

Yale Center Beijing and
Ted and Logan Webinars on High-Tech Industries

Current events, AI Capex & Q2 Earnings in High Tech Industries

Edward A. Snyder and Logan Bender

31 July 2026

som.yale.edu/hightech

The YCB Program: Analysis and Valuation of High-Tech Companies

Yale Center Beijing · Yale School of Management · October 9 – November 20, 2026

8

Live sessions

90 minutes each

Oct 9 – Nov 20

2026

across Q3 earnings season

~30

Companies covered

China + Magnificent 7

Program fees

Stay abreast of our social media channels for info and updates.

Yale SOM Certificate

Awarded upon completion — attendance and participation in all eight sessions.

Faculty

Logan Bender, CFA

Yale MBA · Global Equity Research Analyst

Co-developer of the most subscribed Global Network for Advanced Management elective (2020–2024). Expert in the analysis and valuation of China and U.S. technology companies.

Prof. Edward A. Snyder

William S. Beinecke Professor of Economics and Management

Former Dean, Yale SOM. Authority on industrial organization and competitive strategy.

The YCB Program: Agenda, Format and Coverage

Agenda

#	Date	Session topic
S1	Oct 9	Program Kickoff, Q3 Preview & ER Framework
S2	Oct 10	The Magnificent 7 & China Leaders
S3	Oct 16	First Insights — early Q3 results
S4	Oct 23	Valuation Primer
S5	Oct 30	IPO Timing & Catalysts: Anthropic & OpenAI
S6	Nov 6	Semis & Software: AMD, QCOM, PLTR & AI Infra
S7	Nov 13	China Tech: Tencent, Alibaba, Baidu
S8	Nov 20	Wrap-Up & Synthesis: Portfolio Positioning

Coverage Universe Includes

China: Alibaba, JD.com, Meituan, PDD, Tencent, Baidu
Magnificent 7: Alphabet, Amazon, Apple, Nvidia, Tesla, Microsoft, Meta

Format

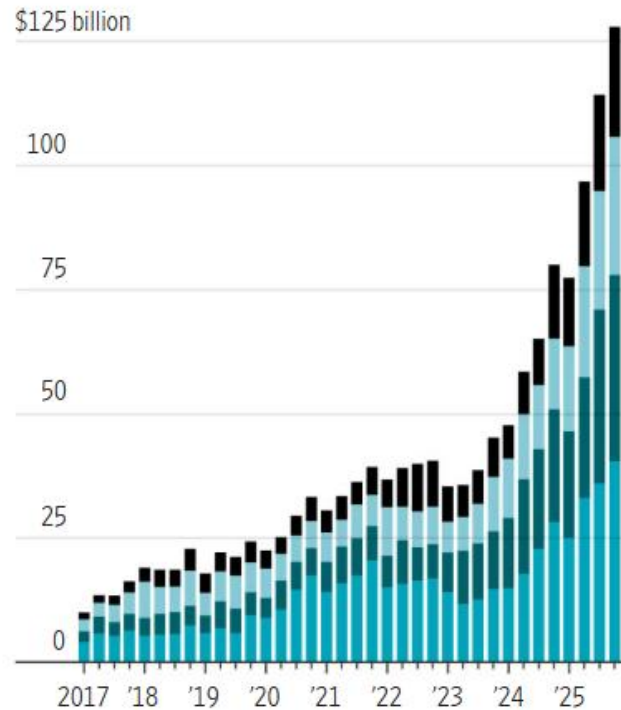
- Eight live 90-minute sessions across a full quarterly earnings cycle
- ~5 hrs/week valuation lab — readings, cases, modeling
- Office hours after sessions 2, 3, 5 and 7

