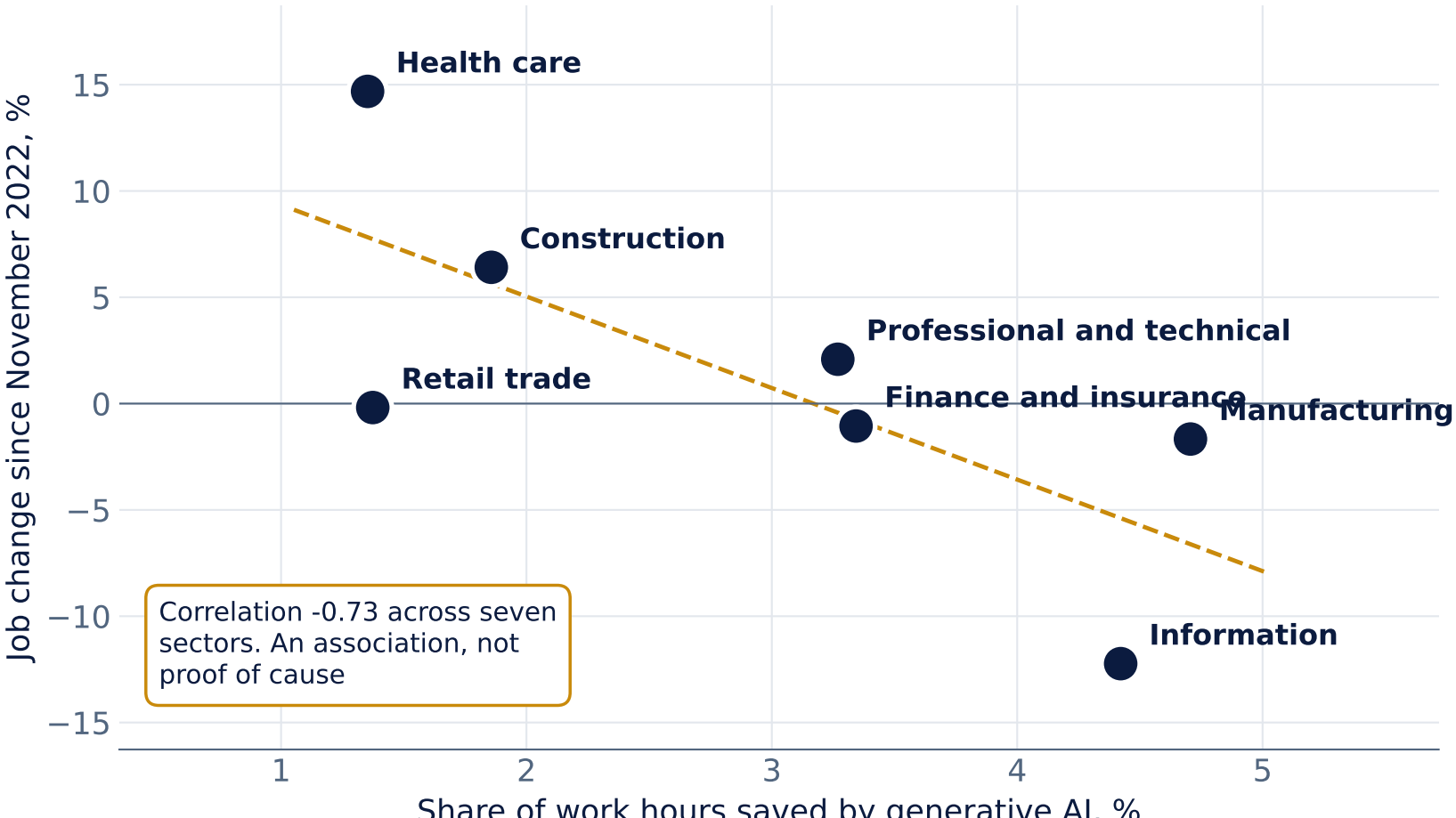
Source: FinzData (BLS establishment survey, point-in-time vintages).

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FinzData

Sectors that save more time with AI have added fewer jobs

Correlation -0.73 across 7 sectors: information saves 4.4% of hours and is -12.2% on jobs; health care 1.4% and +14.7%



