20 November 2026

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Important disclosures and certifications are contained on pages 94 and 95 of this document

Chief Analyst
Allan von Mehren
+45 45 14 14 88
alvo@danskebank.com

Head of Cross Asset Strategy
Bjarne Breinholt Thomsen
+45 45 14 15 15
bt@danskebank.com

Analyst
Mathias Christiansen
+45 45 14 15 91
mathch@danskebank.com

Chief Analyst
Mads Rosendal, CFA
+45 45 14 15 24
madros@danskebank.com

Assistant Analyst
Ella Schlüntz
eschl@danskebank.com

Assistant Analyst
Alexander de Lellis Stroustrup
alexs@danskebank.com

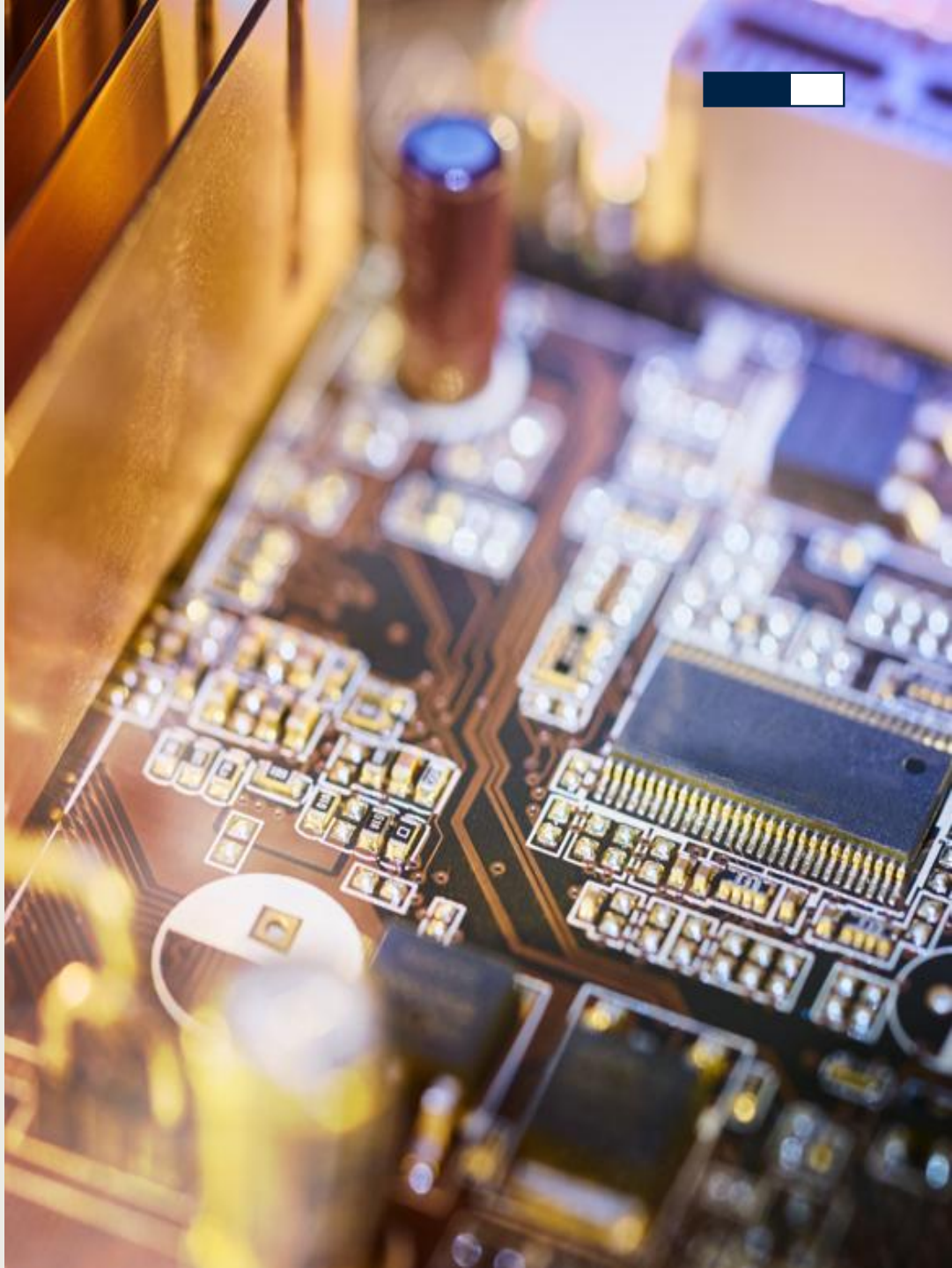


Investment Tracker

Danske Bank

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Key news since previous update

Company news

- **Earnings reports** from key chip companies show continued strong demand for AI capex and strong earnings growth, see pages 53-54.
- Nvidia's CEO **Jensen Huang was ousted** causing uncertainty over the company's outlook.
- **CoreWeave** caused relief in credit and equity markets following a strong earnings report lifting the revenue outlook.
- **Anthropic** said its annual revenue run rate rose to about USD 81bn in late October, up from about USD 71bn the month before. The IPO was many times (c. 7x) oversubscribed, a clear sign that investor demand for AI remains strong, see pages 62-67.

Regulation

- Markets were shaken by the **Democratic sweep** in the mid-term elections that led to Democratic governors taking over in key states related to the AI datacentre build-out; not least Texas, Ohio, Georgia and Virginia.
- The overriding theme among the governors is a **moratorium on new datacentre approvals** until laws are in place that put stronger conditions on the build-out related to electricity costs, water supplies etc. The changing landscape will have little impact on 2027 investments but may delay and raise the costs of investments from 2028, see pages 80-81.

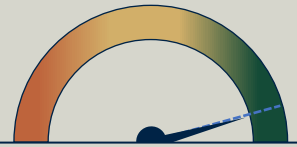
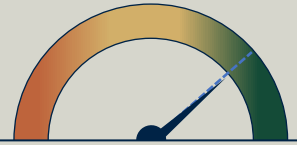
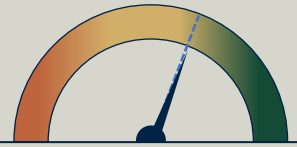
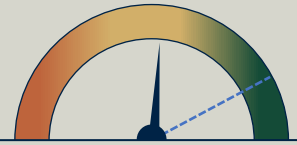
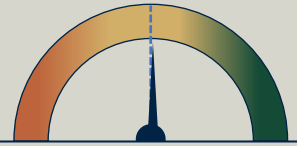
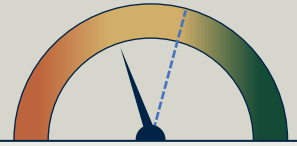
AI investments & demand

- The news flow continues to highlight **supply is the main challenge, not demand**
- **AI demand** continues to increase with the broadening use of AI agents.
- **Investment indicators** from Taiwan and South Korea remain solid. Lower metal prices signal weaker manufacturing growth.
- **Hyperscalers' capex plans** remained strong in Q3 earnings reports and was revised marginally higher for 2027 by consensus.
- The **GPU rental price** has increased signalling stronger demand than supply of compute. **Token prices** have declined further.
- **Prices on memory chips** have diverged. DRAM prices have increased further while NAND prices have declined.

Other

- Ahead of their IPO, Anthropic released a model update **launching Claude Fable 5.2** on 9 November. It is now the leading AI model. Google has really joined the race for best models with their release of **Gemini Carbon 4 model** on 10 November **followed by Gemini 4 Neon on 18 November** which ranks #3 on AI intelligence, see pages 24-26.
- A METR study shows Anthropic is **accelerating model development by use of AI**. It increases model capabilities at a faster rate but also raises the 'loss-of-control' risk by moving closer to so-called 'Recursive Self-Improvement' (RSI) which signifies a compounding AI feedback loop that accelerates development significantly, see slide 23 and 80.

Key takeaways: AI boom continues but hit bumps on the road

6 factors defining the AI investment landscape		
AI data centre investments	Hyperscaler investment plans continue to point to strong further build-out in 2027 Consensus raised capex plans for 2027 but lowered them further out pointing to lower capex from 2028. Investment indicators from Asia and the US showed continued strong growth heading into Q4.	
AI demand	AI use is growing faster than forecast, led by agents, but mainly because existing users use AI more. Demand for compute still appears to outgrow supply, while falling token prices squeeze the AI labs	
Bottlenecks	Bottlenecks are slowing but not stopping the datacentre build-out. Main shortage is in memory chips where prices have leaped with no resolve on horizon. Energy infrastructure is another challenge where supply constraints are present.	
The equity perspective	The equity perspective has turned more balanced. Fear of an AI bubble and uncertainty around future monetization have driven a sharp valuation reset, despite no deterioration in realized earnings, capex plans or underlying demand. Political risks to datacentre expansion have also risen, but strong demand for the Anthropic IPO shows that investor appetite for AI remains intact.	
The credit perspective	Debt markets are open but becoming more restrictive. IPO markets have shown sign of waning demand exemplified by postponed/cancelled Neocloud IPO's (Firmus, Nscale, Lambda)	
Political environment	Focus on safety issues have increased and the risk of a more severe incident seems to be rising. So far there are no signs the US government will step in to slow AI model development, though. Protests against datacentres are so far not a severe constraint, although it is slowing investments in some cases.	

Conclusions

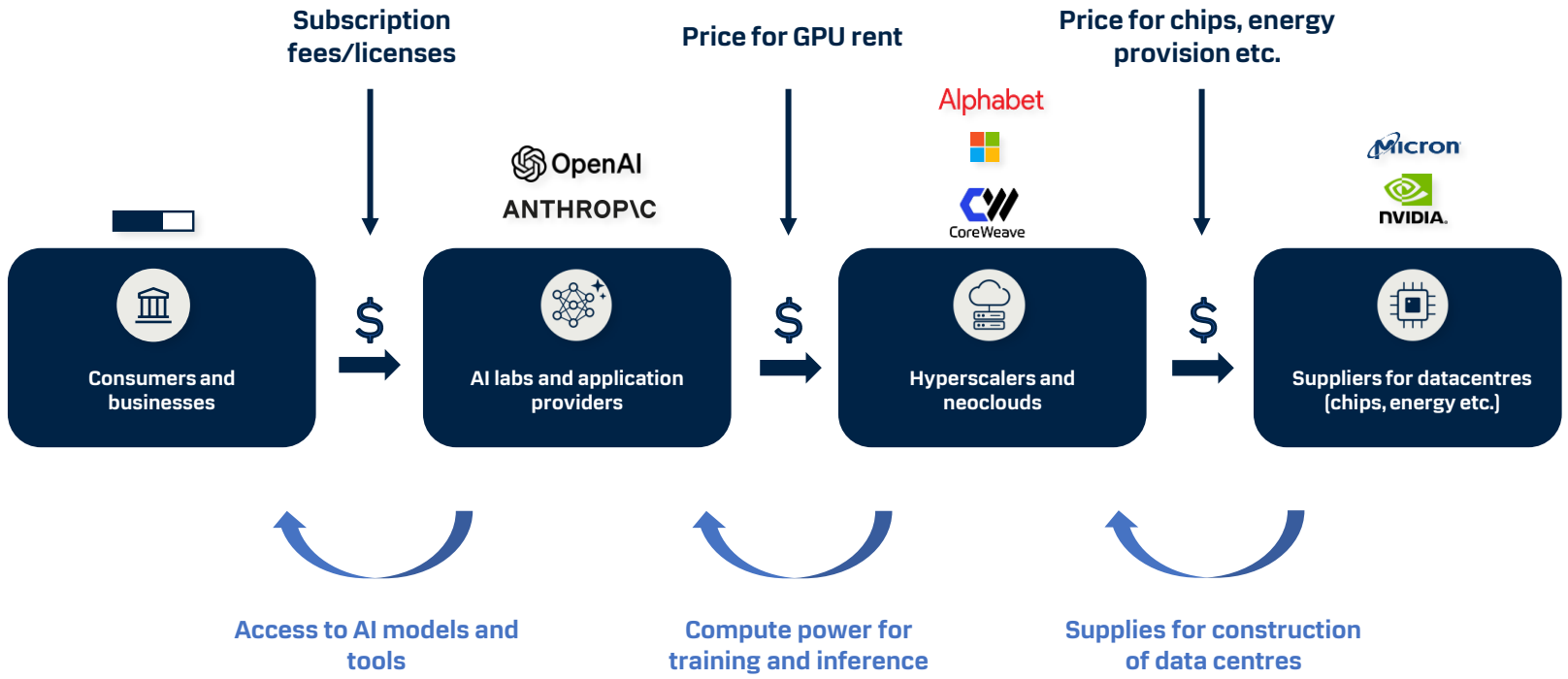
- Despite focus on more regulation, and the recent hiccups in markets, the AI investment boom remains on track. Consensus has again lifted expectations for 2027.
- AI-related earnings growth remains robust, while valuations across much of the technology universe remain below historical averages.
- Credit markets are still open but more restrictive. The need for credit funding is one of the weakest links in the AI chain.
- 2027 looks set to be a critical year as markets will need to see continued increase in revenues from AI labs and as rising capex lifts the funding needs through credit markets.

Note: Colours in the barometers indicate whether each factor supports a continued investment boom (green) or reason for concern (red).

Needle: ***November 2026***
Dashed line: ***October 2026***

How money flows through the AI value chain

- Whether the AI boom is sustainable ultimately depends on whether it will be able to generate enough productivity gains for consumers and businesses to pay the needed bill.
- They will pay AI labs that need enough money to pay the hyperscalers for providing the compute power who again will need to pay their suppliers that will pay sub-suppliers etc.
- The bill for the datacentre build-out is paid up front by profits in the tech companies as well as through financing while most of the income for AI labs is expected in the future when AI adoption becomes more widespread and consumers and businesses are expected to pay big amounts for access to the tools.