How Much AI Investment

Capital spending

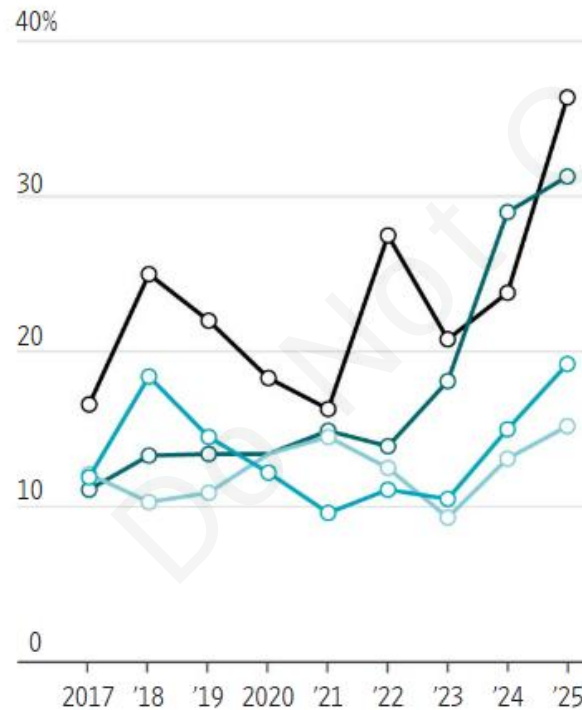
■ Amazon ■ Microsoft ■ Alphabet ■ Meta

Totals, quarterly



Note: Data are for calendar quarters and years. Capital expenditures figures include finance leases.
Source: the companies