-0.73

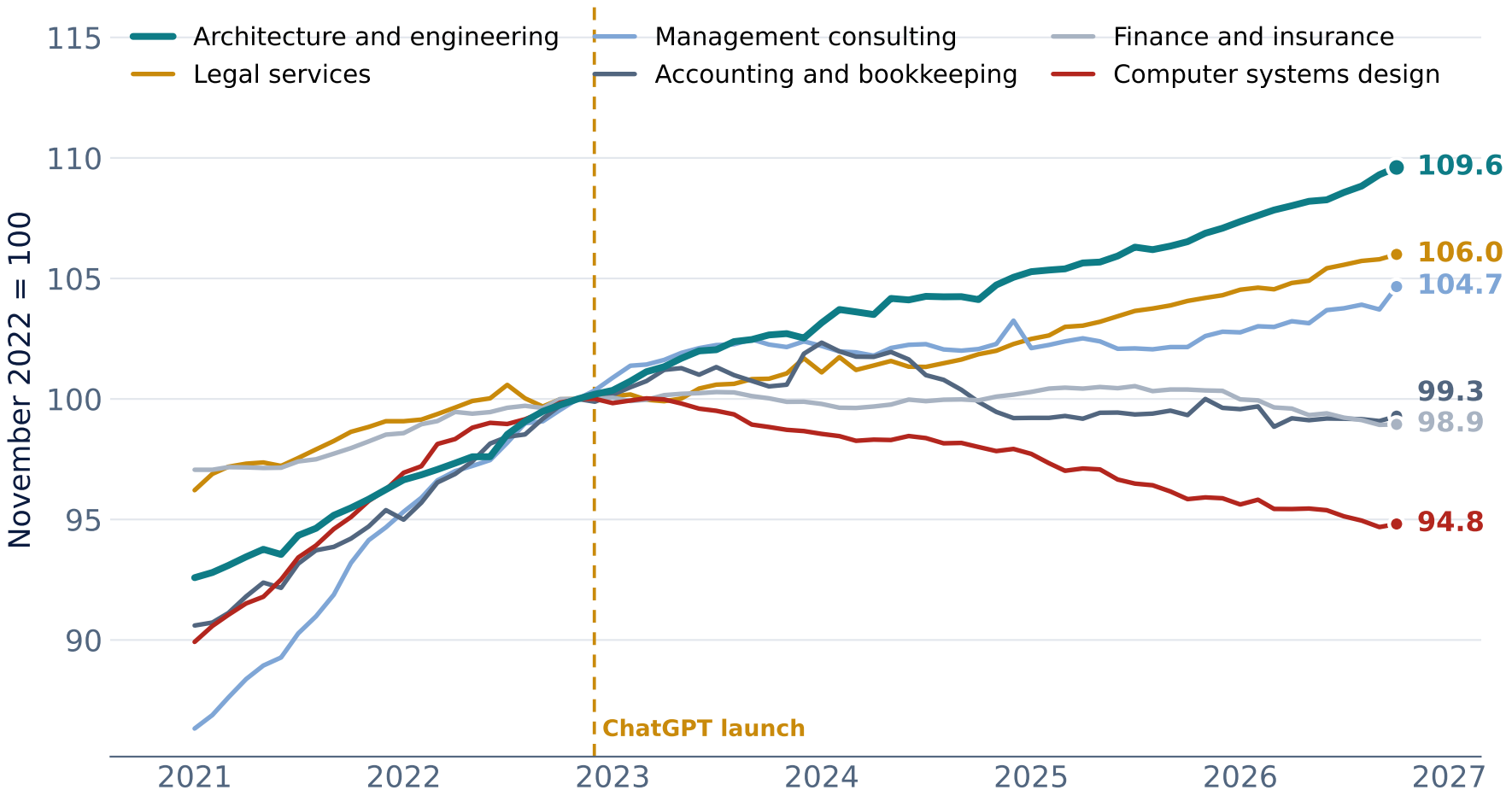
correlation: more time saved, fewer jobs added

Source: FinzData (St. Louis Fed Real-Time Population Survey, Q3 2026; BLS establishment survey). Seven sectors; an association, not a causal estimate.

FinzData

White-collar work is splitting, not collapsing

Since November 2022: architecture +9.6%, legal +6.0%, finance -1.1%, computer -5.2%



-5.2%

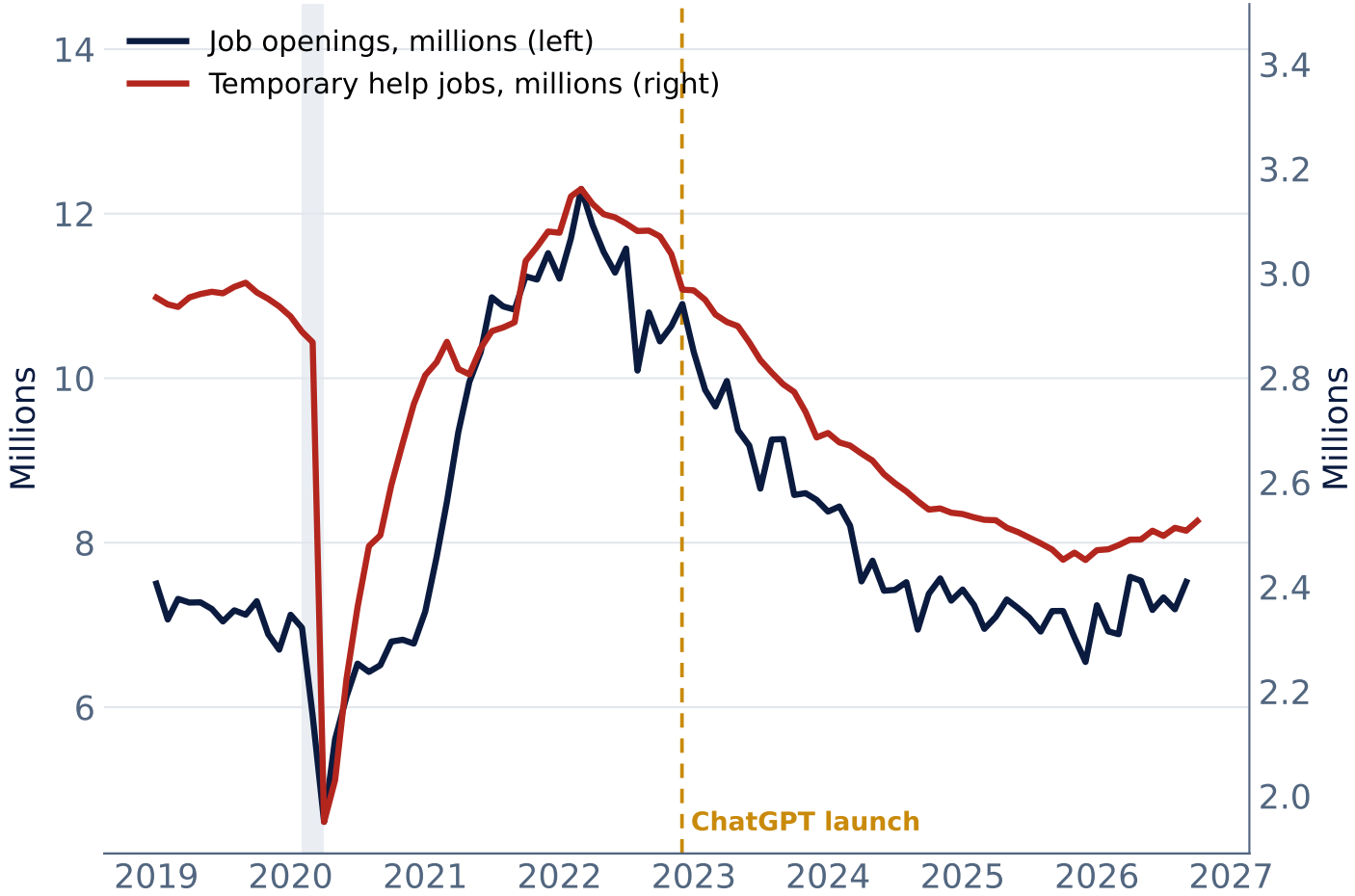
computer systems design jobs since November 2022