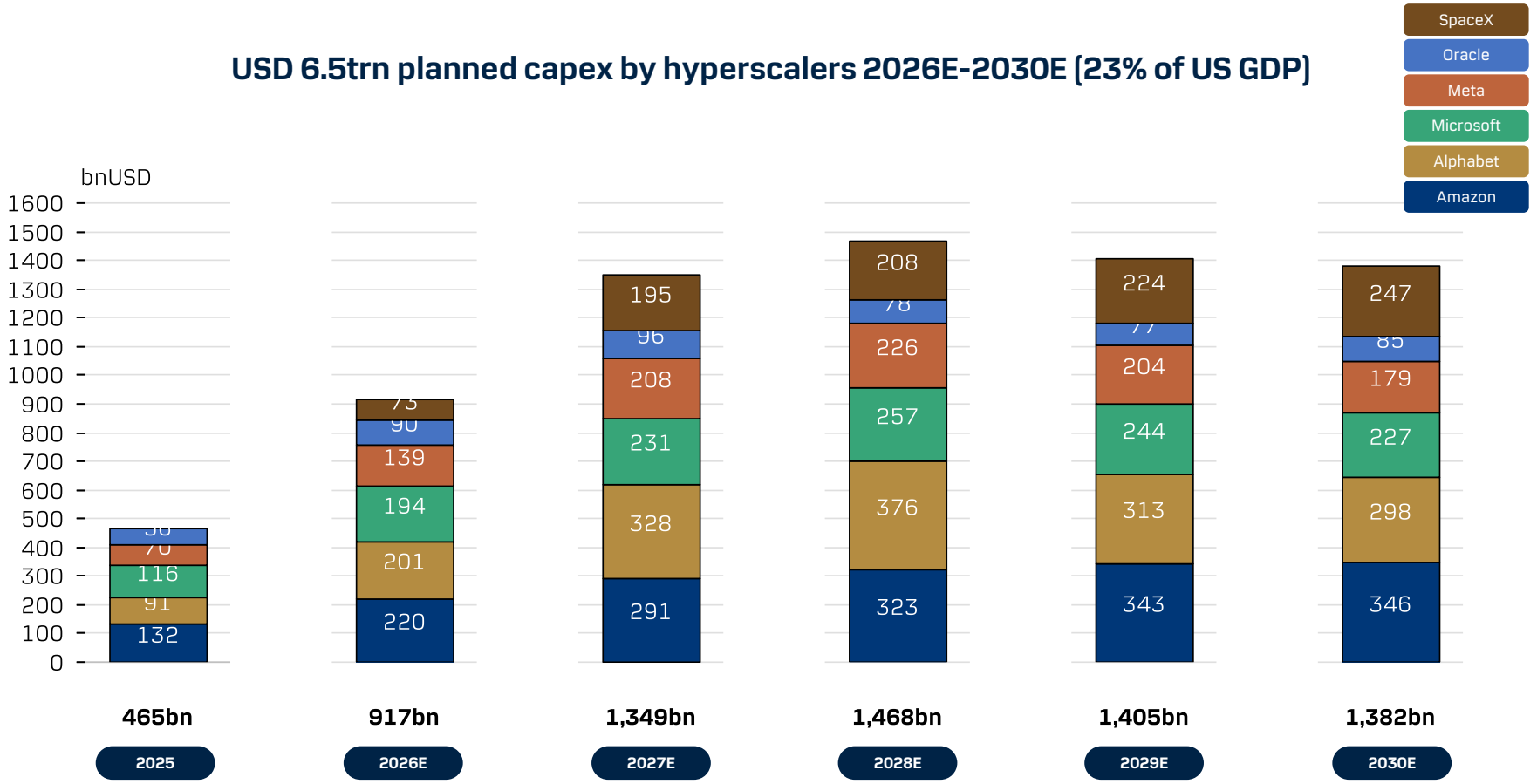



AI data centre investments

Outlook: US hyperscaler plans point to continued boom next year

Investments planned to rise another 47% in 2027

- The data centre build-out has been massive in 2026 and is expected by consensus to increase another 47% in 2027. The consensus estimate for 2027 has been lifted slightly since the update a month ago from USD1.342 bn to USD1.349 following the Q3 round of earnings reports.
- The growth in capex is expected to slow down in 2028 to a growth rate of 8.8% and become negative in 2029 and 2030. The 2030 estimate is reduced from USD1.429 bn to USD1.382 bn.
- For the period 2026-2030, total capex by hyperscalers is expected to be around USD 6,500bn, equivalent to around 23% of annual US GDP in 2025 and more than the entire 2025 GDP of Germany.
- Data centres are used for both AI and non-AI tasks, but the biggest build-out is within AI compute capacity. AI compute is used for both training of models as well as inference, i.e. running AI models and applications for users.

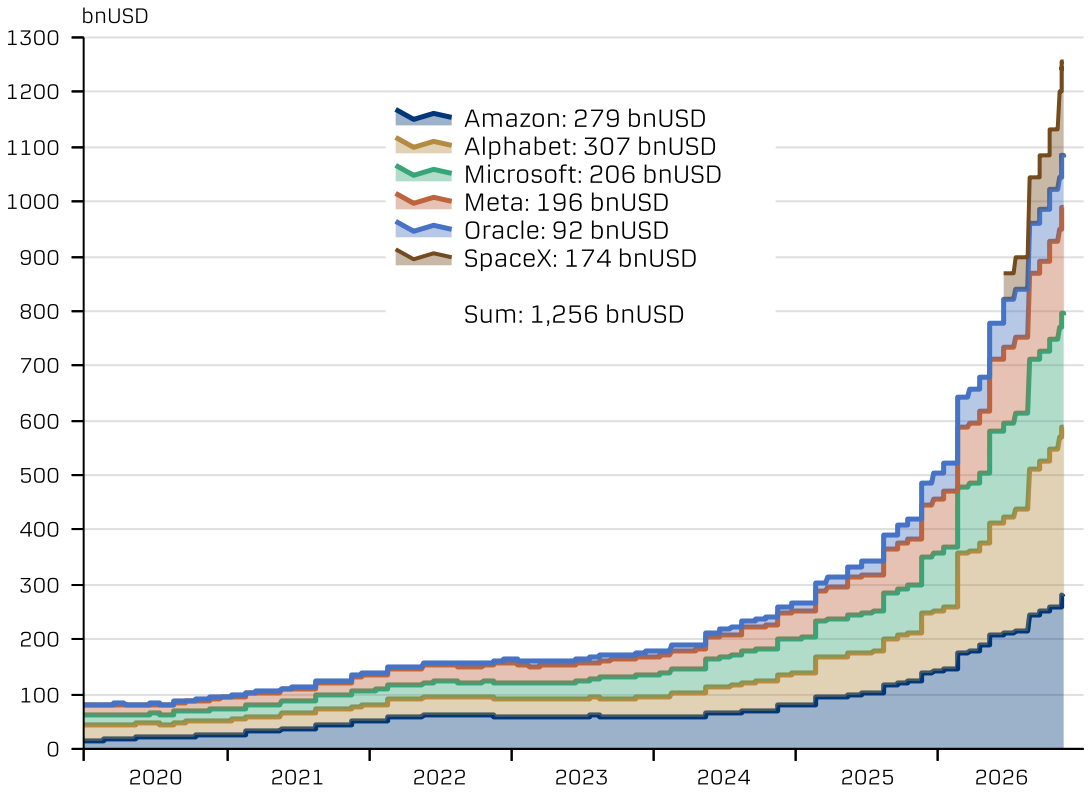


Source: I/B/E/S Consensus, LSEG Data & Analytics

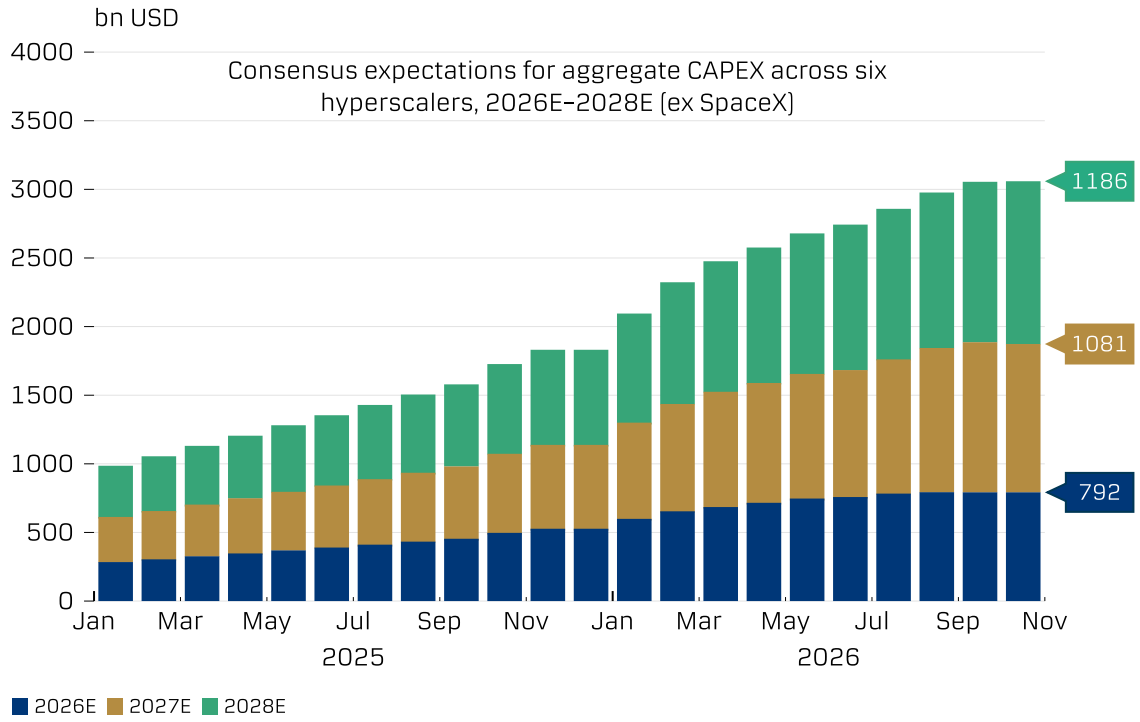
Realized capex: AI investments took off in 2025, continued strongly in 2026

Hyperscaler plans have been consistently revised higher

12M forward capex show capex boom taking off in 2025



Consensus hyperscaler CAPEX estimates for 2026E-2028E have tripled since the start of 2025



Source: I/B/E/S Consensus, LSEG Data & Analytics, Macrobond

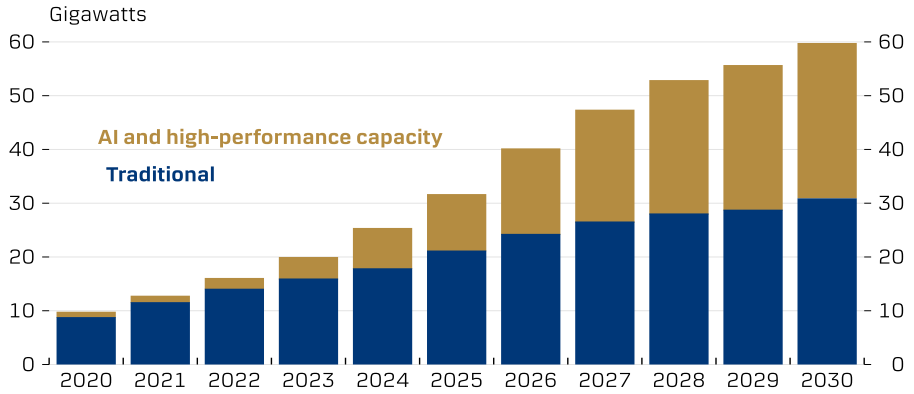
China and EU investments: Buildout continues but much lower scale than in US

US is far ahead when it comes to compute power

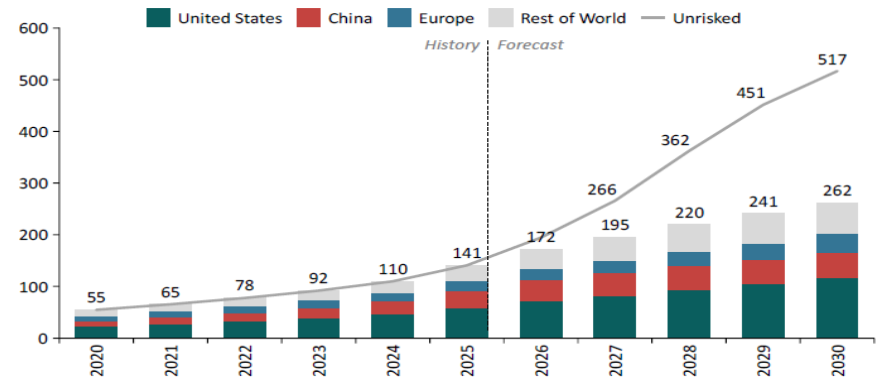
- **China's AI capex plans are much lower than US spending**. But also, on a rising trajectory. China estimates RMB4 trn (app USD600 bn) in new computing-network investments over the Five-Year Plan (FYP) period for 2026-2030.
- The amount is significantly lower than the US hyperscalers investments of more than USD5 trn in the same period.
- Costs are generally lower in China, so in PPP terms China's investments are closer to around USD 1 trn. But compute power per gigawatt is also much lower as China does not have access to the most advanced GPUs due to US tech sanctions. Estimates indicate 1GW in US generates 4-8 times more training compute power compared to 1GW in China.
- Rystad Energy projects China's AI datacentre capacity to increase from 10.5 gigawatt in 2025 to 28.9 gigawatts in 2030 (around 1/3 of projected US capacity). The biggest increase is expected to take place in 2026-2028, where around 5 gigawatts per year is projected to be added each year. .

- **EU' Cloud and AI Development Act (CADA) aims for a tripling of EU data centre capacity in 5-7 years**. Still coming from a much lower level, EU is set to lag far behind the US.
- CADA aims to address challenges of long permitting procedures, limited access to energy, land and financing. CADA also states, "over reliance on non-EU cloud service providers poses a significant risk to Europe's digital autonomy and resilience."

China data centre expansion to continue (projection by Rystad Energy)



Rystad projection of global data centre capacity



Source: Rystad Energy Data Center Report, April 2026

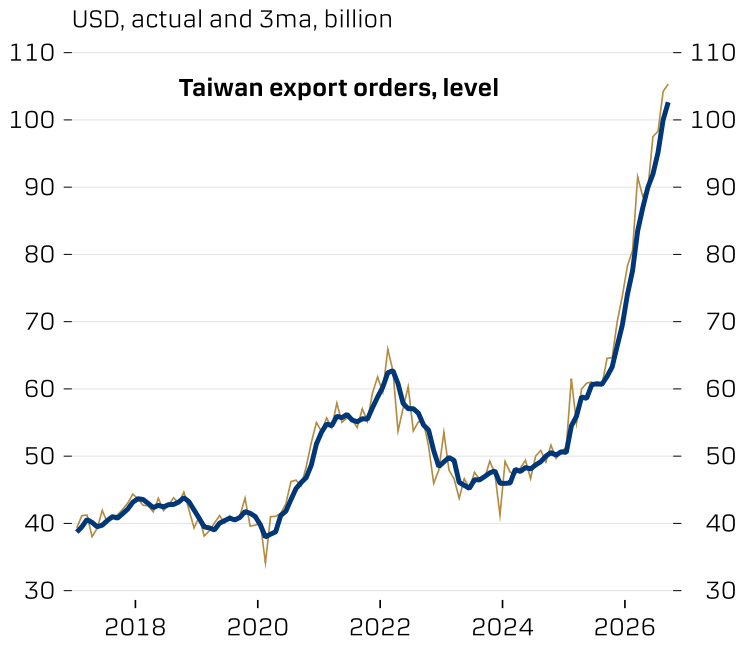
Capex indicators: Asian chip exports continue to surge

Shipments from key Asian chip suppliers point to strong datacentre investments in Q3

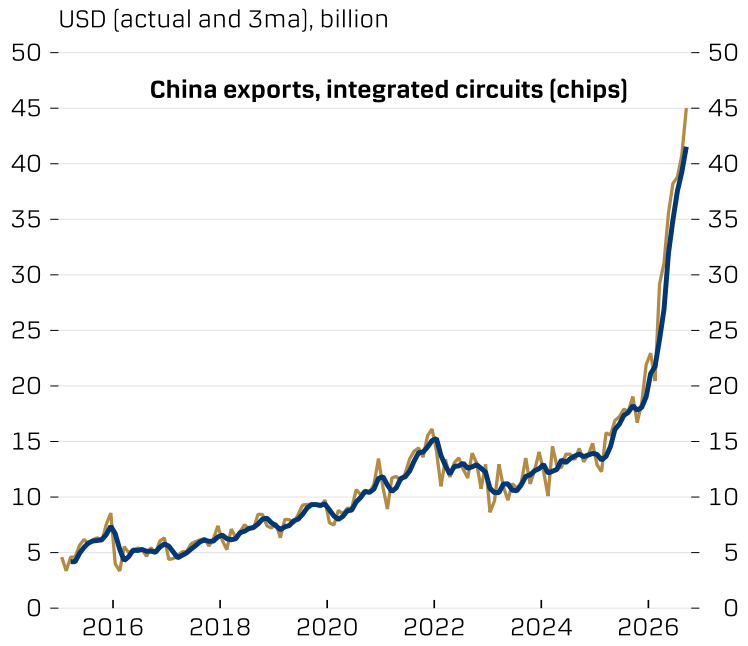
South Korea exports continued strong trend in October, both volumes and values