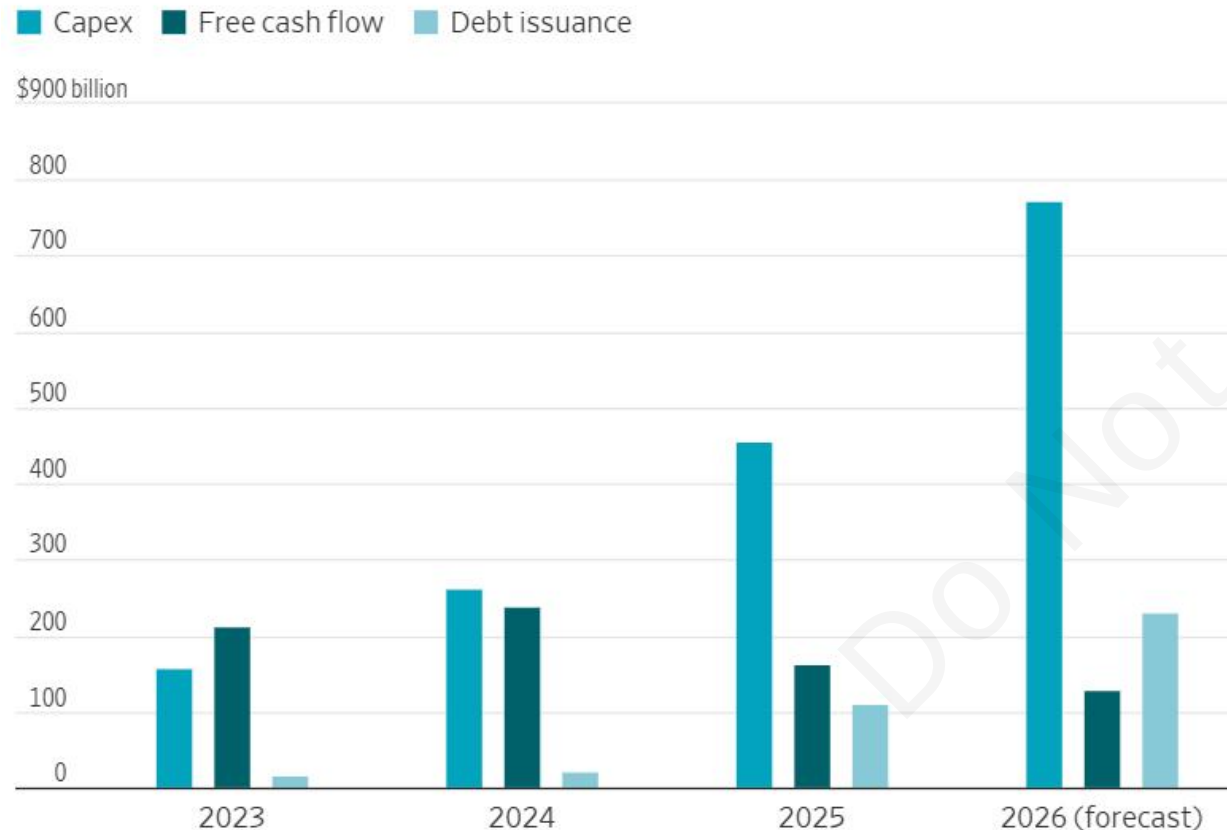
As a percentage of sales, annually



- Quarterly capex across the four hyperscalers has gone from about \$10 billion in 2017 to roughly \$125 billion — most of it since 2024.
- As a share of sales, Meta now spends about 37% and Amazon 31%. These levels are uncommon among software companies.
- UBS expects hyperscaler spending to reach \$770 billion in 2026 — 23% above its prior forecast.