Source: FinzData (BLS establishment survey, point-in-time vintages).

FinzData

Hiring demand has cooled well below its 2022 peak

Openings 7.5 million against a 12.3 million peak in 2022; temporary help 2.53 million against 3.16 million



-39%

job openings against the 2022 peak

Source: FinzData (BLS JOLTS to September 2026; establishment survey to October 2026).

FinzData

04

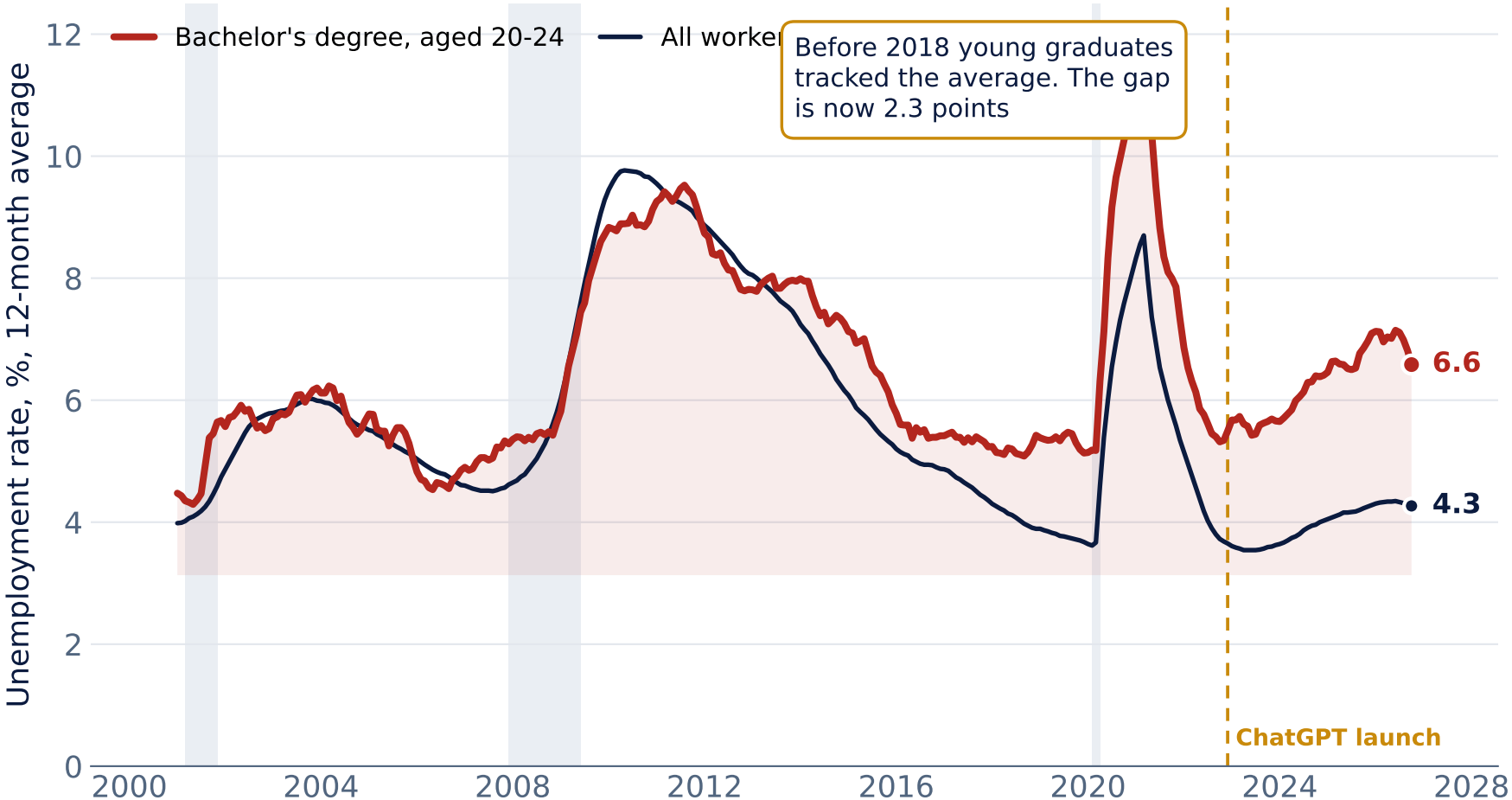
Entry-level work and graduates

Young graduates against all workers, first-time job seekers, unemployment by education, and search duration.