Taiwan export orders still rising at strong pace



Chinese chips exports also strong

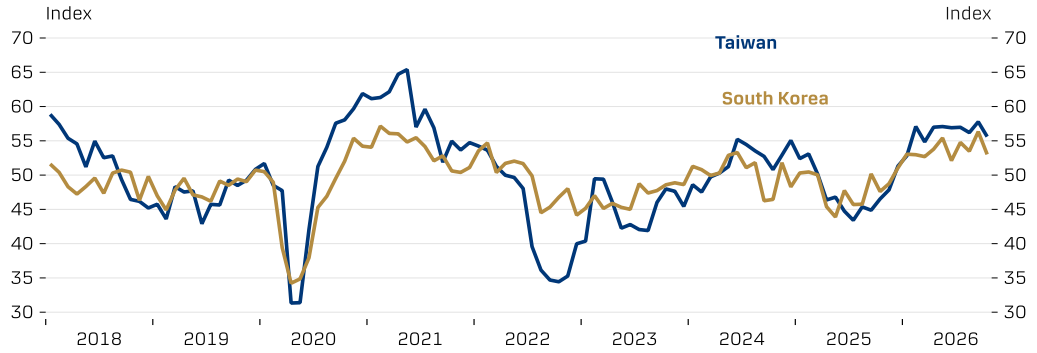


Source: Macrobond, Korea Customs Service, Bank of Korea, Taiwan Ministry of Economic Affairs, GAC

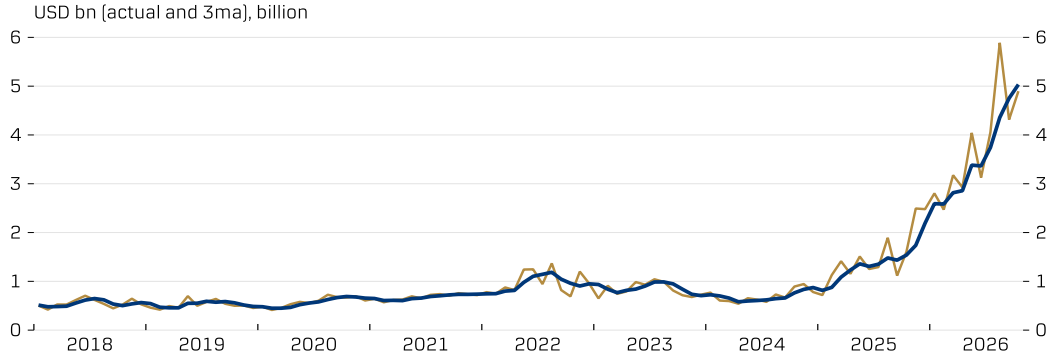
Capex indicators: Chip sales from some Asian suppliers show slower momentum

Capacity constraints may start kick in as capex plans remain strong

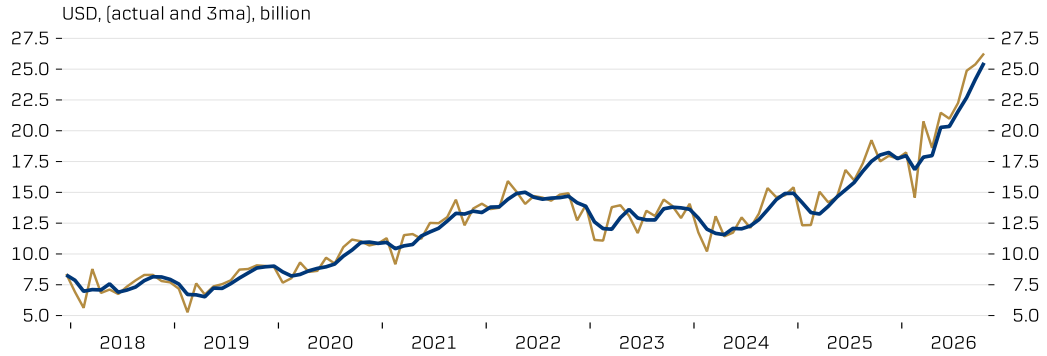
PMI manufacturing, new orders – moving sideways



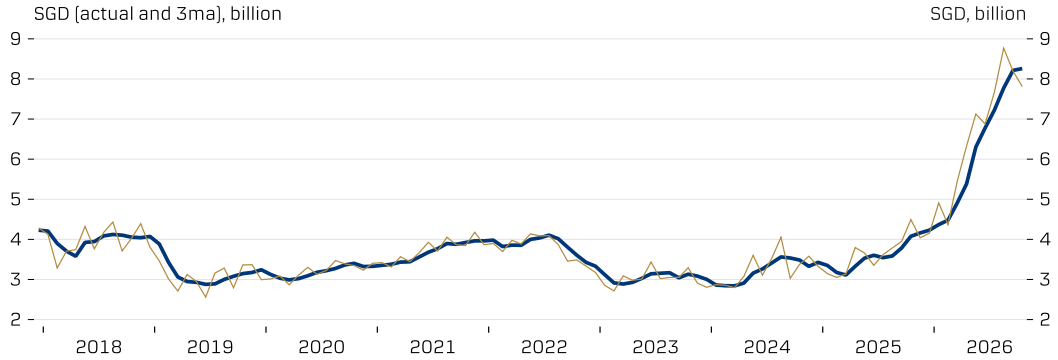
Taiwan exports of DRAM memory chips – signs of slower momentum



Taiwan exports of logical chips (GPUs etc) – still strong rise



Singapore AI-related exports – momentum slowed recently

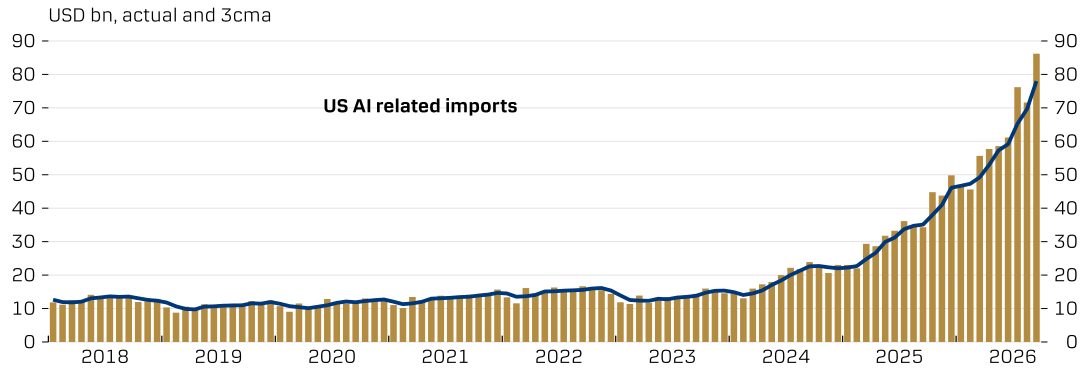


Source: Macrobond, S&P, Taiwan Ministry of Finance, SingStat

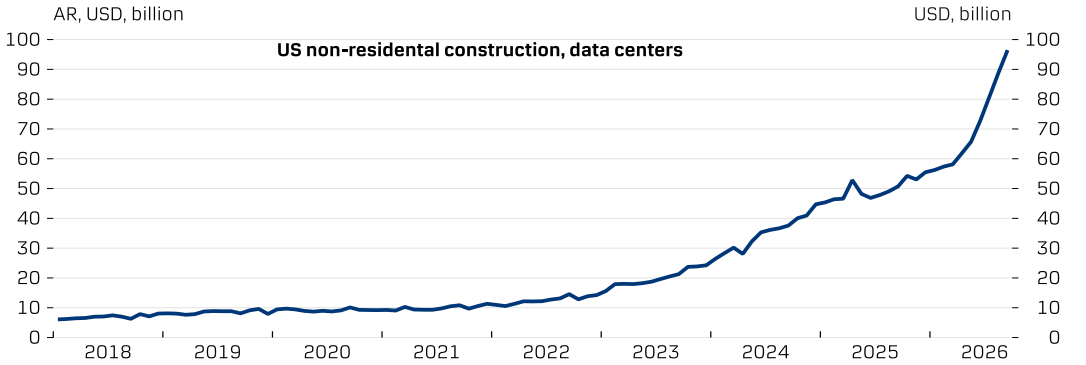
Capex indicators: US data still show strength

Strong growth in datacentre construction and AI related imports

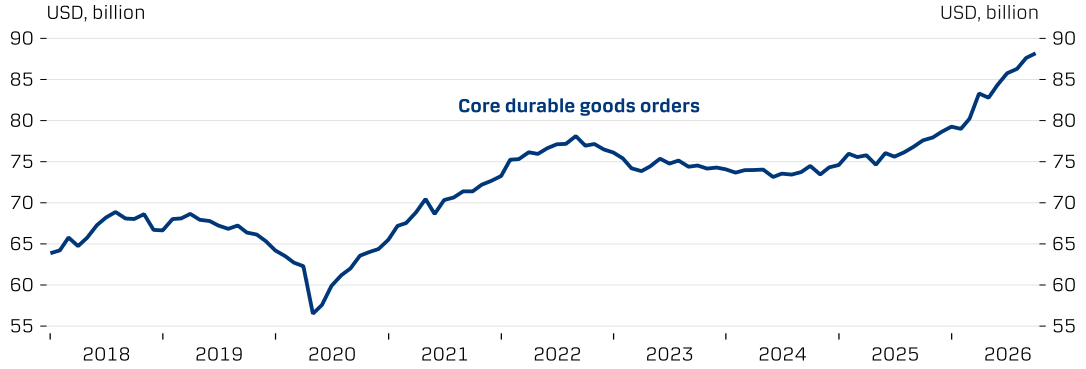
US imports of AI related components (chips etc.) still on rising trend



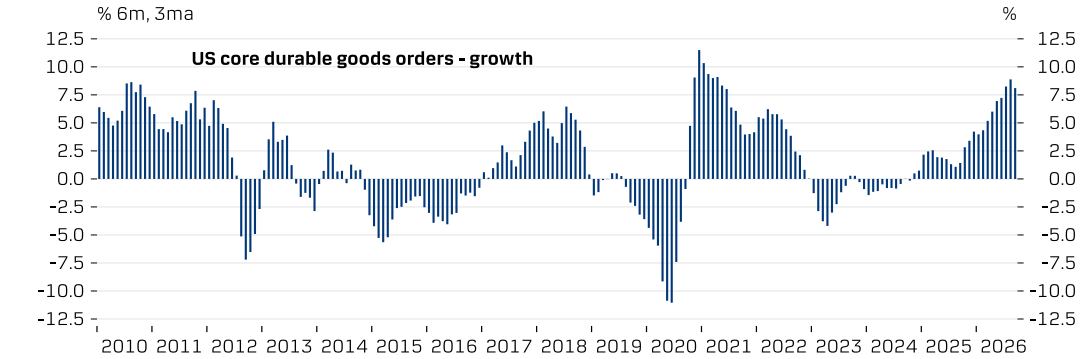
Construction of data centres continue higher



Strength in US capex orders continues



Growth in capex orders stabilizing



Source: Macrobond, US Census Bureau, Danske Bank

Metal prices: Roll-over in prices points to weaker overall manufacturing

Copper prices also lower lately breaking the upward trend

- Building data centres require a lot of metals, not least copper for electricity transmission. Metals are also used in the construction. We thus track prices on metals as a real-time indicator of momentum in investments.
- Metal prices have clearly lost momentum over the past months suggesting overall manufacturing activity is slowing down.
- The still strong trend in chips exports from South Korea and Taiwan suggest it may be more due to supply constraints or crowding out of other investments, but the drop in copper prices which is key in datacentres may indicate some cooling into November.

Copper prices more volatile after Iran war but still trending higher



Overall metals index lost momentum



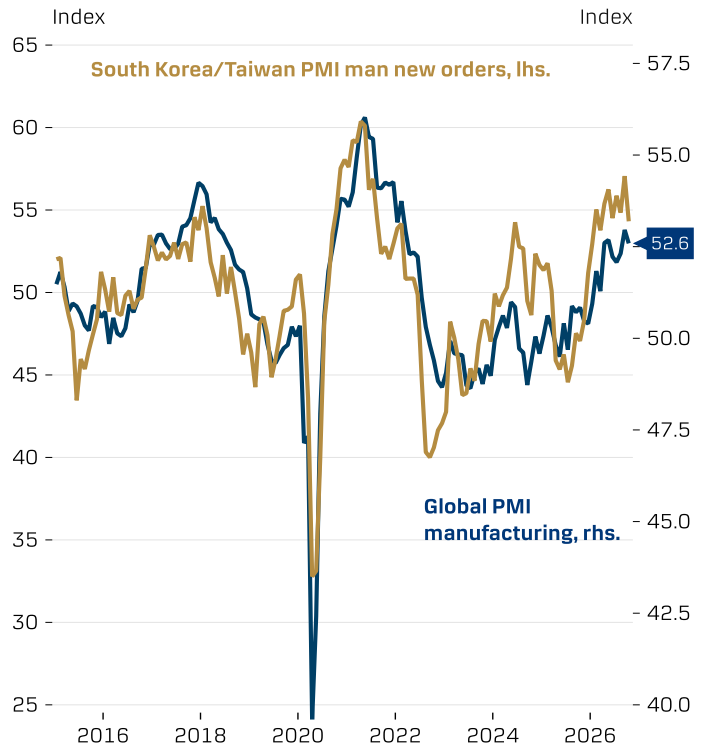
Growth rate in metal prices clearly come down



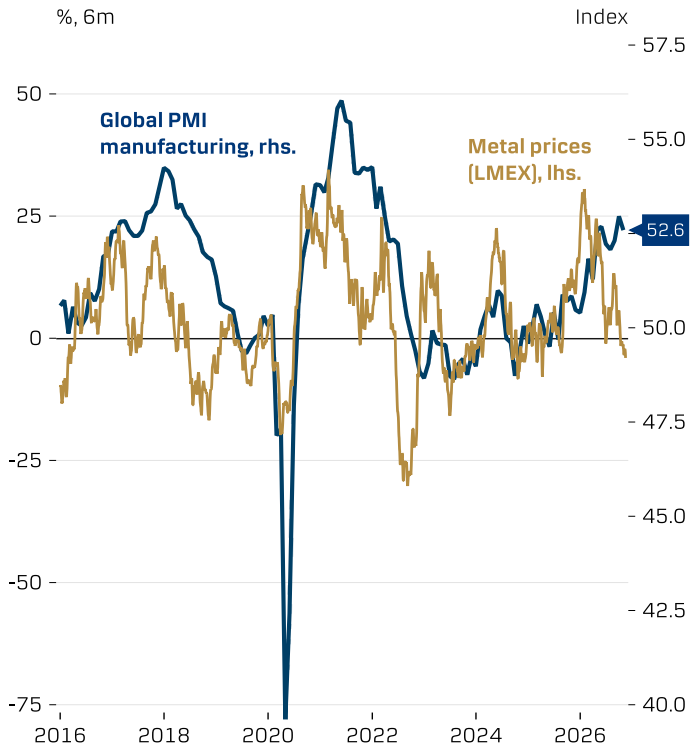
Source: Macrobond, Bloomberg, Danske Bank
Note: Past performance is not a reliable indicator of current or future results