The AI Debt Boom

Hyperscalers' spending and debt issuance



Note: Tracks Microsoft, Meta, Google, Amazon, Oracle, Coreweave

Sources: Bloomberg, PitchBook LCD, UBS

\$360 billion

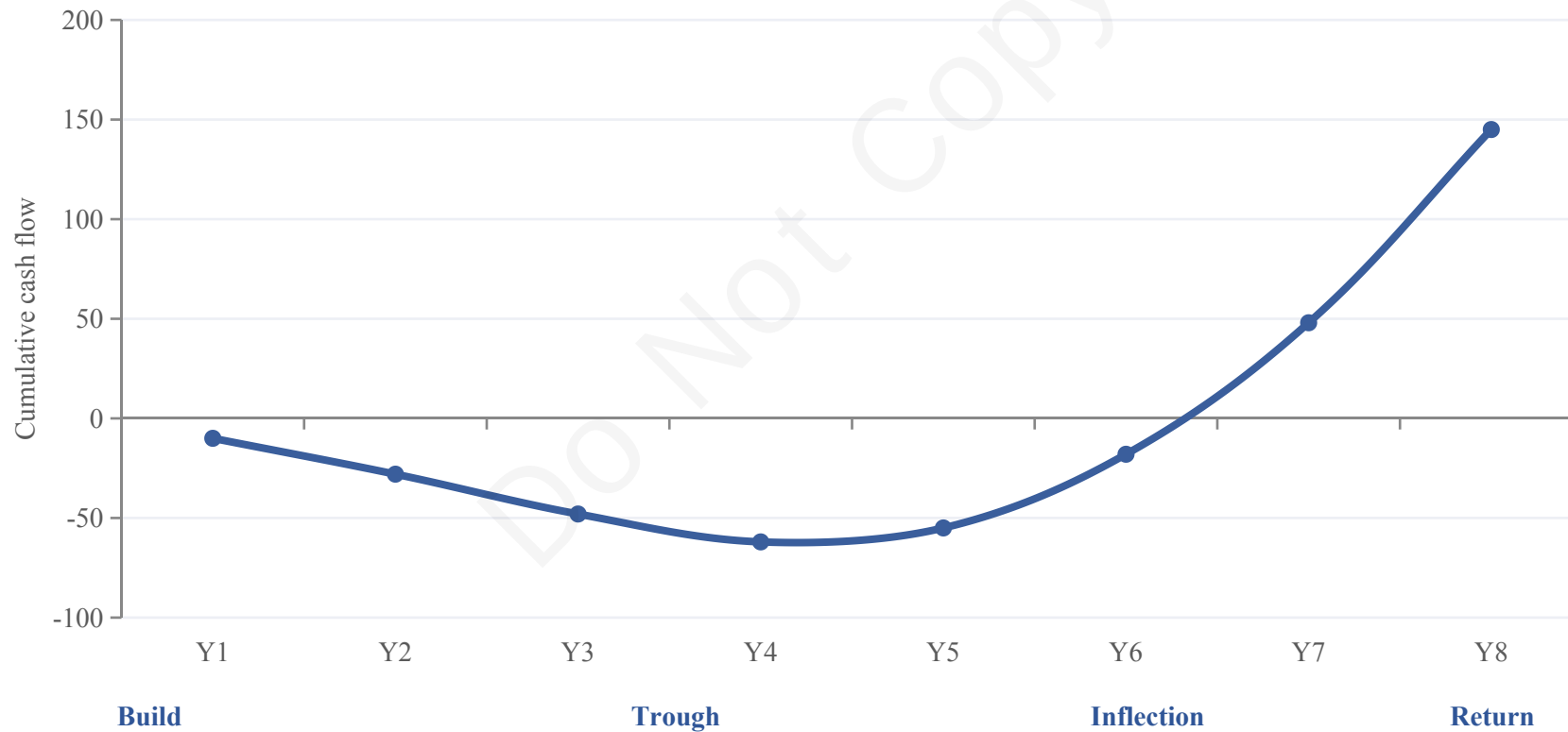
of new debt in 2026

- Until 2024 these companies paid for growth out of pocket. In 2025 the relationship inverted — roughly \$440 billion of capex against \$150 billion of cash generation — and the shortfall was borrowed.
- UBS has lifted its 2026 issuance estimate for investment-grade US technology borrowers to \$360 billion, from \$300 billion previously.
- The 2026 picture: about \$770 billion of capex, \$115 billion of free cash flow, \$215 billion of new debt. UBS calls it an “AI debt boom.”

Source: The Wall Street Journal, citing Bloomberg, PitchBook LCD and UBS. Tracks Microsoft, Meta, Google, Amazon, Oracle and CoreWeave.

The Hockey Stick Analogy

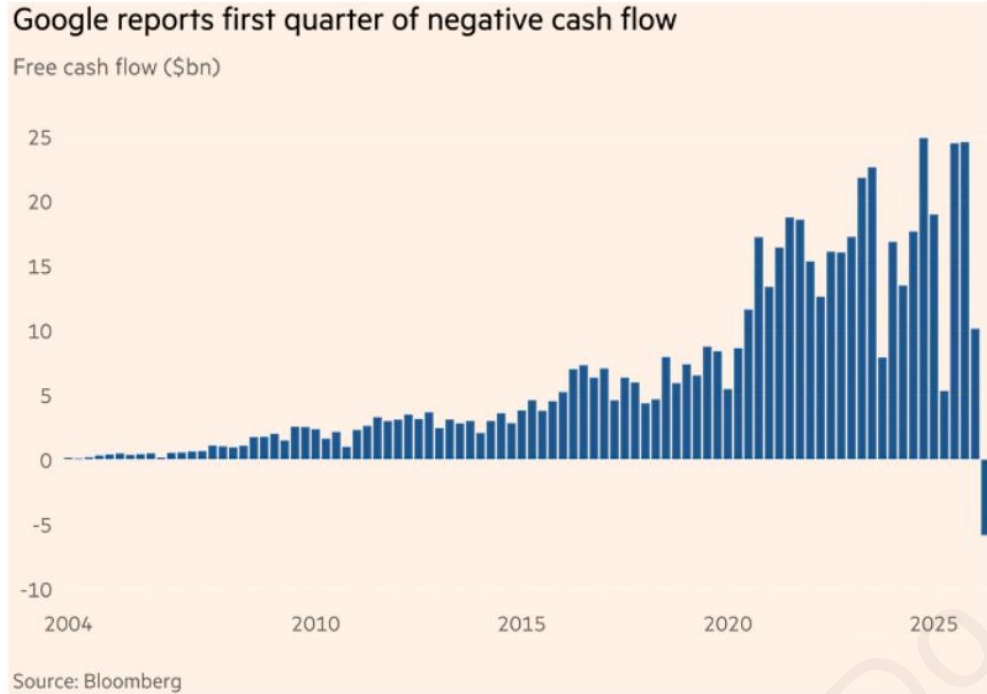
- AI investments by major firms are in many ways like a startup company with a hockey stick profile.



Illustrative shape only — not a forecast, and not drawn from company data.

The Debate Shifts: From How Much to What Return

Jefferies view



Alphabet's first negative free-cash-flow quarter since it began reporting.