FinzData

Young graduates now fare worse than the average worker

6.6% against 4.3% in October 2026; in November 2022 it was 5.3% against 3.7%



6.6%

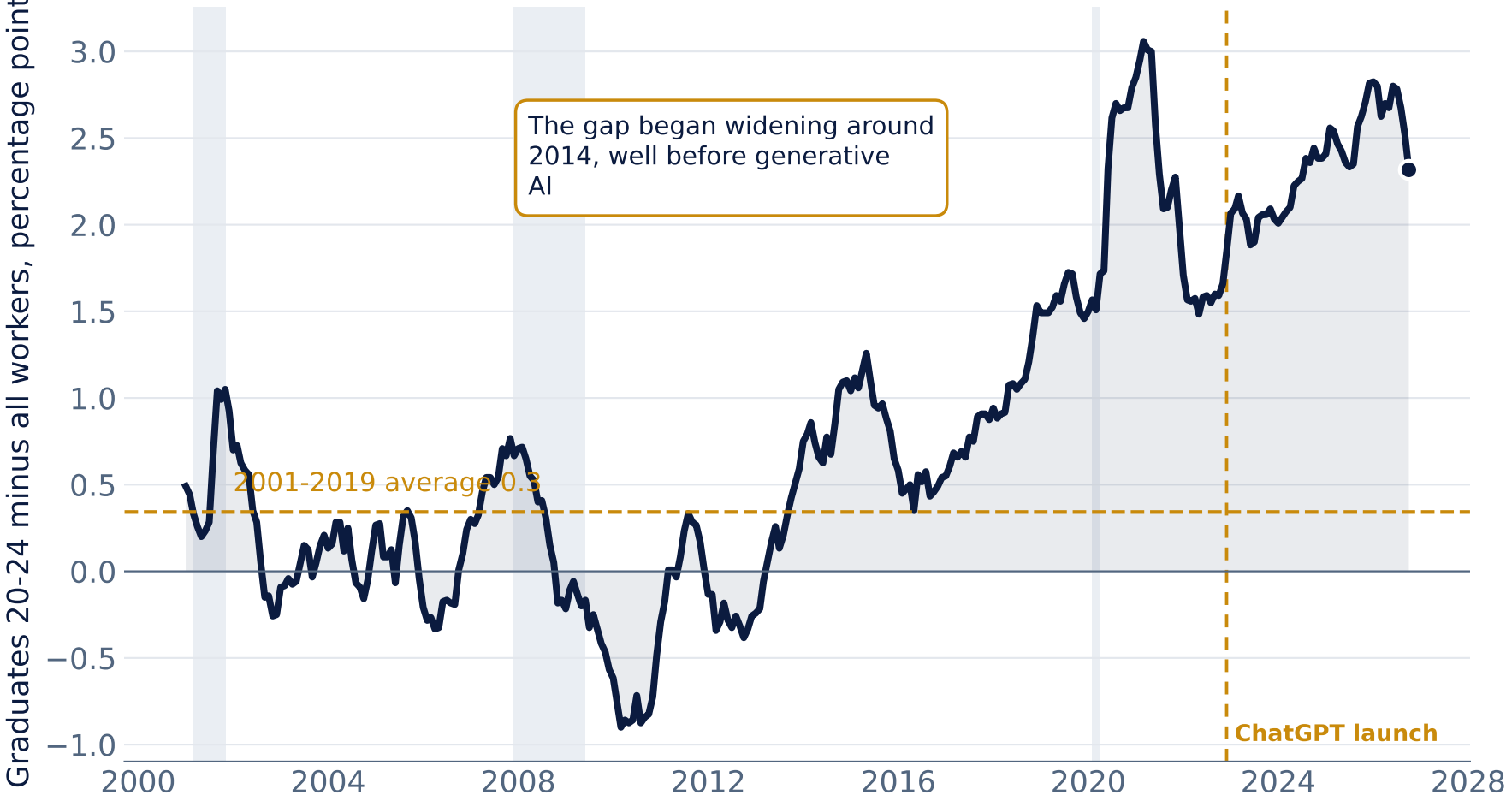
jobless rate for bachelor's graduates aged 20-24

Source: FinzData (BLS household survey; 12-month averages, October 2025 interpolated).

FinzData

The graduate penalty has persisted for years, not months

Gap 2.3 points in October 2026; it has stayed above 1.5 since 2023 and averaged 0.3 over 2001-2019