Impact on global manufacturing cycle: Mixed news, metals look weak

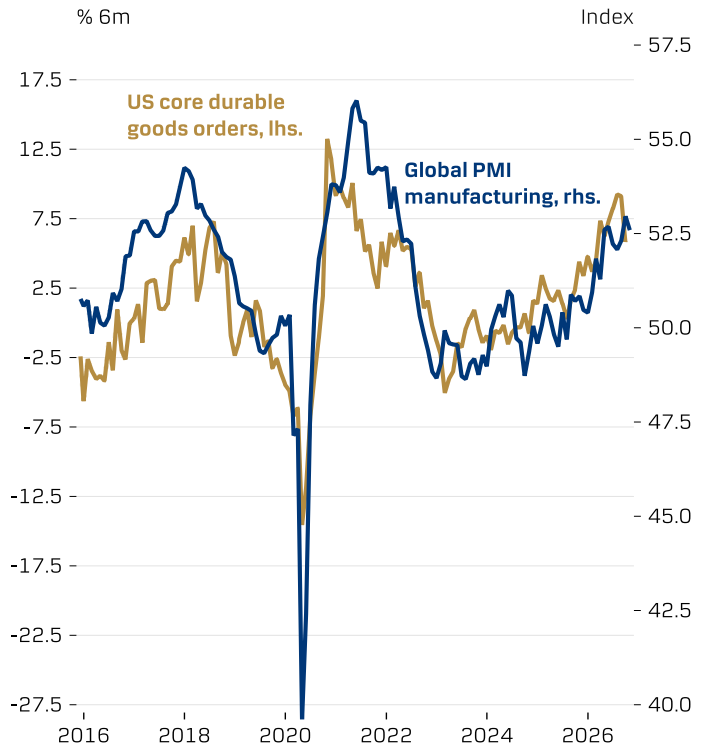
South Korea/Taiwan orders at plateau



Industrial metals prices send weaker signal



US investment orders plateau



Source: Macrobond, Bloomberg, Danske Bank

Anecdotal evidence

Statements from key tech players

How much hyperscalers plan to spend

Amazon: *Andy Jassy (CEO), Q3 2026 earnings call, 29 October:*

- *" We still expect 2026 cash CapEx of approximately $220 billion, the majority for AWS and expect to spend meaningfully more in 2027 "*

Alphabet: *Anat Ashkenazi (CFO), Q3 2026 earnings call, 28 October:*

- *"Our full year 2026 CapEx guidance range of $195 billion to $205 billion remain unchanged. We continue to expect our CapEx to increase significantly in 2027, and we'll provide further details on our Q4 call. "*

Meta: *Susan Li (CFO), Q3 2026 earnings call, 21 October:*

- *"We anticipate 2026 capital expenditures, including principal payments on finance leases, to be in the range of $135 billion to $145 billion, narrowed from our prior outlook of $130 billion to $145 billion."*

Whether chip suppliers can deliver

AMD: Lisa Su *(CEO), Q3 earnings call, 3 November 2026:*

- *"It is true that demand is higher than supply. So we continue to work with our supply chain partners to increase supply."*

TSMC: *C.C. Wei, (Chairman & CEO), Q3 2026 earnings call, 15 October:*

- "We are moving full speed ahead to increase our capacity to meet our assessed demand, and stepping up our CapEx investment to support our customers' future growth"

PTI: Jim Lin (Senior VP), *6 November 2026:*

- *"The most important thing right now is capacity"*

Amazon: *Andy Jassy (CEO), Q3 2026 earnings call, 29 October:*

- *"We're installing an AI accelerator about every 14 seconds and almost as fast as we install capacity, customers are gobbling it up."*

Source: Earnings calls and statements from companies

AI demand

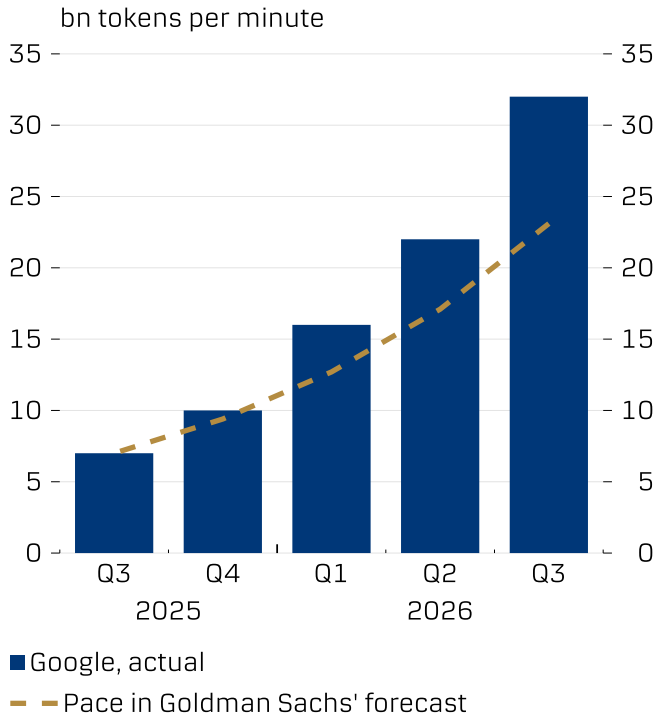


Overview: AI use is growing faster than forecast, led by agents

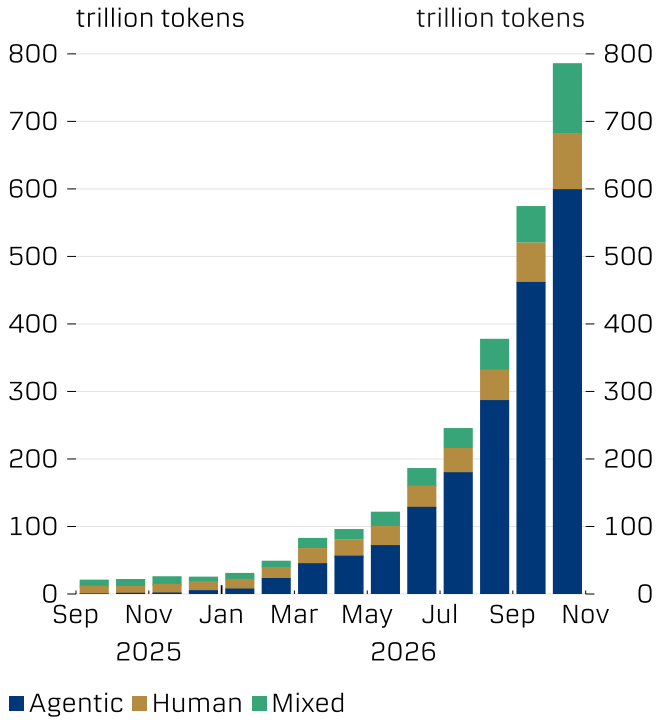
Firms and developers now use almost 32bn tokens a minute on Google's AI models, over four times as many as a year ago

- The build-out rests on rapid growth in AI use, and Goldman Sachs expects token use to roughly triple in 2026 and grow even faster in 2027, driven by agents (pp. 87).
- We follow Google, one of the few large AI providers to report token use every quarter, and OpenRouter. Both are only slices of the market, but they show the direction.
- So far, use is ahead of the forecast, mainly because existing users use AI more (pp. 18-19). Agents already account for 76% of tokens on OpenRouter in October, and in coding they started over 40% of new code changes on GitHub in September, up from 17% in March.
- Whether this continues depends mainly on agents spreading.

Google has stayed ahead of the forecast pace all year



Agents drive the surge in use on OpenRouter



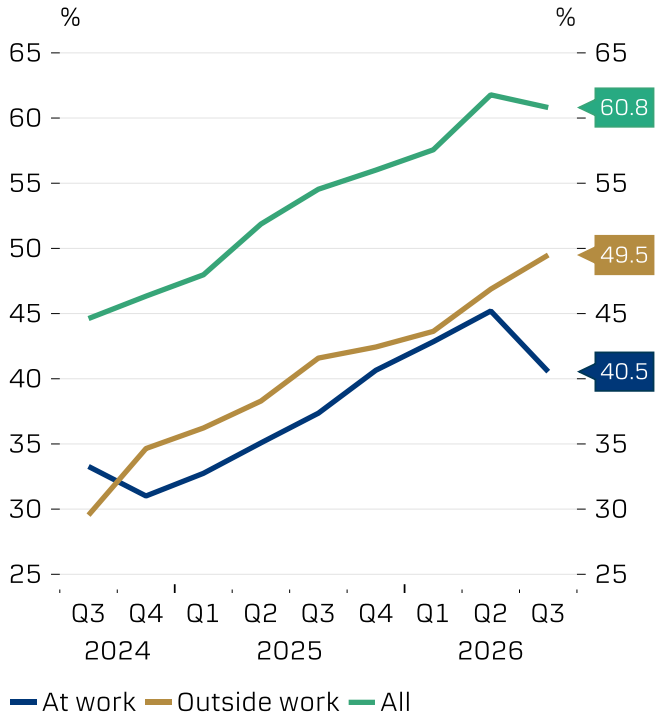
Source: Goldman Sachs Research, Alphabet, OpenRouter, GitHub (Octoverse 2026), Danske Bank
Note: Google's API tokens per minute (Alphabet). Forecast pace: Google's Q3 2025 level grown by the roughly 3.3x Goldman Sachs expects for 2026; growth only, not levels. OpenRouter, a service giving developers access to many AI models, classifies customer accounts as agentic, mixed or human by usage patterns. Volumes also reflect its own customer growth.

AI users – consumers: User growth stalls, but users pay more

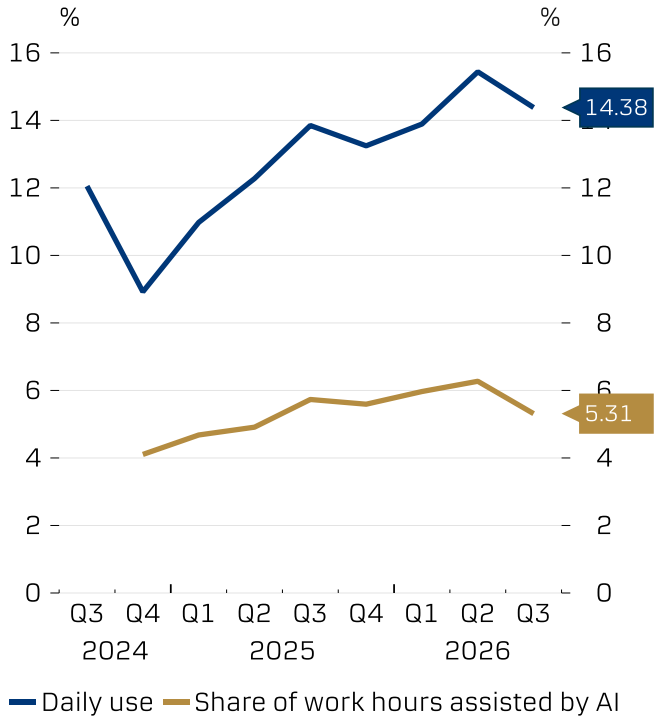
The share of US adults using AI fell for the first time in Q3, though only slightly

- How many people use AI, how often and how much they pay sets the base for consumer demand.
- About six in ten US adults aged 18-64 now use AI, after two years of steady gains. Menlo Ventures counts only 11% more users globally than a year ago.
- Most still use it only occasionally, but those who pay use it far more. Half of US payers use AI daily, and two in three use AI agents (Menlo).
- Spending has more than tripled to about USD40bn a year, as more users pay and payers pay more. The 14% paying USD100 or more a month account for 60% of consumer AI spending (Menlo).
- Consumer demand thus depends on a small group paying more, rather than on AI reaching more people.

Use at work fell in Q3, while use outside work rose to a new high



AI assists only about 5% of work hours



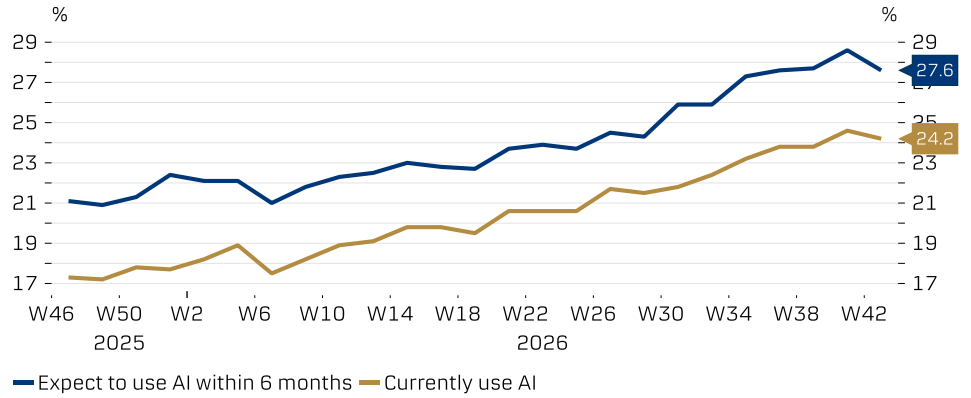
Source: Real-Time Population Survey: Generative Artificial Intelligence Adoption Tracker (Bick, Blandin and Deming) via FRED, Menlo Ventures, Danske Bank
Note: Real-Time Population Survey of US adults aged 18-64 (Q3 survey conducted in August). Menlo Ventures: survey of 5,067 US adults, July 2026; spending is a global estimate. Menlo is an investor in Anthropic and OpenRouter.

AI users – businesses: Slower adoption, and a few firms drive spending

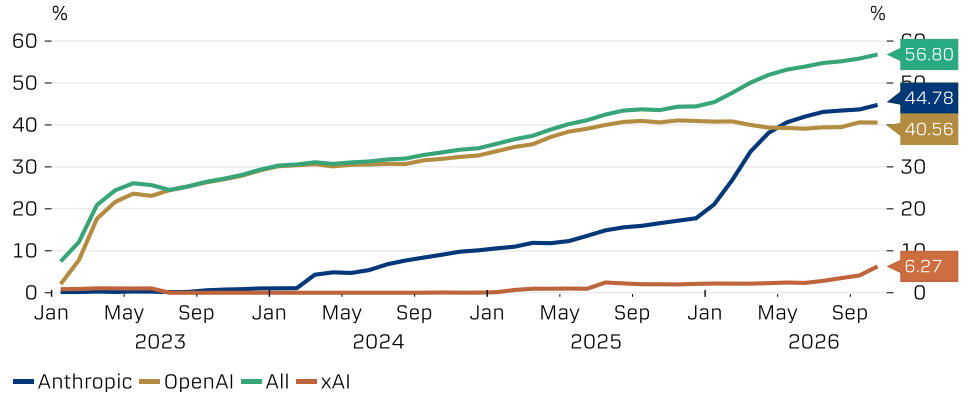
About one in four US firms now uses AI, up from about one in six a year ago

- Business use turns AI into lasting revenue for the AI labs that make the models, such as OpenAI and Anthropic, so how widely and how deeply firms use it matters for demand.
- On Ramp, 57% of the tech-forward US firms now pay for AI, up from 44% a year earlier. Adoption is still rising, but the pace has more than halved since the spring, to about one point a month.
- Spending is highly concentrated. On Ramp, the top 1% of firms account for 80% of what firms pay OpenAI and Anthropic, spending about USD10,200 per employee a month on AI against USD16 for the median firm. Most are venture-backed firms in tech, finance and technical services.
- Of the two leaders, only Anthropic is still gaining ground. SpaceX AI is growing fastest, and 6% of US firms on Ramp now pay for it, up two points in a month. Ramp expects a three-way race, with new entrants adding to the pressure on prices.