- **The analyst community is in debate** about whether the cycle is at a turning point. The question being asked has changed: no longer how large the spend is, but whether it clears its cost of capital.
- **Evidence.** Alphabet has posted its first negative free-cash-flow quarter. Record capex, cash burn and a turn to the bond market have together shifted how the trade is read.
- **The sell-off.** Korean equities, dominated by SK Hynix and Samsung, have fallen roughly 10% in a week. US memory and chip names have followed.
- **Open question:** is this ordinary quarter-start rotation, or is the market pricing an earlier slowdown in hyperscaler spending than anyone has guided to?
- **The real risk...?** The hyperscalers themselves are not fragile — belief in the model is. If belief fades, everything can get repriced.

What Are Quarterly Earnings and Why Do We Follow Them?

What are they?

- Every three months, a public company must report what it sold and what it earned. That report is its quarterly earnings.
- Before they print, analysts publish forecasts. The average of those forecasts is the **consensus** — what the market already expects.
- The share price does not always move on whether the numbers are good. It moves on the **gap** between the result and the consensus, and on what management guides for the quarter ahead.
- Being an investor isn't reading the numbers, it's knowing what was expected, and understanding why the two differ.

Microsoft — quarter ended June 30, 2026

	Reported	Expected
Earnings per share (adj.)	\$4.74	\$4.24
Revenue	\$90.01B	\$87.62B
Azure growth	43%	40%

- Total revenue rose roughly 18%. Azure's growth rate climbed to 43%, and the unit cleared \$100 billion of annual revenue for the first time.
- Capital spending and finance leases together hit \$41 billion, up 69% on the year, while free cash flow contracted 23% to \$19.64 billion.

Source: CNBC. Consensus figures from LSEG; segment consensus from StreetAccount.

A Second Example: Amazon's Quarter

Cloud sales — and spending — accelerate

	Reported	Context
Revenue	\$200.6B, up 20%	above guidance of \$194–199B
AWS sales	\$42.2B, up 37%	fastest growth in 18 quarters
2026 capex guidance	\$220B	raised by \$20B
Free cash flow	−\$7.6B	negative for the quarter

- AWS added 37% year on year to reach \$42.2 billion. Alongside it, Amazon lifted its 2026 capital spending plan to \$220 billion, with Jassy pointing to memory-chip prices as one driver. The shares rose more than 9% in after-hours trading.
- **Read the net income line carefully.** Of the \$62.6 billion headline, \$53.4 billion is nonoperating pretax other income, largely the revaluation of Amazon's Anthropic stake. That is a paper gain, not the operating business.
- **Jassy:** “We've long believed AWS could become a few-hundred-billion-dollar-revenue business, and now believe it'll be at least double that — and very possibly be a trillion-dollar annual revenue business for us in time.”

Amazon: Market Rewards Higher Spending With Higher Growth

+37%

AWS growth

fastest in 18 quarters

\$200.6B

Q2 revenue

up 20% year over year

\$220B

2026 capex guidance

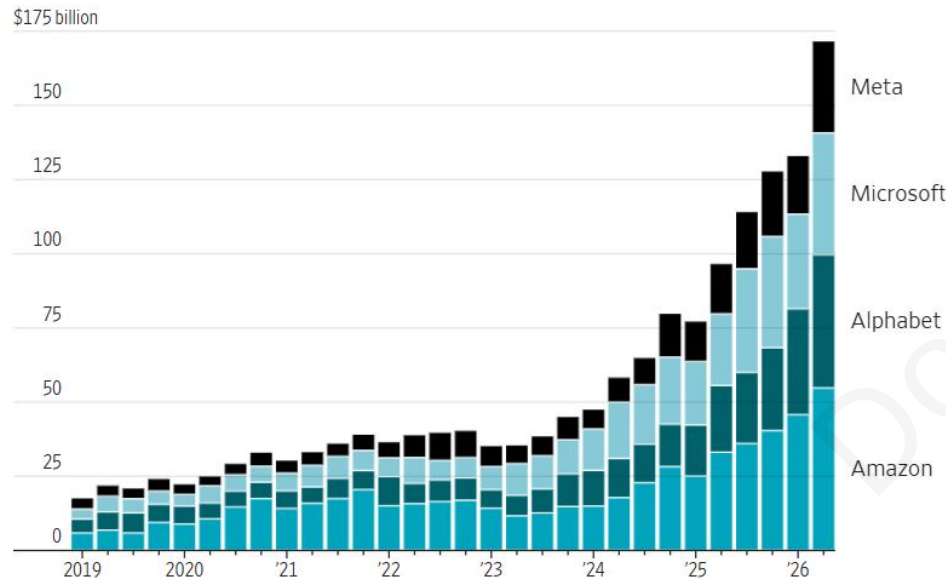
raised by \$20 billion

-\$7.6B

Free cash flow

negative for the quarter

Capital expenditures, quarterly



Note: Data are for calendar quarters and include finance leases.
Sources: the companies