2.3 pts

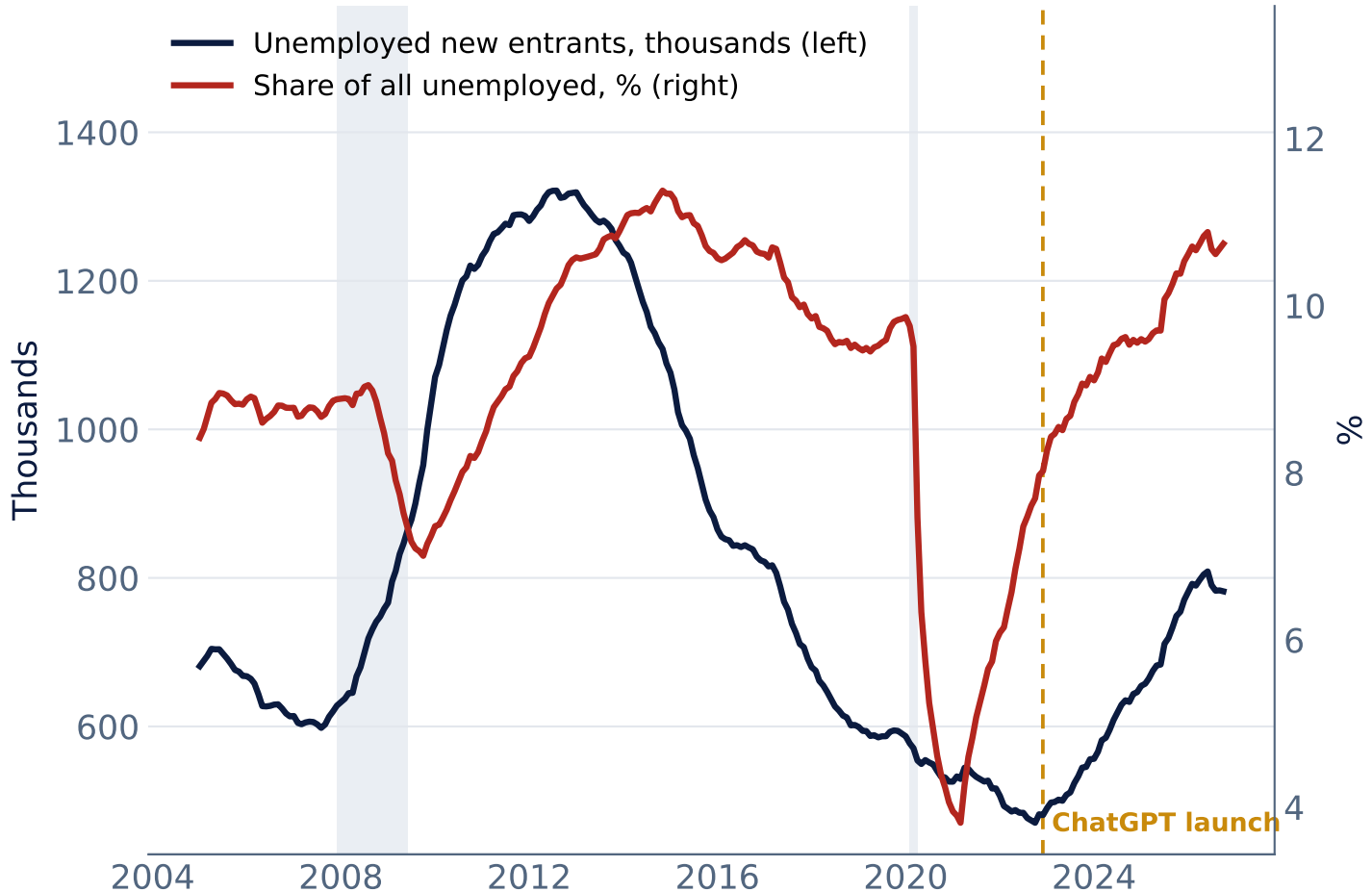
above the average worker; the 2001-2019 norm was 0.3

Source: FinzData (BLS household survey; 12-month averages, October 2025 interpolated).

FinzData

The first rung is harder to reach

782k people are unemployed and seeking a first job, up from 482k; 10.7% of the unemployed, from 8.0%