More firms expect to use AI within six months than use it today



Anthropic now leads OpenAI among firms paying for AI



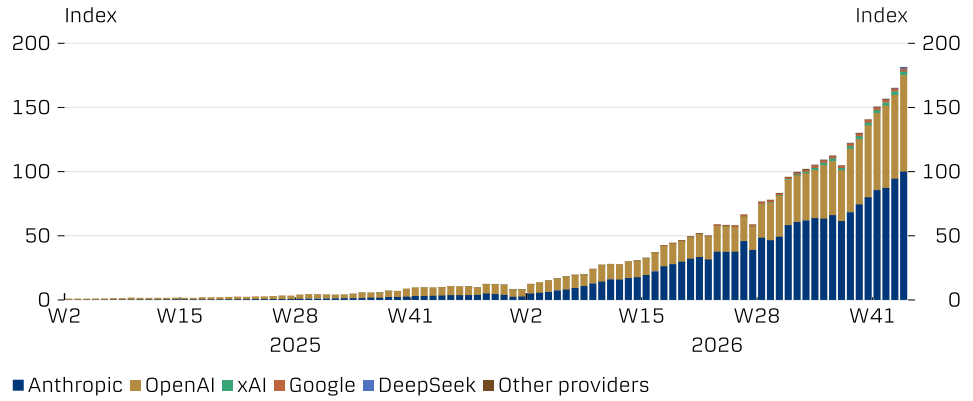
Source: US Census Bureau (BTOS), Ramp Economics Lab (Ramp AI Index), Danske Bank
Note: BTOS: share of US firms using AI in the past two weeks, or expecting to within six months; from 1 November, the question says "Super Intelligence (SI)" instead of AI. Ramp: share of its 85,000+ US business customers paying for AI.

Token use: More use, but price cuts keep spending flat

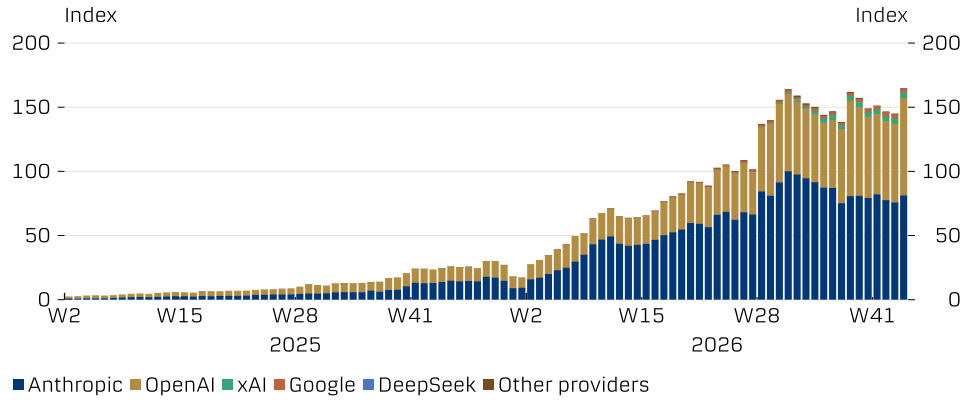
US firms on Ramp use almost twice as many tokens as three months ago, but spend about the same

- Token use gives a sense of how much computing power AI requires, while spending indicates how much money flows back to the AI labs. Ramp's data on US firms cover both.
- Over the past year, token use among these firms has risen about 18-fold, while spending has risen only about 7-fold. Since the summer, nearly all of the growth has been in volume.
- The gap largely reflects falling prices, and on Ramp the price per token fell 21% in October alone. Ramp points to price cuts and a buyer's market rather than weaker use. Cheaper new model versions and low-priced Chinese rivals add to the price pressure (pp. 26 and 57).
- For the build-out, volume probably matters most, as it helps keep compute scarce. For the labs, the price matters more, and Anthropic says its own price cuts tied to new model versions and contractual discounts lowered its revenue growth by about USD600m q/q in Q3.

Anthropic leads the surge in token use *(Anthropic, latest week =100)*



Firms now spend less on Anthropic and more on OpenAI *(Anthropic, three months ago =100)*



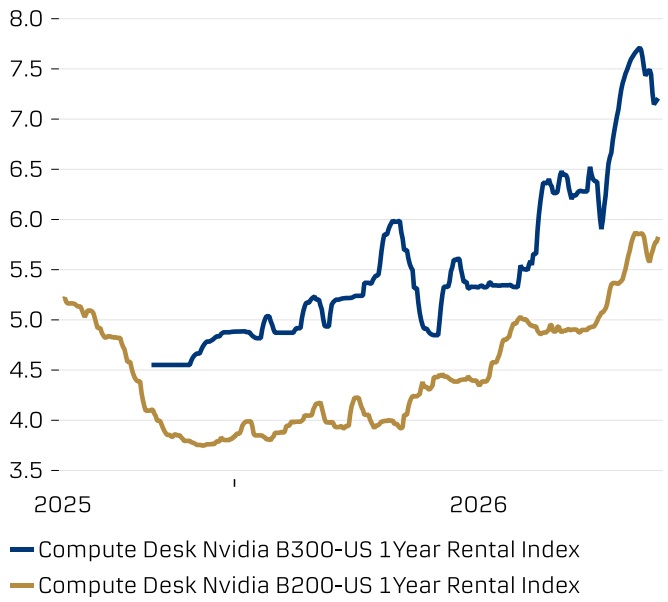
Source: Ramp Economics Lab (Ramp AI Index), TechCrunch, Anthropic (S-1/A), Danske Bank
Note: Ramp: API token use and spending of firms tracking AI spending in Ramp. Prices also fall when firms switch to cheaper models. Latest week ending 1 November vs week ending 2 August.

Compute: AI gets cheaper to use, but chips get dearer to rent

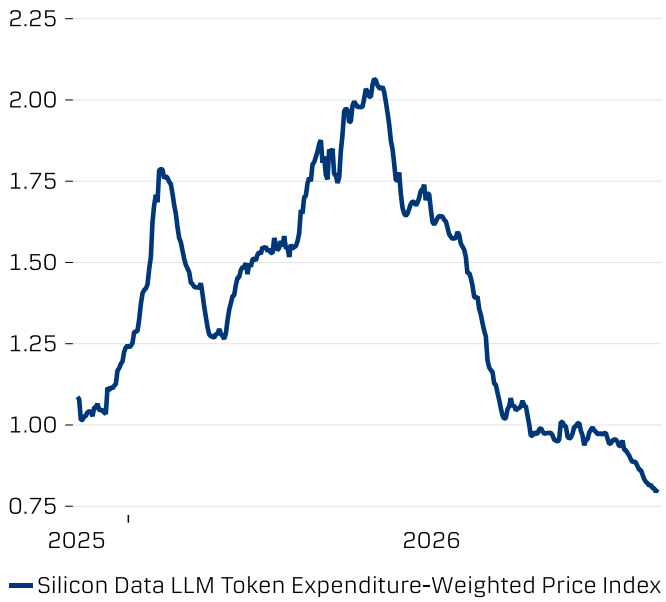
Renting Nvidia's B300 chips costs almost 50% more than in early January, while token prices are near a record low

- GPU rents, the price AI labs and others pay for computing power, give a timely read on whether demand for compute is outgrowing supply.
- That appears to be the case. New AI computing capacity is growing about 2.5-fold a year (Epoch AI), yet Nvidia says its chips are fully used, and CoreWeave sees demand for 2028 at several times its capacity.
- Rents are rising for older chips too. At CoreWeave they rose 30-50% in Q3, and Nvidia says its 2022-generation chips are being re-rented at up to twice their original price.
- This leaves the AI labs paying more for compute while earning less per token. At the same time, scarce compute supports further investment in data centre.

B300 rents are only slightly below their October record



The price per token has more than halved since June



Source: Compute Desk (The Compute Index, Inc.), Silicon Data, Bloomberg, Epoch AI, Nvidia, CoreWeave, Danske Bank

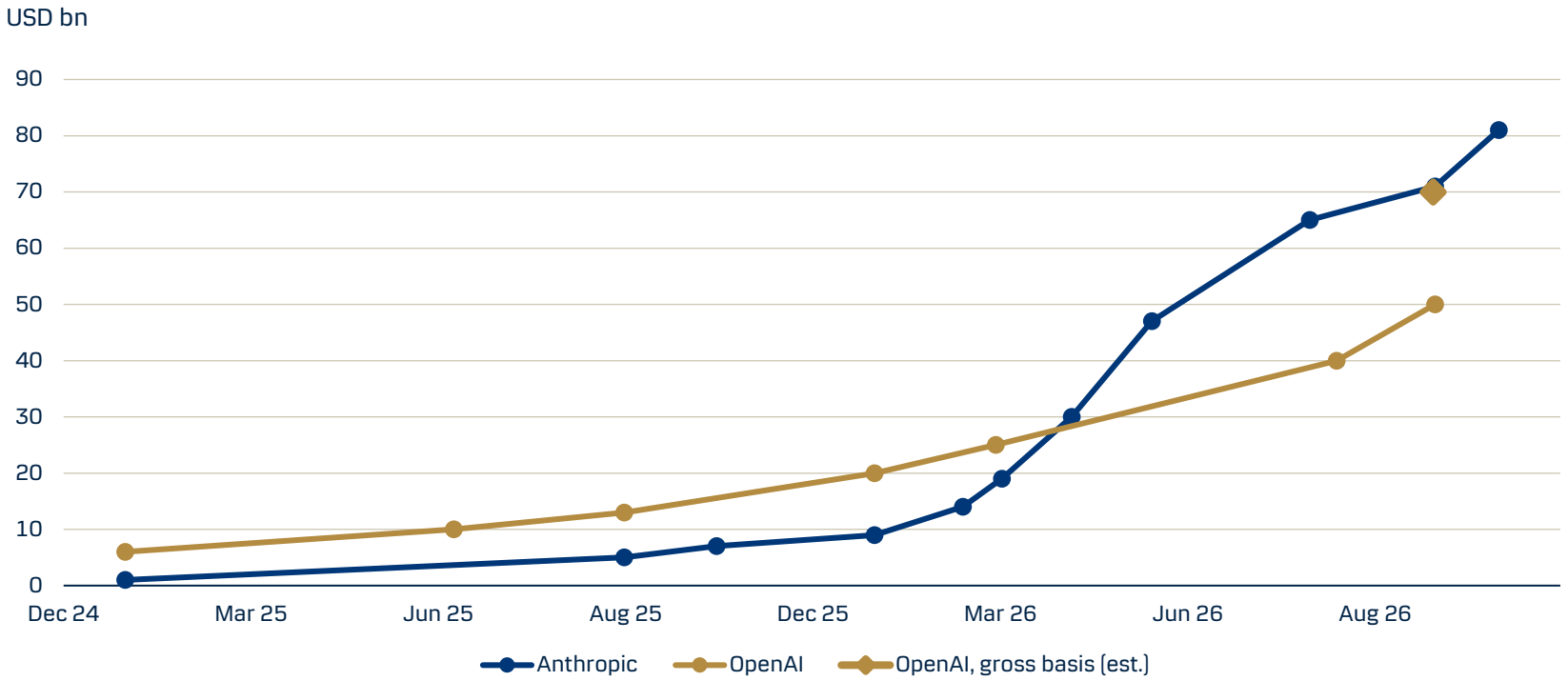
Note: Compute Desk: one-year rental price of Nvidia B300 and B200 chips in the US. Silicon Data: usage-weighted average price per million tokens across AI models. Epoch AI: computing power of AI chips sold worldwide.

AI revenue: Soaring, but the labs are getting squeezed

Anthropic's annualised revenue rose to USD81bn at end-October from about USD9bn at end-2025

- Lab revenue indicates whether the labs can keep paying for their compute (IPOs: pp. 60-67).
- Anthropic's and OpenAI's reported annualised revenue adds up to about USD130bn, more than five times as much as a year ago.
- But prices are falling, and in Q3 costs grew faster than revenue. Anthropic's compute costs rose to 58% of its revenue from 48% in Q2, partly because extra compute bought at short notice cost more.
- Anthropic's IPO prospectus says it expects its growth to slow. Even so, Goldman Sachs expects Anthropic's revenue to exceed USD600bn in 2030, and OpenAI's own plan points to about USD350bn.
- The key thing to watch is whether revenue again grows faster than compute costs.

On the same basis, the labs were about equal in September



Source: Epoch AI, Anthropic (S-1/A), OpenAI, Goldman Sachs, Financial Times, Danske Bank

Note: Run rate: recent revenue extrapolated to a year; company figures and press reports. Anthropic counts sales via cloud partners in full, OpenAI only its own share; OpenAI on Anthropic's basis is a Danske Bank estimate. Forecasts: Goldman Sachs for Anthropic and a company presentation for OpenAI, both as reported by the FT.

METR study finds Anthropic model advances are accelerated by use of AI

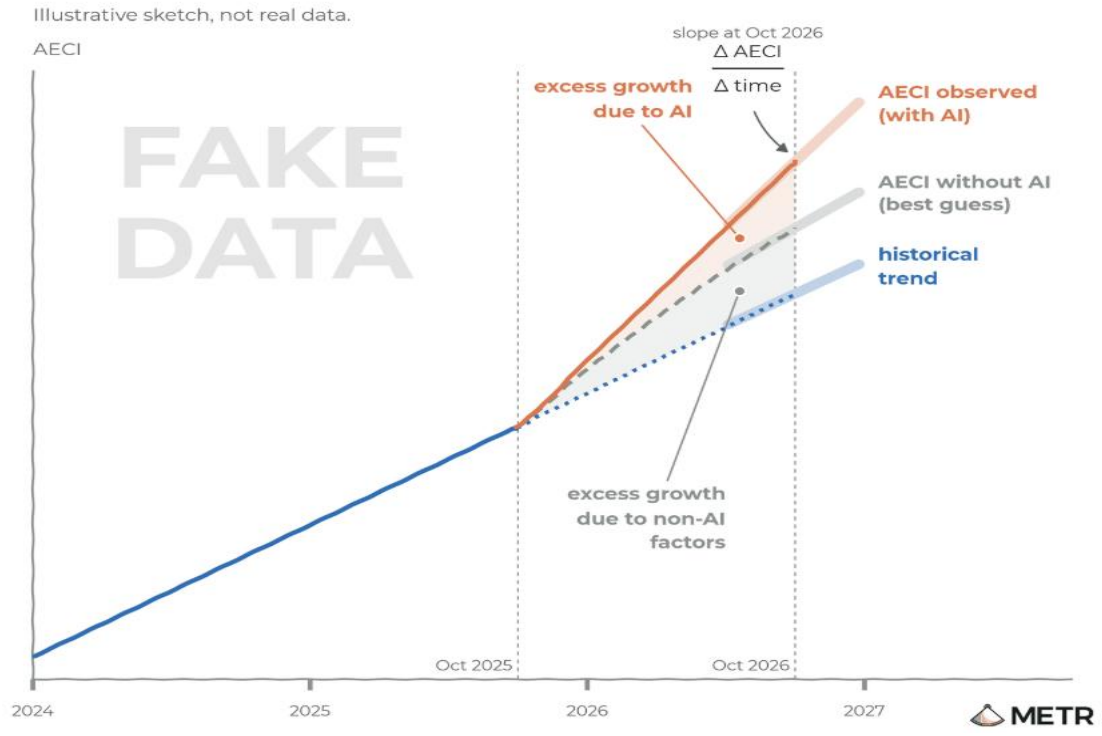
Using AI for research can accelerate model development but also raise 'loss-of-control' risk

Takeaway: Leading AI labs increasingly use AI to train AI. This leads to far more capable models at an *accelerating* pace, but it also increases the 'out-of-control' risk.

Key statements in METR October study

- **Acceleration:** "Most METR staff who worked on this project now believe that, as of October 2026, Anthropic is likely improving the capabilities of their models... at around twice the rate they did between March 2024 and October 2025".
- **Not driven by training compute:** "We were able to confidently determine that the acceleration was not due to an acceleration in the rate of growth of training compute".
- **AI training**: We guess that a majority (perhaps ≈80%) of the current (October 2026) acceleration is due to AI.
- **Risks from AI training**: "If AI systems started to significantly accelerate further AI development, this could lead to a sudden emergence of extreme and risky capabilities."