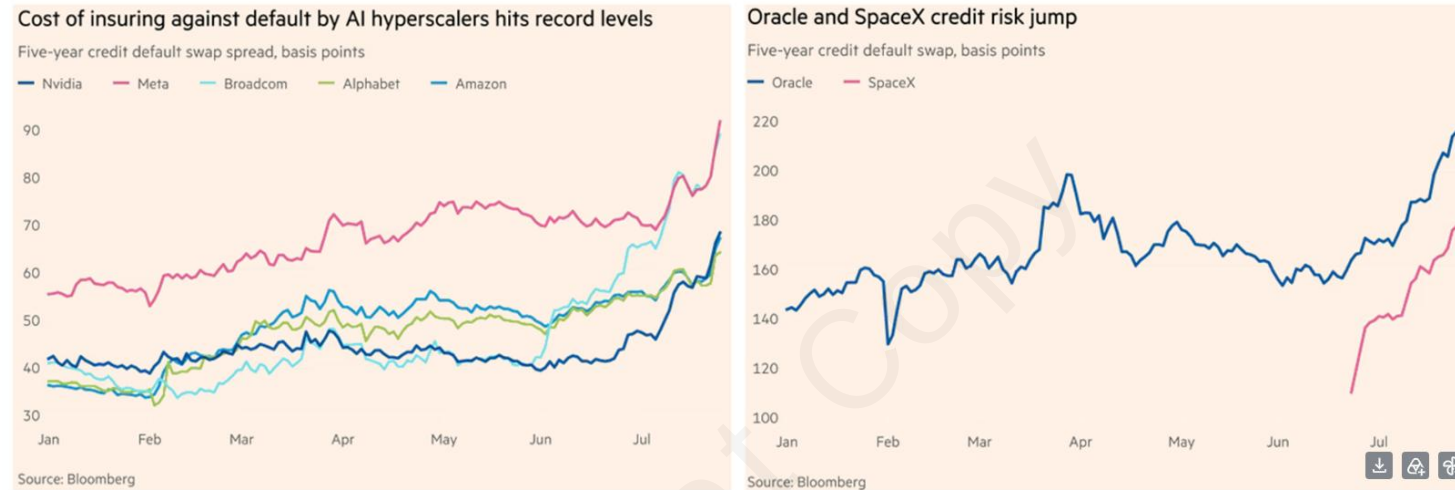
- AWS turned in its strongest growth in eighteen quarters at 37%, reaching \$42.2 billion. Amazon simultaneously lifted 2026 capex guidance by \$20 billion, to \$220 billion. The shares rose more than 9%.
- **Amazon is in our coverage universe for the upcoming YCB Program.** How should investors think about its growth in 2026 and beyond?

Further reading: [Edward A. Snyder, I. Simmons and S. Zaslavsky, “A Counterfactual Analysis of Amazon’s Acquisitions Under the 2023 Merger Guidelines,” Review of Industrial Organization, Vol. 64, Issue 5, August 2024, pp. 177–212.](#)

Source: The Wall Street Journal (Isabella Simonetti), July 30, 2026; company filings.

Credit Markets Are Repricing AI Risk

Jefferies view



- **Record spreads.** Default insurance on five-year paper has never been more expensive for Oracle, SpaceX, Alphabet, Meta, Broadcom or Nvidia.
- **Oracle is the acute case.** Its spread has widened from 144bp in January to 215bp now, and S&P's downgrade to BBB- leaves it a single step from high yield.
- **Not confined to Oracle.** Nvidia and Alphabet protection also priced at all-time highs this week.
- **Bonds agree.** By mid-July the top five hyperscalers were paying about 0.6 points over identically rated peers. No other investment-grade sector carried a wider gap.
- **Where the doubt sits.** Near-dated borrowing costs have not moved. The extra yield is demanded only at the long end — a verdict on eventual profitability, not on liquidity.
- **Why this is unusual.** Equity analysts covering high-tech companies do not normally spend any time on their debt.