782k

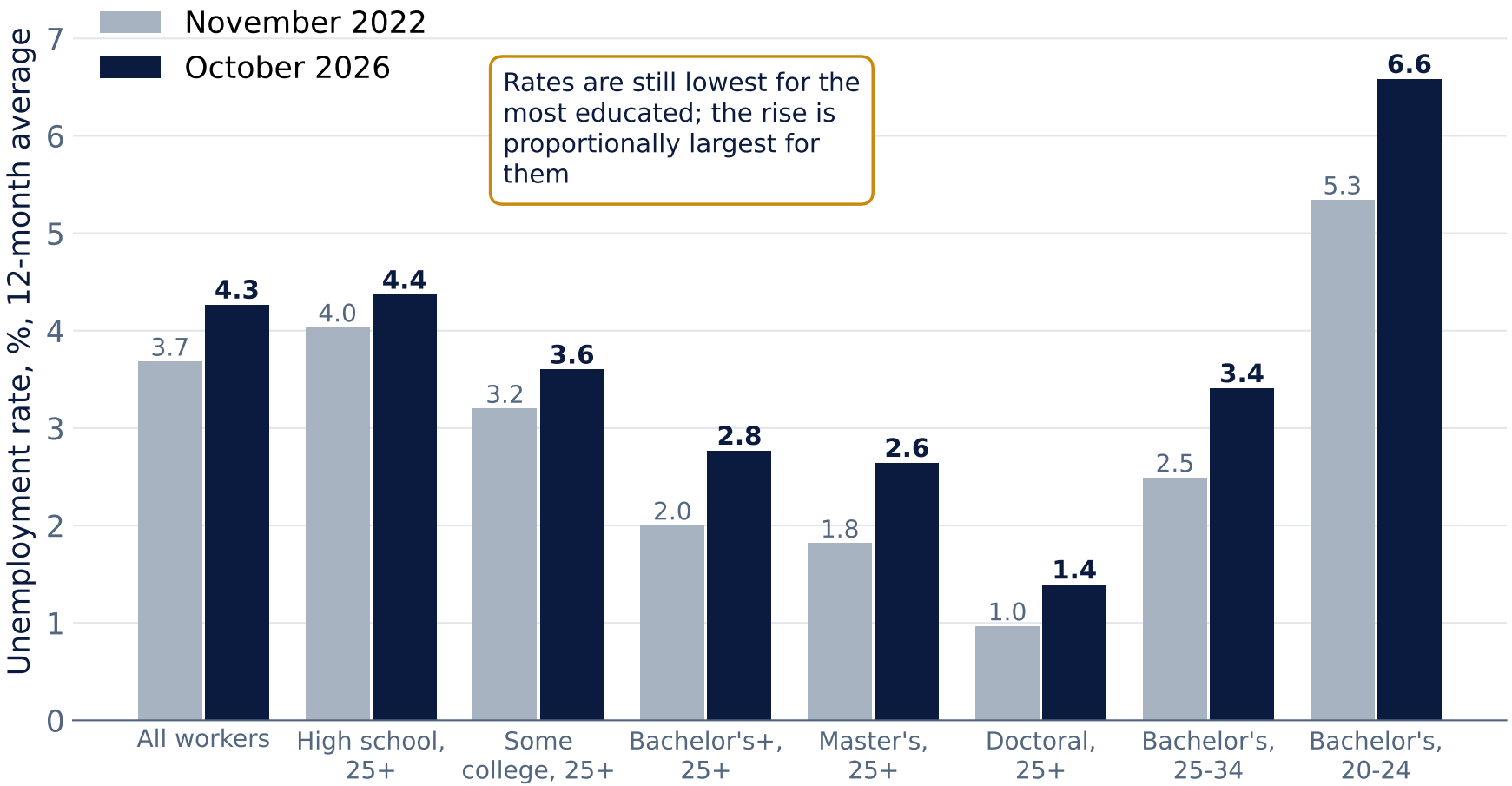
unemployed and looking for a first job

Source: FinzData (BLS household survey; 12-month averages, October 2025 interpolated).

FinzData

Unemployment has risen most, in relative terms, for degree holders

Bachelor's and higher 2.0% to 2.8% (+38%); high school 4.0% to 4.4% (+8%)



+38%

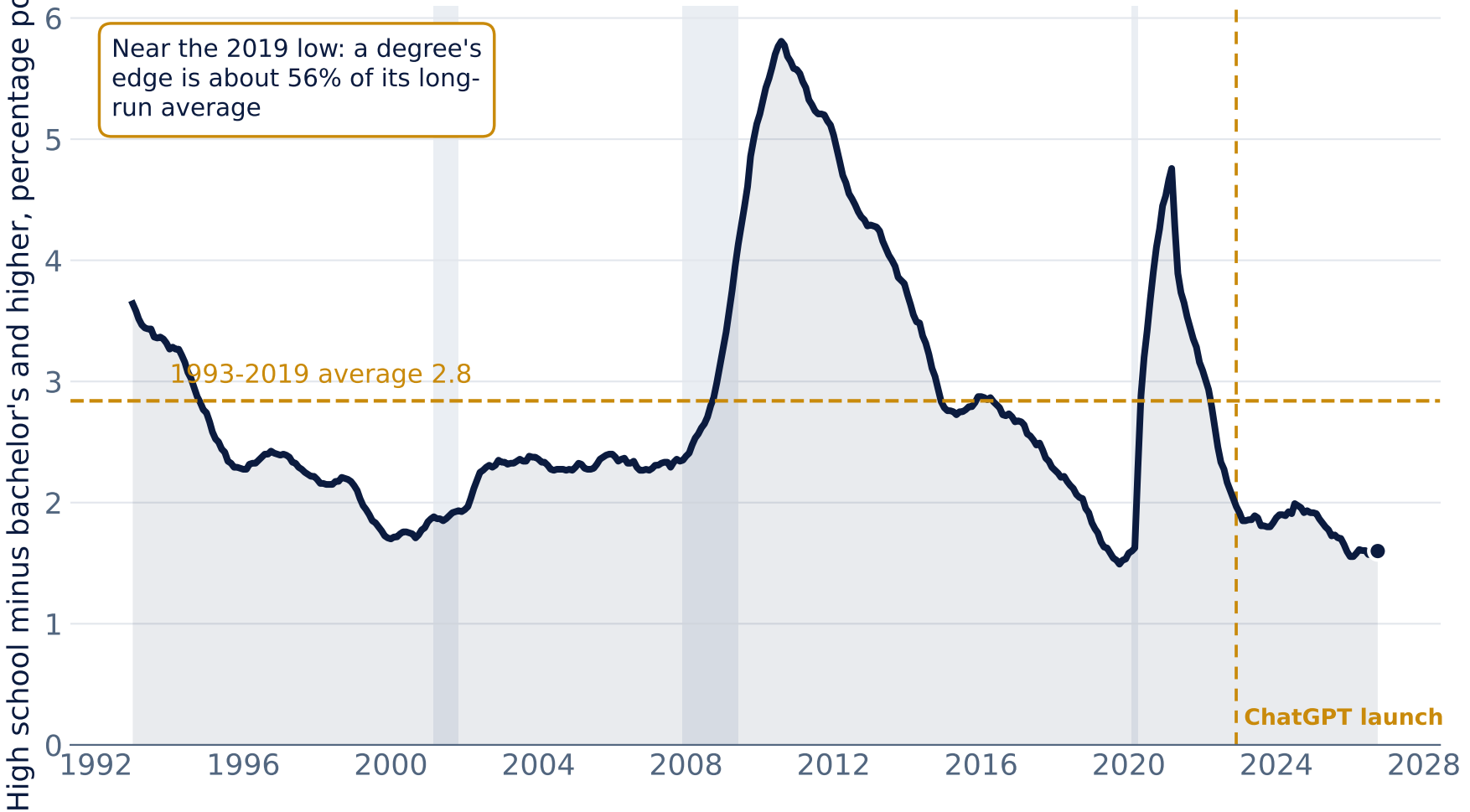
relative rise in unemployment for degree holders

Source: FinzData (BLS household survey; 12-month averages, October 2025 interpolated).