METR finds that model acceleration is achieved by using AI

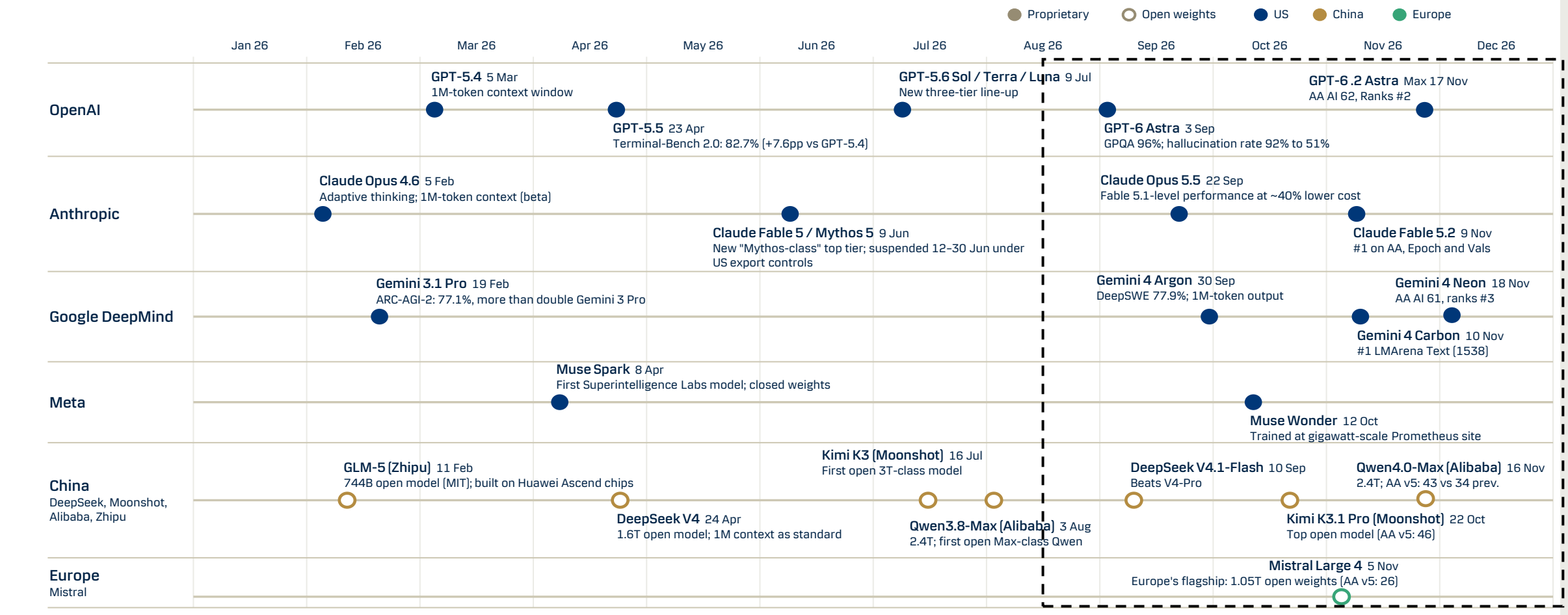


Note: AECI is Anthropic's version of the Epoch Capabilities Index

Source: METR: Independent Assessment of AI R&D Acceleration at Anthropic in October 2026, 5 November 2026

AI models: Many new model updates in November

Claude Fable 5.2 rank #1. Gemini has joined the race for best models with recent releases

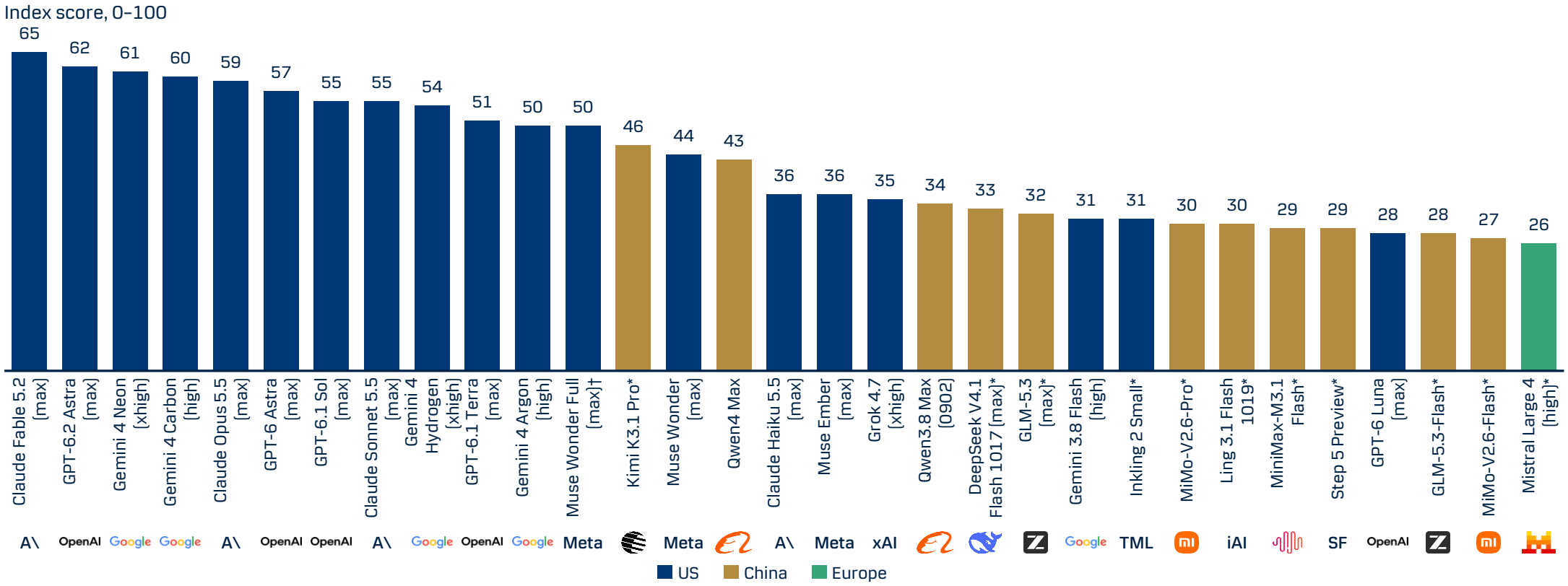


Source: Company announcements, model cards and release notes; Artificial Analysis (Intelligence Index v5.0.1, 12 Nov 2026); Reuters; Danske Bank. Selection of 20 releases, 1 Jan–13 Nov 2026. AA = Artificial Analysis.

AI models: Close race between Anthropic, OpenAI and Gemini at the top

The Chinese Kimi K3.1 Pro is the best open-weights model

Artificial Analysis Intelligence Index: score

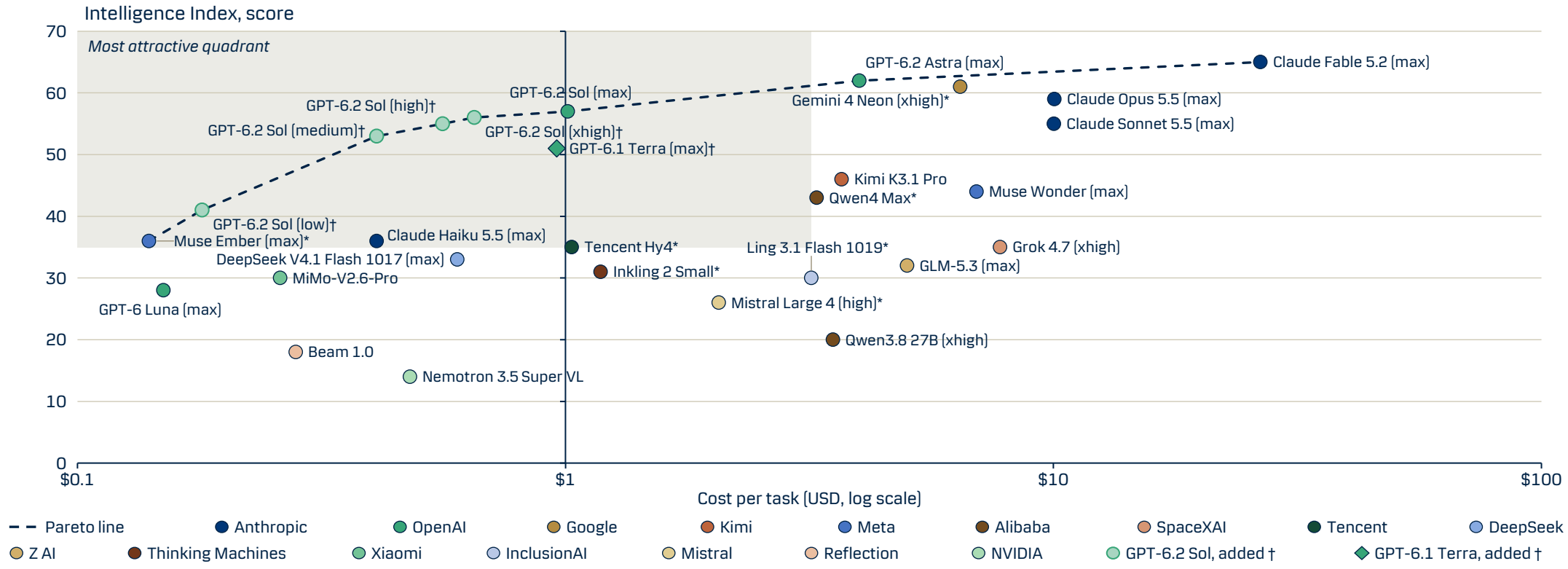


Source: Artificial Analysis (Intelligence Index v5.0.1, accessed 16 Nov 2026), Danske Bank. Best-scoring configuration per model; reasoning-effort setting in brackets. Scores as displayed by Artificial Analysis (rounded). * Open weights.

AI models: US labs compete with China through lighter and cheaper versions

GPT-6.2 Sol versions best value for money at lower end of price spectrum. Claude Fable 5.2 come with steep premium

Artificial Analysis Intelligence Index vs. cost per task



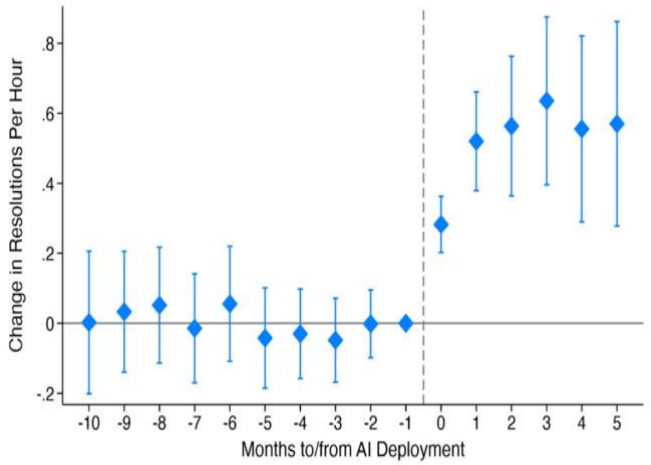
Source: Artificial Analysis (Intelligence Index v5.0.1, models leaderboard, accessed 13 November 2026), Danske Bank. Note: cost per task = weighted average USD cost per Index task, log scale. 27 models across the 16 developers in Artificial Analysis' chart; shaded quadrant = above median score and below median cost of the models shown.

Productivity: Few signs of broad productivity gains but too early to assess

J-curve effect normal in new technology

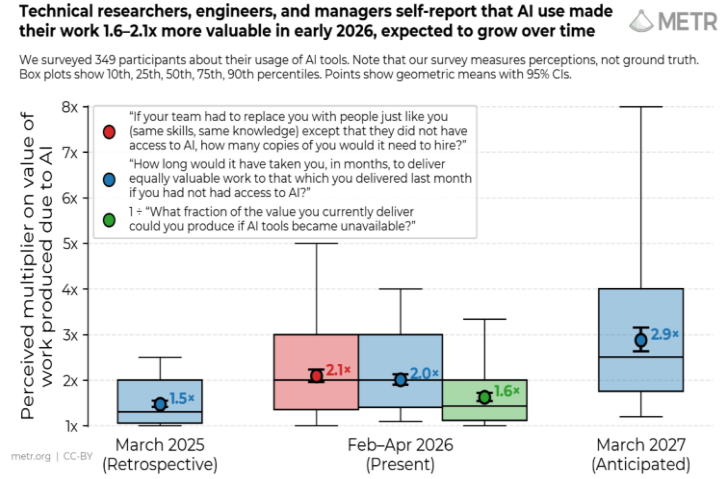
- For AI to be monetized it ultimately has to generate productivity gains big enough for businesses and consumers to be willing to "pay the bill" for the massive investments going into AI development.
- So far, there are few signs that AI has led to broad productivity gains. The main gains so far links to specific areas such as software coding and customer support, where tools have been easy to adopt and improved efficiency right away.
- As new technologies tend to show a J-curve effect on productivity, it is too early to assess broader gains. The J-curve effect is the pattern that introduction of new technologies often leads to lower productivity start with due to cost of investing in the tools and costs of learning how to benefit from it. Productivity gains show up at a later stage (see for example Is the AI productivity story at a turning point?)

Study of technical support functions show clear lift to productivity



Note: The chart shows number of cases solved ("resolutions per hour") in a technical support firm before and after AI was available.