Source: Bloomberg; S&P; Jefferies. CDS and spread levels as quoted in late July 2026.

The Revenue Math: What Has to Be True

~\$450B

2025 spend

AI infrastructure

~\$900B

2026 projected

chips, data centers, power

~\$1.4T

2027 estimate

and still climbing

~\$2.5T

revenue required

per year, to cover it

- Roughly \$450 billion went into AI infrastructure last year. This year's figure is tracking near \$900 billion, and 2027 estimates reach \$1.4 trillion. No build-out on this scale has been attempted before.
- **The hurdle.** For the spending to pay for itself, The Economist puts the annual AI revenue required at around \$2.5 trillion — more than the entire technology sector sells today.
- **Who would pay it?** Consumer subscriptions are not close to that scale, so the burden falls on enterprises: many more of them, using the technology far more heavily.
- **Adoption is thinner than the headlines.** Around a fifth of US firms use AI at all. Workforce use topped out near 46% in mid-2025 and has since slipped back to about a third.
- **Scale it.** Hold adoption at that level and the arithmetic implies roughly \$100,000 of annual AI spending from the average OECD company — every one of them.
- **Depth is the weak point.** ECB data show only about one adopter in ten across the euro area describes its use as intensive. Bundesbank figures put most German adopters under a twentieth of working hours.

The End Game: Commoditisation and Open Models

Analyst consensus

- **Capability is diffusing fast.** Moonshot's newest system scores near the US frontier while costing a fraction as much to build. Frontier-class work is no longer the preserve of a few labs.
- **The base case.** Demand shifts toward cheaper, openly released models. Anyone buying compute or AI services gains; the squeeze lands on the margins of the frontier developers, not on their customers.
- **Falling prices are the mechanism.** In the consumer market these systems are converging toward undifferentiated utility, and per-token pricing shows it. Cheaper access pulls adoption forward.
- **Open weights compound.** A model you can download and modify puts frontier capability in far more hands — and whatever those hands build still has to run on someone's silicon.
- **What is priced in.** Valuations approaching \$1 trillion at both OpenAI and Anthropic assume a lead that holds and a premium that sticks.

Kimi and the Moonshot IPO

~\$18B

Latest private round
against ~\$4.3B in December

H2 2026

IPO target
signalled to some investors

−10%

PHLX Semiconductor
the week K3 landed

4×

Open-model usage growth
vs. proprietary — OpenRouter

- **The company.** Founded in 2023 by Yang Zhilin, a Tsinghua and Carnegie Mellon graduate, and backed by HSG, Alibaba and Tencent. Its focus has widened from foundation models to agents that carry out multi-step work.
- **The listing.** Moonshot is weighing a Hong Kong flotation while raising privately at roughly \$18 billion — four times the December mark. Investors have been told a listing could come as early as the second half of this year.
- **Then K3 landed.** When the listing plans surfaced, Moonshot's K2.5 ranked well but still sat behind the leading Western models. K3 overturned that on certain coding benchmarks, topping Anthropic's Opus 4.8 and OpenAI's GPT-5.5 on the company's own numbers. Analysts reached for “DeepSeek 2.0.”
- **Market reaction.** The PHLX Semiconductor index dropped 10% across the week, its worst since April 2025, and entered a bear market. Ten of eleven S&P sectors closed lower.
- **Why chips.** Open weights are free to download and can be tuned in-house. OpenRouter reports open-model use among its heaviest spenders growing four times faster than proprietary use over six months, with 500-plus organisations switching. If enterprises migrate, the compute demand underwriting the capex cycle looks less secure.