FinzData

A degree still protects, but by less than it used to

Jobless-rate advantage of a degree: 1.6 points now against a 2.8-point average over 1993-2019



1.6 pts

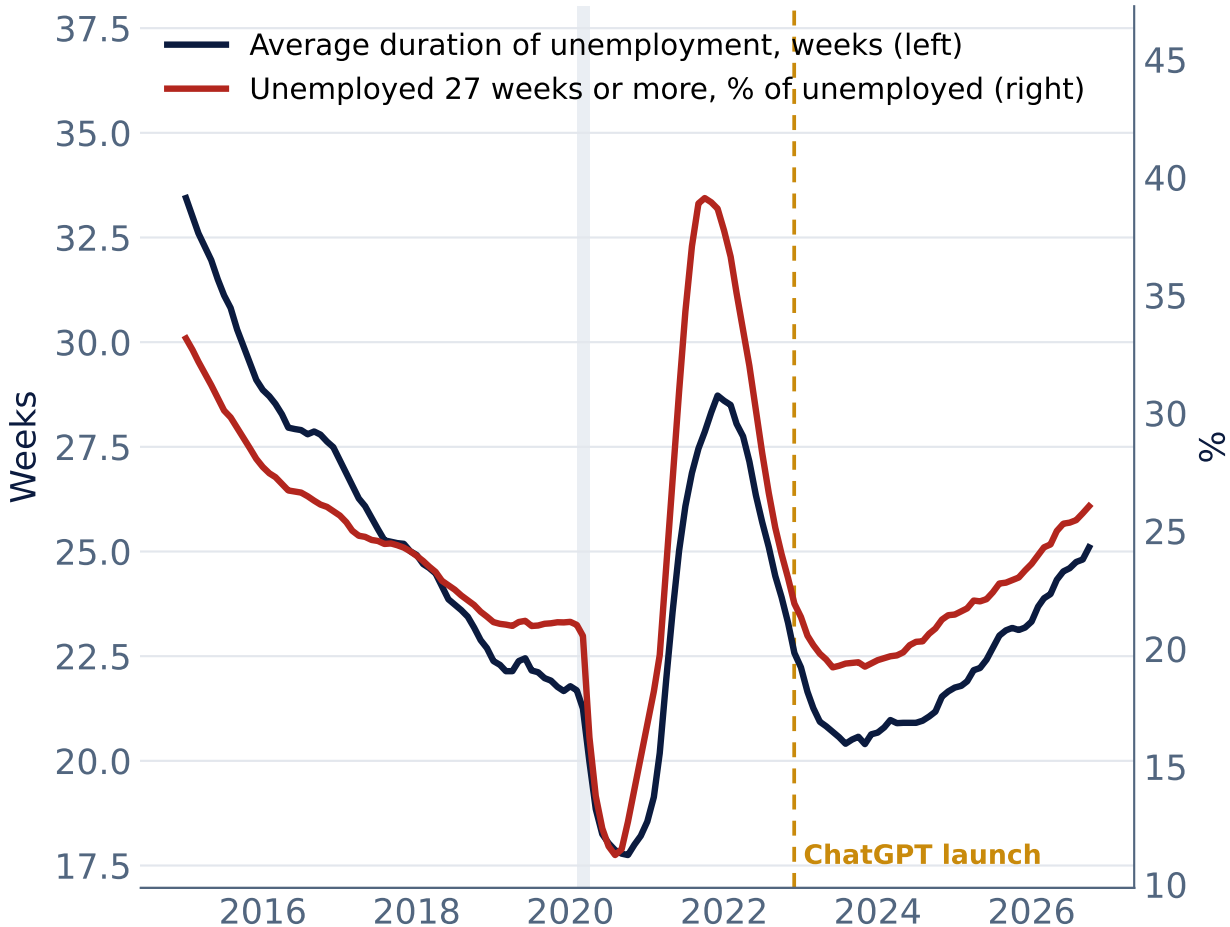
a degree's jobless advantage; long-run average 2.8

Source: FinzData (BLS household survey; 12-month averages, October 2025 interpolated).

FinzData

Job searches are taking longer

Average spell 25.1 weeks (from 23.3 in November 2022); long-term share 26.0% (from 23.0%); U-6 underemployment 8.0% fro



25 wks

average job search, up from 23

Source: FinzData (BLS household survey; 12-month averages, October 2025 interpolated).

FinzData

05

Outlook

Street views, three scenarios, risks to the read, our read, and what to watch.

The Street still expects the build-out to grow

Cited bank views from this week's research; figures are the banks', not FinzData's

Source	View	Detail
J.P. Morgan	2027 hyperscaler capex	Estimate $1.71 trillion against consensus of $1.31 trillion.
J.P. Morgan	Capex and earnings	Each $100 billion of AI capex is worth about $9 of S&P 500 earnings per share.
J.P. Morgan	Valuation reset	AI-stock multiples have compressed about 35% since May, led by semiconductors and memory.
J.P. Morgan	Jobs from the build-out	Data-center-linked construction added 165,000 jobs in a year, 0.1% of US employment.
J.P. Morgan	Index target	Year-end 2026 S&P 500 target of 8,000 reiterated.
Morgan Stanley	Nvidia	Removed from the Top Pick list on a stop-loss rule after a 25% fall since October 2. Overweight rating and $300 price target unchanged; shares at $168.89.