Some areas already experience more efficiency using AI tools



Sources: METR, Quarterly Journal of Economics: Generative AI at work

Anecdotal evidence: Demand runs hot, but strains are showing

Statements from key tech players

Demand keeps surging

Microsoft: Satya Nadella (CEO), Q1 FY2027 earnings call, 28 October, on Copilot:
- *"Automated tasks have nearly doubled since July."*

Alphabet: Thomas Kurian (CEO, Google Cloud), Q3 2026 earnings call, 28 October, on firms that used Gemini Enterprise a year earlier:
- *"...more than quadrupled their spend with us year-over-year."*

Anthropic: IPO prospectus (S-1/A), November:
- *"Claude has experienced the fastest enterprise adoption of any technology in history..."*

Amazon: Andy Jassy (CEO), Q3 2026 earnings call, 29 October:
- *"...almost as fast as we install capacity, customers are gobbling it up."*

Strains in compute and prices

Nvidia: Colette Kress (interim CEO and CFO), Q3 FY2027 earnings call, 17 November:
- *"Token prices have fallen nearly 60% since May, accelerating token usage and demand for compute. As a result, GPU rental prices are rising across generations."*

OpenAI: launch of its GPT-6.2 Astra model, 17 November, on a test of multistep professional work:
- *"...GPT-6.2 Astra sets a new high, scoring 5.2 points higher than GPT-6 Astra at less than a third of the cost, and 5.5 points ahead of Claude Fable 5.2 at just 5% of the cost."*

Meta: Mark Zuckerberg (CEO), Q3 2026 earnings call, 21 October, on why its Muse agent is not yet global:
- *"In the near term, Muse is very compute-intensive to run..."*

Anthropic: Dario Amodei (CEO), event with JPMorgan's Jamie Dimon, 13 November:
- *"Compute is the deepest business dilemma that the company faces."*

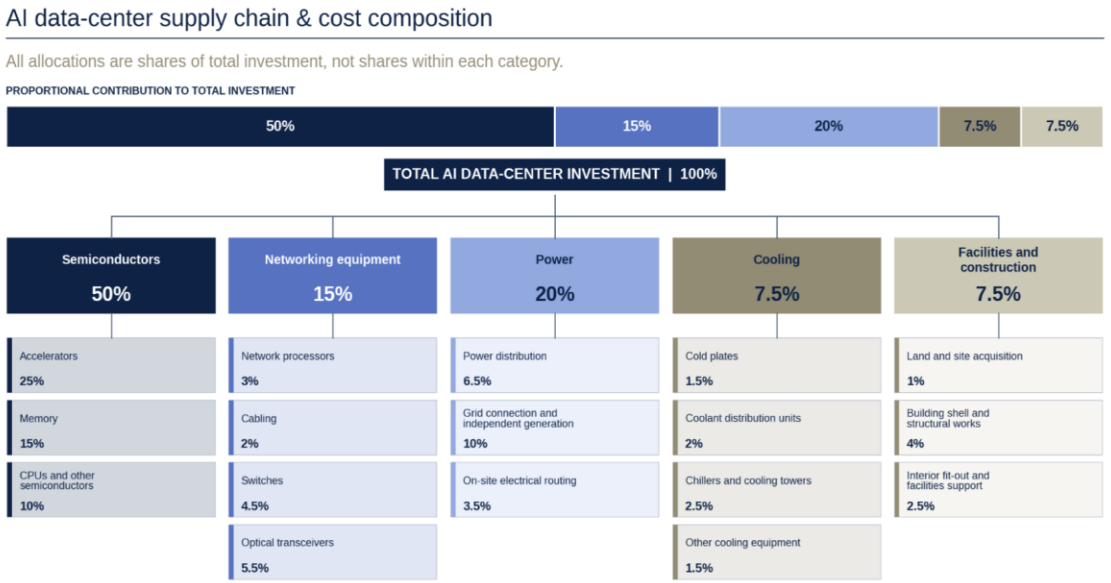
Source: Company earnings calls, filings, announcements and interviews (Microsoft, Alphabet, Anthropic, Amazon, Nvidia, OpenAI, Meta), Bloomberg, Danske Bank


Bottlenecks

Bottlenecks in chips and energy slowing AI built-out, but not stopping it

As AI capex is planned to increase by another 50% in 2027 bottlenecks could emerge as bigger headwind

Semiconductors 50% of data centre cost, power and cooling close to 30%



Most important bottlenecks over the next 12-24 months:

1. **Semiconductors: HBM and DRAM – worsening**
   Micron and SK hynix both point to a tighter memory market in 2027 than in 2026. Nvidia is already flagging extreme memory pricing. This is becoming both a volume constraint and a margin issue.

   Advanced packaging and test – unresolved
   TSMC is explicit that packaging capacity is limiting customer growth.

   Leading-edge wafers – tight but manageable
   TSMC, ASML and AMD suggest wafer and tool supply is tight but not currently the most binding constraint.

2. **Energy: Power and grid connection – worsening**
   Looks like the most critical constraint. Interconnection timelines are measured in years, turbine delivery slots are extending into the next decade, and grid operators are warning that load growth is outpacing supply. On-site power is a workaround, but introduces new constraints such as permits, fuel supply and turbine availability.

   Transformers, switchgear and electrical equipment – unresolved but improving
   Lead times remain long.

3. **Cooling: Not yet a binding constraint**
   Cooling appears more like an execution risk than a structural bottleneck. Vertiv and Schneider Electric both indicate that capacity is being added and lead times remain manageable.

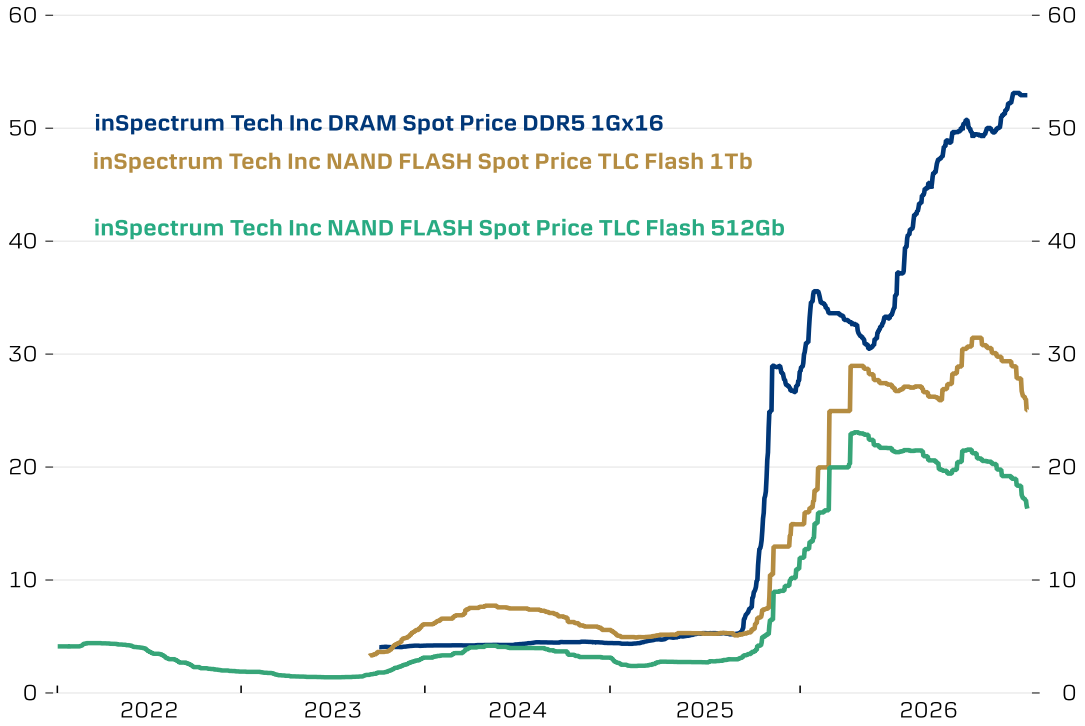
4. **Construction: Land, permitting and local opposition – worsening**
   This is unlikely to stop AI infrastructure demand, but it will change where capacity is built. Moratoriums, air permits and local resistance are pushing developers into smaller sites, new geographies and potentially less efficient builds.

Source: Danske Bank, It's time to build

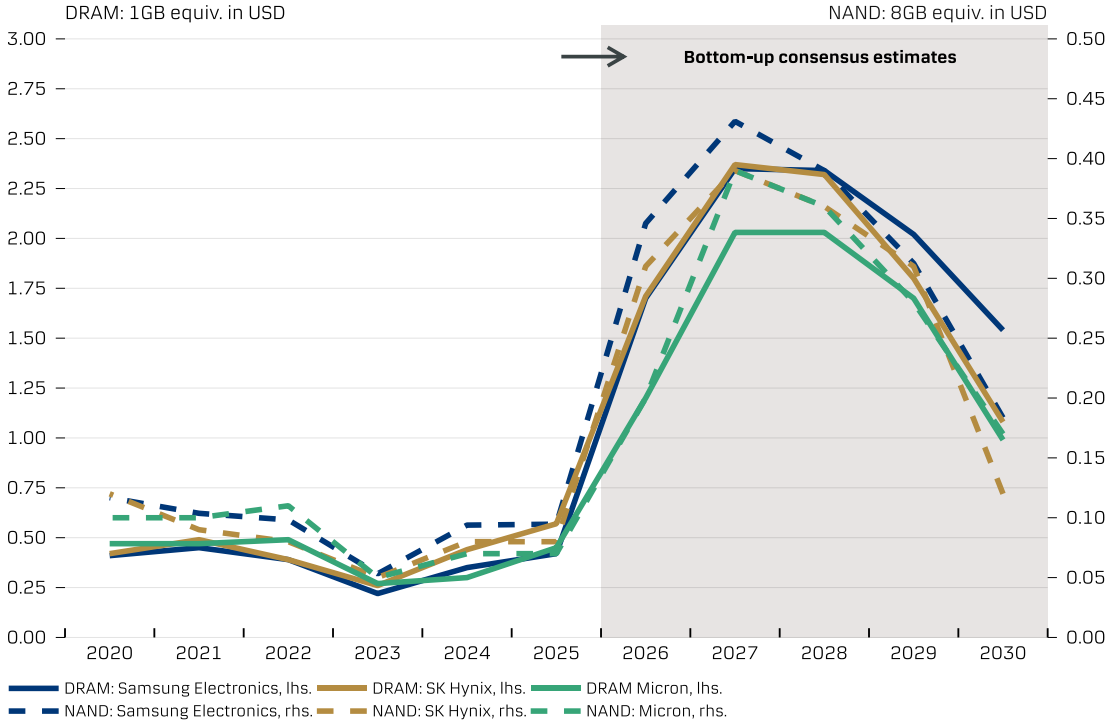
Semiconductors: Shortages of memory chips pushed up DRAM prices further

Prices on NAND coming down

Prices on memory chips have increased substantially due to shortages. Memory chip producers plan to double capacity by 2030 to meet demand



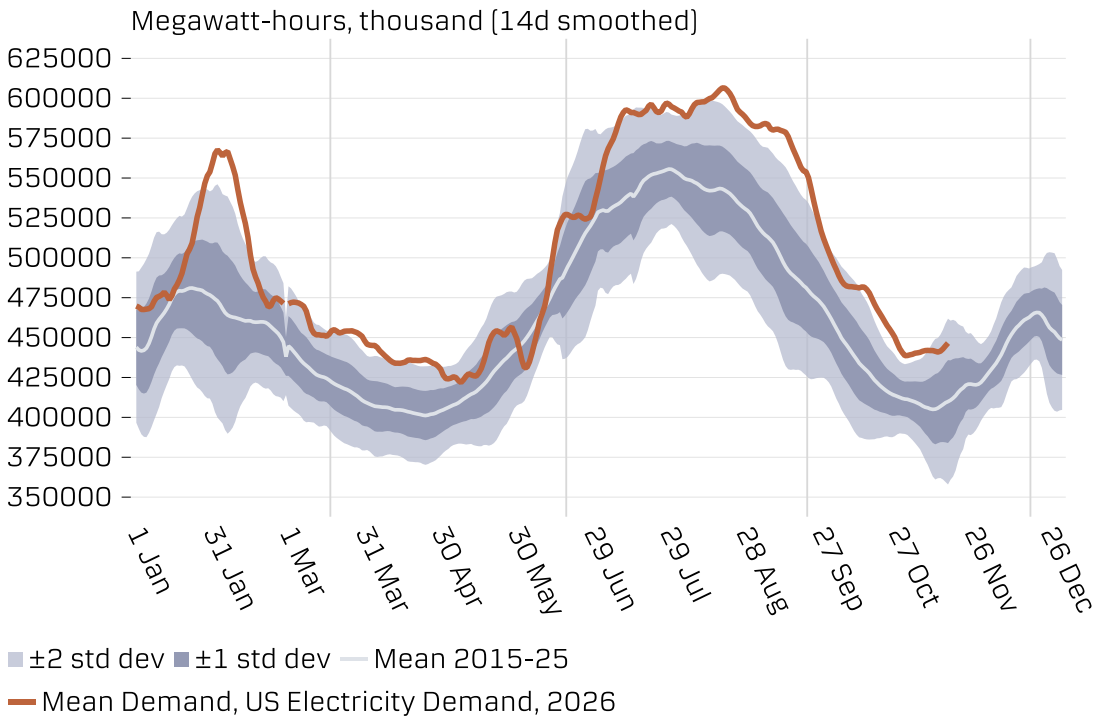
Analysts expect memory chip prices to peak in 2027/28



Source: Visible Alpha consensus estimates, Macrobond

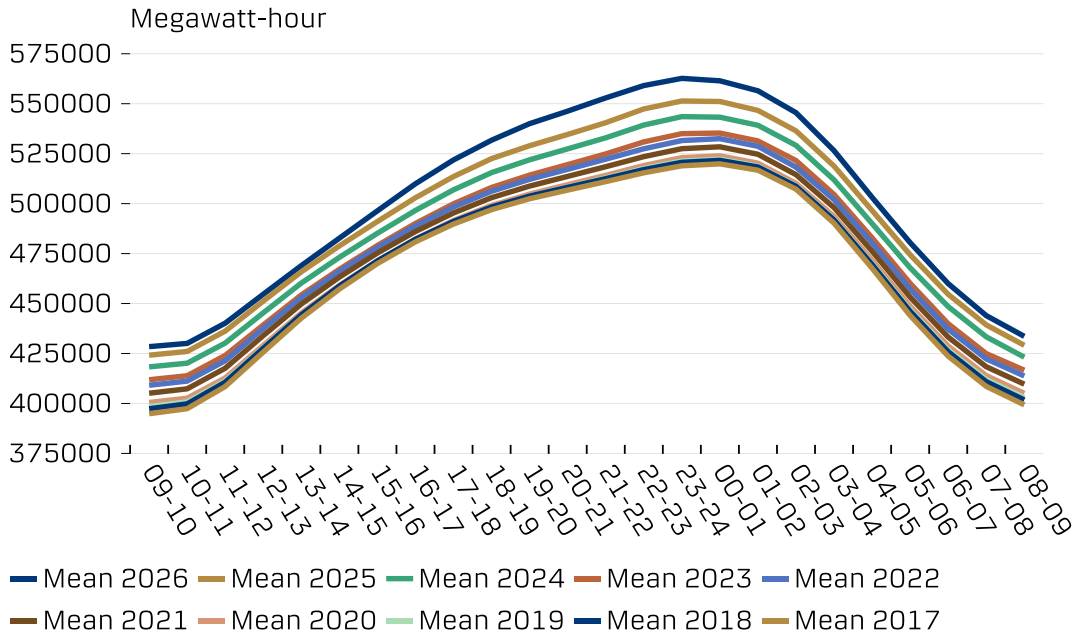
Energy: US grid under pressure as demand increases

2026 is already large energy consuming year



Mean demand for electricity is moving higher increasingly the last couple of years

US Electricity Demand Hourly - UTC Time



Source: Macrobond, EIA

Energy: Data centres will need to bring their own electrons

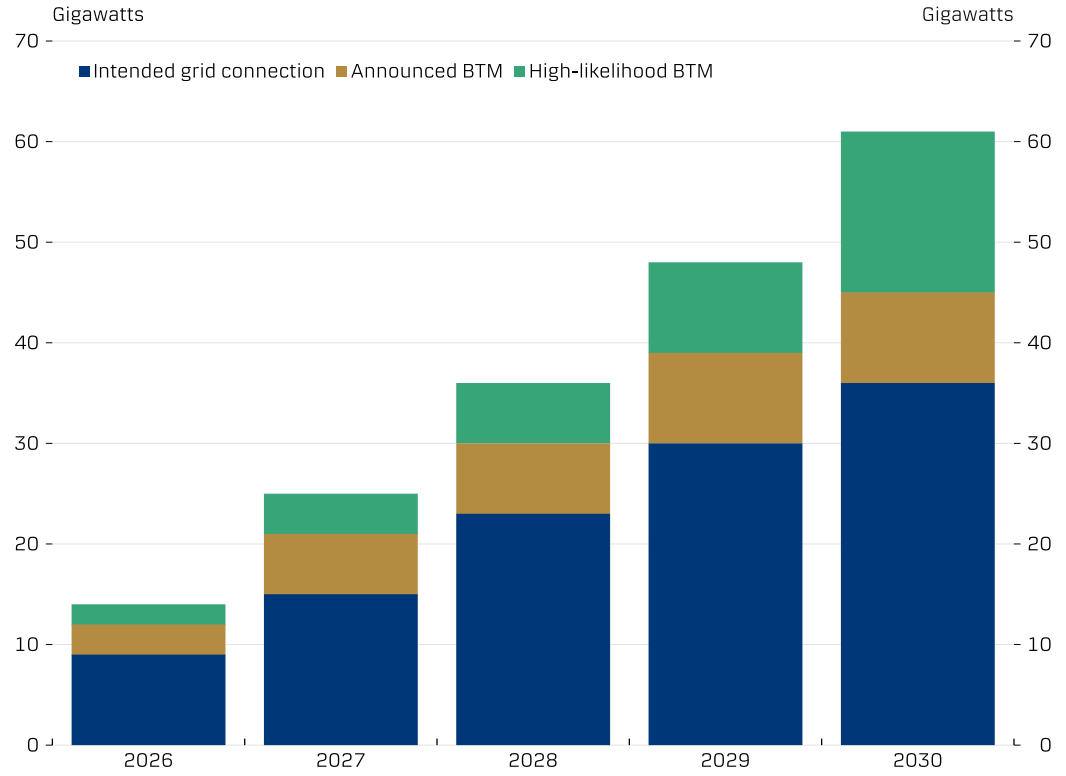
BTM adoption is accelerating across the US. Tighter regulation following US election will only add to this trend.