Alibaba: Closing the Gap, and Opening the Weights

2.4T

Qwen3.8 parameters

Alibaba's new flagship

No. 2

Alibaba's own claim

behind only Fable 5

+5.2%

BABA Hong Kong

vs. Hang Seng Tech +2.9%

Q1 F2027

expected late August

not yet reported

- **The release.** Qwen3.8-Max-Preview runs to 2.4 trillion parameters. Alibaba's own claim is that only Anthropic's Fable 5 ranks ahead of it.
- **Open weights are the story.** The company intends to publish the weights for anyone to download and adapt — handing frontier capability to developers with no route to funding a model of their own.
- **A fast-moving open ecosystem.** Moonshot's Kimi K3 landed days before at 2.8 trillion parameters, which the company bills as the largest openly released model to date. Two such launches inside a week.
- **“Successful leadership in AI will not be built around a single model or a single approach.”** — Matt Garman, CEO, Amazon Web Services
- **Market reaction.** Alibaba's Hong Kong shares rose 5.2%, against 2.9% for the Hang Seng Tech Index.
- **Coverage note.** No China name has reported yet. Alibaba's Q1 F2027 print is expected late August, with the others following. The YCB Program tracks the Q3 cycle from October 9.

Dr. Lisa Su and AMD



Dr. Lisa Su

*Chair and Chief Executive Officer
Advanced Micro Devices*

- Dr. Lisa Su has led AMD as chief executive since 2014 and serves as chair. She holds BS, MS and PhD degrees in electrical engineering from MIT and spent 13 years at IBM before senior roles at Freescale and Texas Instruments.
- She sits on the advisory board of the Yale SOM Program on Stakeholder Innovation and Management (Y-SIM), alongside Ken Chenault, Sam Palmisano, Jim Breyer and Jane Sun.
- **Taiwan:** AMD is investing more than \$10 billion across Taiwan's semiconductor sector, working with ASE on silicon “bridging” technology in advanced packaging.
- **Agentic AI:** AMD has begun making its Venice CPU at TSMC on its most advanced node, and aims to extend TSMC's 2nm process across its data-center CPU roadmap.
- AMD is in our coverage universe for the upcoming YCB Program.
- **AMD prints its quarterly results next week.**

AMD and Anthropic: A \$5 Billion Bet

- The two companies have struck an agreement worth tens of billions in AI server hardware. Anthropic will take up to 2 gigawatts of AMD's Instinct MI450 chips, with deliveries opening in the first half of 2027.
- AMD is committing up to \$5 billion of its own capital to Anthropic — a first for the relationship — released against deployment milestones, and is negotiating to stand behind Anthropic's future data-center leases.
- This narrows Nvidia's lead and follows comparable arrangements with OpenAI and Meta. Anthropic's workloads already span Google TPUs, Amazon Trainium and Nvidia GPUs.
- A parallel engineering agreement lets AMD apply Claude to its own silicon design — using the customer's models to sharpen the product being sold to them.

+13.00%

*AMD closed at \$485.39
July 30, 2026*

The Deal at a Glance

Compute	Up to 2 gigawatts
Chip	Instinct MI450
Deliveries begin	First half of 2027
AMD investment	Up to \$5 billion

Source: The Wall Street Journal (Anissa Gardizy); market data as of July 30, 2026 close.

Thank You!

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Sources

The Wall Street Journal — Amazon, Microsoft, AMD/Anthropic, Alibaba, Moonshot, capital spending and debt charts

CNBC — Microsoft fiscal Q4 results

The Economist — AI revenue requirement

Jefferies — Chris Wood; William Beavington, Global TMT

UBS — capex and issuance forecasts

Bloomberg · **PitchBook LCD** — spending, cash flow and credit series

S&P Global Ratings — Oracle downgrade

LSEG · **StreetAccount** — consensus estimates

European Central Bank · **Deutsche Bundesbank** — enterprise AI adoption depth

University of Texas — US workforce AI use

OpenRouter — open vs. proprietary model usage

Company filings, earnings releases and investor calls

Further reading: [Edward A. Snyder, I. Simmons and S. Zaslavsky, “A Counterfactual Analysis of Amazon’s Acquisitions Under the 2023 Merger Guidelines,” Review of Industrial Organization 64\(5\), 2024.](#)