Source: J.P. Morgan US Market Intelligence (Nov 12, 2026); Morgan Stanley Research (Nov 11, 2026).

Three paths from here

Qualitative scenarios; each names the series that would confirm it

Scenario	Confirming data	Economy	Jobs	Graduates
Diffusion continues	Adoption and time saved keep rising; tech investment share holds	Productivity-led growth with slow hiring	Mix keeps shifting toward care, construction and trades	Gap to all workers stays wide; field of study matters more
Capex pause	Tech investment share and Taiwan ICT exports roll over	Growth slows; Asian exporters hit first	Limited direct loss: the build-out employs few people	Little relief: hiring freezes outlast spending cuts
Labor shock	Information and professional payrolls fall together; durations lengthen	Output holds while income shifts further to capital	White-collar losses broaden beyond tech	Entry-level unemployment rises further; policy response likely

Source: FinzData Research (framework; no forecasts implied).

What could make this read wrong

1. **Cause** — The timing fits AI, but higher interest rates and the unwinding of 2021-2022 tech over-hiring explain part of the weakness in information and computer services jobs.

2. **Measurement** — Business adoption comes from corporate card spending and worker adoption from a survey. Both can move with sample changes, as the Q3 2026 dip in workplace use shows.

3. **Graduates** — The graduate gap began widening before 2022. AI may be extending a trend that started with degree oversupply and slower professional hiring.

4. **Revisions** — Payrolls, productivity and GDP are revised. Every figure here is the latest published vintage as of November 12, 2026.

Source: FinzData Research.

Our read

1. **Economy** — Growth is leaning on investment and productivity, not hiring. Tech investment is 5.3% of GDP and output per hour is growing 2.7% a year. A capex pause would hit GDP and Asian exports before US jobs.

2. **Employment** — Total employment is holding and the mix is moving. Information has lost 381k jobs since November 2022 while health care and construction keep adding.

3. **Entry level** — Fewer first rungs. 782k people are unemployed and seeking a first job, and the tasks that trained juniors are the ones AI saves the most time on.

4. **Graduates** — A degree still lowers unemployment, but its advantage is 1.6 points against a 2.8-point long-run average. Field of study and hands-on experience matter more.

5. **Policy** — The questions ahead are about entry-level pathways, retraining and who captures the productivity gain. Analysis, not investment advice.

Source: FinzData Research (interpretation of the FinzData series in this deck). Analysis, not investment advice.

What to watch

Dated catalysts over the next four weeks

Date	Event	Why it matters here
Nov 17-20	Microsoft Ignite	Enterprise AI products and pricing: the next leg of business adoption.
Nov 25	Q3 GDP second estimate; PCE	Revisions to tech investment and to productivity inputs.
Nov 30-Dec 4	AWS re:Invent	Hyperscaler capacity and capex signals for 2027.
Dec 4	November jobs report	Information, professional services and temporary help payrolls; graduate jobless rates.
Dec 9	Federal Reserve decision	Rates set the cost of the build-out and of white-collar hiring.
Dec 10	November CPI	Whether productivity gains are showing up as disinflation.

Source: FinzData Research; event dates from agency and company calendars.

Method

1. **Vintages** — Each observation is the latest published vintage in the FinzData macro store as of November 12, 2026. Point-in-time history is kept for every series.

2. **Averages** — Unemployment rates by education and age are not seasonally adjusted, so they are shown as 12-month averages. Exports and electricity are rolling 12-month sums.

3. **Missing month** — The October 2025 household survey was not published. That month is interpolated before averaging.

4. **Base date** — November 2022 is used as the base for employment comparisons; Q4 2022 for quarterly series.

5. **Bank research** — J.P. Morgan and Morgan Stanley views appear on one slide, cited, and are not FinzData data.

Source: FinzData Research.

FinzData

The data behind this deck

71 FinzData macro series, every vintage kept

A679RC1Q027SBEA
B935RC1Q027SBEA
B985RC1Q027SBEA
CES5051800001
CES5552000001
CES6054000001
CES6054110001
CES6054120001
CES6054130001
CES6054150001
CES6054160001
CES6562000001
CGBD2024
CGBD2534
CGDD25O
CGMD25O
CP
FZELEC_US_TX_COM_SALES
FZELEC_US_US_TOT_SALES
FZELEC_US_VA_COM_SALES
GDP
GDPC1
JTSJOL
KREXPIC
KREXPSSD
LNS13023569
LNS14027660
LNS14027662
LNS14027689
MANEMP
OPHNFB
PAYEMS
PNFI
PRS85006173
RAMPAIALL
RAMPAIENTERPRISE
RAMPAIMIDMARKET
RAMPAISMB
RPSGENAITSALL
RPSGENAITSIND10
RPSGENAITSIND12
RPSGENAITSIND15
RPSGENAITSIND16
RPSGENAITSIND3
RPSGENAITSIND4
RPSGENAITSIND6
RPSGENAITSIND9
RPSGENAITSOCC1
RPSGENAITSOCC13
RPSGENAITSOCC17
RPSGENAITSOCC2
RPSGENAITSOCC21
RPSGENAITSOCC3
RPSGENAITSOCC9
RPSGENAIUSAGESHAREALL
RPSGENAIUSAGESHAREWORK
TEMPHELPS
TWEXPELEC
TWEXPICT
TWEXPTOTAL
TWEXPUS
U6RATE
UEMP27OV
UEMPMEAN
UNEMPLOY
UNRATE
USCONS
USGOVT
USINFO
USLAH
USTRADE

Point-in-time: get_macro_vintage(series=..., as_of=...), in Python, REST or MCP.

Source: FinzData (macro vintages).