Behind-the-meter (BTM) vs. standard Front-of-the-meter (FTM)

- FTM connection is the standard approach to electricity supply, providing access to grid services and broader market-based power procurement options. Waitlist can be up to 5 years for larger data centre projects posing a clear bottleneck
- BTM refers to energy installations located on-site or directly connected to a facility, enabling power generation without relying solely on the public grid. This can help secure power supply, reduce exposure to grid congestion and bypass long grid connection queues.
- Hybrid BTM models combine grid access with on-site generation, providing both flexibility and resilience. On the other hand, adds regulatory exposure, longer equipment lead times, and project complexity.
- BTM adoption is the most relevant for large-load facilities where the cost and complexity are justified, typically above 100 MW.

Note: Inter connection queue is the official waitlist and engineering review process that power generation, energy storage, and large transmission projects must complete before connecting to the public electricity grid.

US data centre electricity expansion to be mainly driven by BTM grids (located on-site)

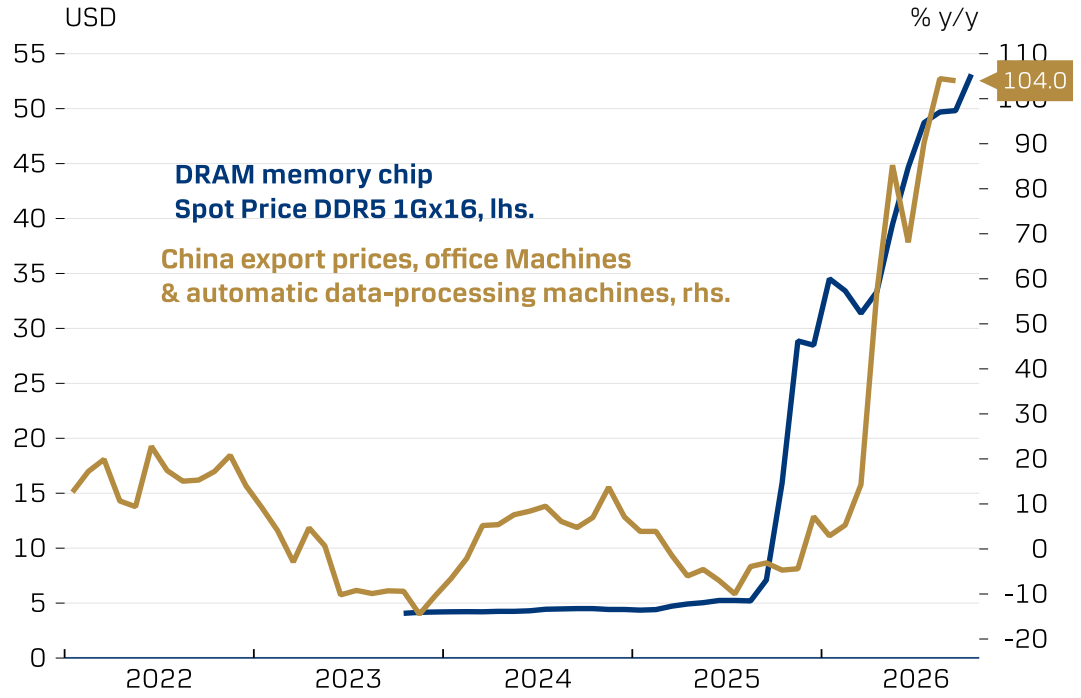


Source: Rystad Data Center Report 2026

Inflation: Rise in memory chip prices adds to global inflation impulse

Chinese export price inflation remains high

The sharp rise in prices of memory chips has lifted Chinese export prices on mobile phones, laptops and other electronics...



... leading to highest rise in export price inflation since covid



Source: Macrobond, Bloomberg, GAC



The Equity Perspective

The Equity Perspective

Scope and analytical framework

The Equity Perspective provides a comprehensive framework for understanding how the AI investment cycle is developing across global equity markets. We have tried to put together the key indicators required to assess the scale, direction and financial implications of the AI buildout.

The purpose is to give investors a transparent and regularly updated framework for identifying the most important developments, dependencies and potential imbalances within the AI investment cycle.

AI cannot be understood through a single sector, industry classification or group of companies. The investment landscape encompasses several distinct, but highly interconnected, parts of the value chain. These include hyperscalers, semiconductor companies, hardware and infrastructure providers, software companies, AI laboratories and the broader group of companies adopting or benefiting from AI. Each segment has different business models, capital requirements, competitive dynamics and sensitivities to the AI investment cycle. The tracker therefore distinguishes clearly between the companies financing the buildout, those supplying the necessary infrastructure and those seeking to monetise AI through products, services and productivity improvements.

AI is increasingly shaping sector and industry performance, while the geographical distribution of AI capabilities is creating substantial differences across countries and regions. Exposure to hyperscalers, semiconductor manufacturing, data-centre infrastructure, software and AI applications varies significantly between the US, Asia, Europe and the broader global equity market. Consequently, sector and industry composition will dominate traditional regional equity comparisons. The Equity Perspective maps these differences and illustrates how the AI cycle is changing the composition, concentration and earnings profile of major equity markets.

The tracker follows the cycle through a consistent set of financial and market indicators. These include equity performance, revenue growth, earnings expectations, capital expenditure, free cash flow, profitability and valuation. The analysis also includes supply-and-demand conditions and relevant capacity constraints across the AI value chain.



The evidence has yet to disqualify the buildout

Our current assessment of the AI equity landscape

- Assessing an investment cycle of this speed and scale involves considerable uncertainty. The past month has tested sentiment rather than fundamentals, as an exceptional sector rotation out of IT, amplified by the Democratic sweep in the US midterms, repriced AI-related equities sharply. The indicators we monitor have not followed prices lower, and we remain constructive.
- Earnings and fundamentals are as intact as a month ago. With NVIDIA's results, Q3 reporting is largely complete: all the major semiconductor companies beat earnings expectations, as did four of the big six hyperscalers. Market reactions have nevertheless been muted. Cash generation remains split: the hyperscalers are expected to burn cash in 2026, while semiconductor companies generate more than USD 400bn.
- Valuations have become considerably more attractive. Global IT now trades below MSCI ACWI on 12M forward P/E, the widest discount since 1995, whereas tech normally trades at a premium. Semiconductors trade at less than half the multiple of software despite far stronger earnings growth, and EM Asia trades at its lowest P/E in 15 years.
- Politics has become a more tangible risk. Data centre restrictions could delay part of the capacity due in 2028, but most of next year's buildout is already under construction and capex plans are still rising. Monetisation remains the central uncertainty, but the heavily oversubscribed Anthropic IPO shows that appetite for AI remains strong.
- We are aware of the uncertainties, but the rotation has happened without earnings or fundamentals playing any real part, making the entry point even more attractive in our view. The evidence continues to support the AI investment cycle, although the distribution of risks and returns remains highly uneven.

	Semiconductors Chip suppliers for data centres	**AI labs & application providers** Model developers and AI software	**Hyperscalers & neoclouds** Cloud and AI compute capacity
Share price performance	Hit hardest by the rotation: NVIDIA down around 27% in a month	Software derated: Solid but still lagging	Most resilient: Amazon up 11% YTD as midterms favour existing capacity
Earnings	Exceptional: all major semis beat in Q3, 2026E earnings seen more than doubling	Revenue soaring: Anthropic run-rate c. USD 81bn, but labs still loss-making	Solid: four of the big six beat in Q3, Amazon and Alphabet a touch short
Capex	Hyperscaler capex is their revenue: NVIDIA guides Q4 sales up c. 90% y/y	Huge compute needs: Anthropic commitments c. USD 900bn, IPO adds funding	Plans still rising, but midterms put 2028 data centre permits at risk
Free cash flow	Cash machines: semis seen generating more than USD 400bn of FCF in 2026E	Labs burning cash; listed app providers solidly cash-generative	Big six FCF seen at c. USD -170bn in 2026E; a slower build would ease it
Valuation	Undemanding: c. 11x 12M fwd. P/E for NVIDIA, c. 2.2x for SK Hynix	Stretched: Palantir still c. 64x 12M fwd. P/E despite the derating	Reasonable: c. 12-24x 12M fwd. P/E for the big six (ex SpaceX)

1) Boom accelerates 2) Boom continues 3) Warning signs 4) AI bust

Mapping the AI value chain across equities I

Many of the most important AI leaders in the US are companies classified outside the IT sector

Magnificent 7

Company	Market cap (USDbn)
Apple	5.100
Microsoft	3.700
Nvidia	3.500

Company	Market cap (USDbn)
Amazon	2.800
Tesla	1.500

Company	Market cap (USDbn)
Alphabet	3.300
Meta	1.500

#	Global sectors	Weight (%)
1	**Information Technology (IT)**	**31.2**
2	Financials	16.6
3	Industrials	10.2
4	Health Care	9.4
5	**Consumer Discretionary**	**8.6**
6	**Communication Services**	**7.0**
7	Consumer Staples	5.1
8	Energy	4.5
9	Materials	3.5
10	Utilities	2.4
11	Real Estate	1.5

AI labs & application providers

Company	Market cap (USDbn)
Anthropic	1.750

Other semiconductors

Company	Market cap (USDbn)
AMD	800
Applied Materials	300
Broadcom	1.700
Intel	300
Micron	800

Other hyperscalers

Company	Market cap (USDbn)
Oracle	300

Company	Market cap (USDbn)
SpaceX	1.900

Source: MSCI GICS Classification, LSEG Data & Analytics, (Anthropic fully diluted)

Mapping the AI value chain across equities II

The global leaders across AI, hyperscalers and semiconductors, ranked by market capitalisation

AI labs & application providers

Country	Company	Sector	mCap (USDbn)
	Alphabet**	Comm. Services	3,338
	SpaceX**	Comm. Services	1,880
	Anthropic	IT	1,750***
	Meta Platforms**	Comm. Services	1,524
	Tesla	Cons. Disc.	1,480
	OpenAI*	IT	1,250
	Tencent**	Comm. Services	399
	Palantir	IT	370
	Alibaba**	Cons. Disc.	207
	Salesforce	IT	151
	SoftBank Group	Comm. Services	126
	AppLovin	Comm. Services	126
	Snowflake	IT	95
	ServiceNow	IT	92
	Baidu**	Comm. Services	22

Hyperscalers and neoclouds

Country	Company	Sector	mCap (USDbn)
	Microsoft	IT	3,700
	Alphabet**	Comm. Services	3,338
	Amazon	Cons. Disc.	2,783
	SpaceX**	Comm. Services	1,880
	Meta Platforms**	Comm. Services	1,524
	Tencent**	Comm. Services	399
	Oracle	IT	345
	IBM	IT	212
	Alibaba**	Cons. Disc.	207
	Equinix	Real Estate	101
	NTT	Comm. Services	85
	Digital Realty	Real Estate	66
	Nebius	IT	28
	CoreWeave	IT	25
	Baidu**	Comm. Services	22

Semiconductors (chip suppliers for datacentres)

Country	Company	Sector	mCap (USDbn)
	NVIDIA	IT	3,524
	Broadcom	IT	1,655
	TSMC	IT	1,648
	Samsung Electronics	IT	946
	AMD	IT	802
	Micron	IT	781
	SK Hynix	IT	631
	ASML	IT	541
	CXMT	IT	380
	Intel	IT	296
	Applied Materials	IT	269
	Texas Instruments	IT	261
	Lam Research	IT	254
	Arm	IT	190
	KLA	IT	184

Source: MSCI GICS Classification, LSEG Data & Analytics, Anthropic fully diluted

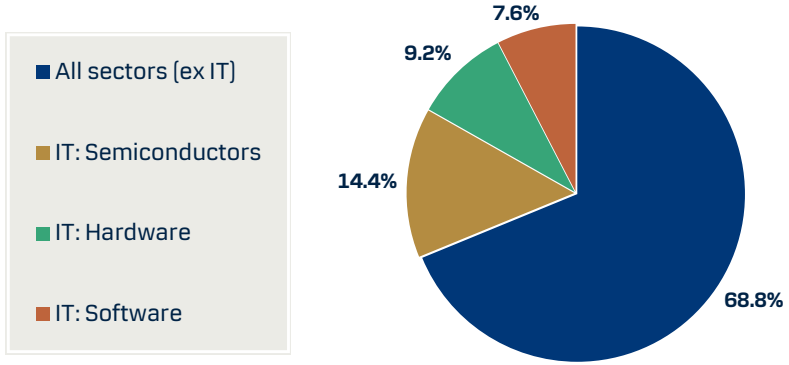
**Note: Not yet listed. OpenAI at latest funding round valuation; expected GICS sector: IT.*

***Note: Included in both AI and Hyperscalers due to own frontier AI models and large-scale cloud/AI compute capacity. ***Note: Anthropic fully diluted market cap.*

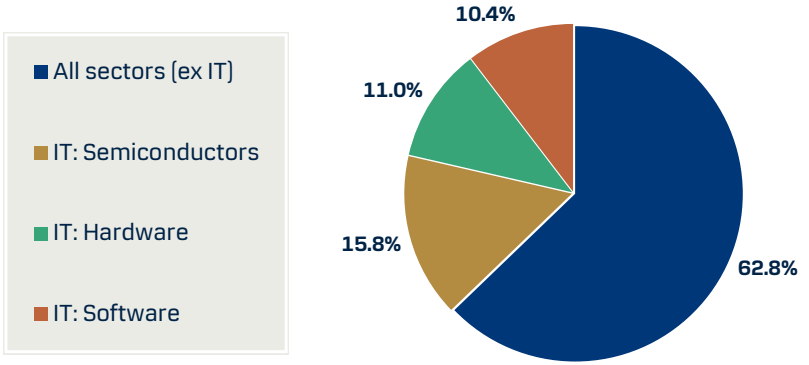
Technology shapes regional equity markets very differently

IT exposure varies widely across regions, driving significant differences in equity market composition

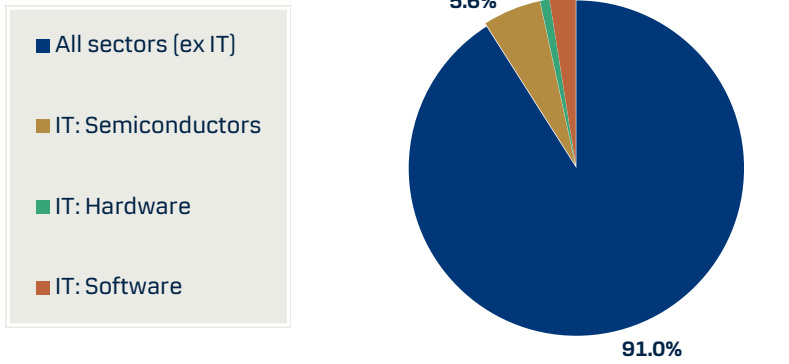
Global



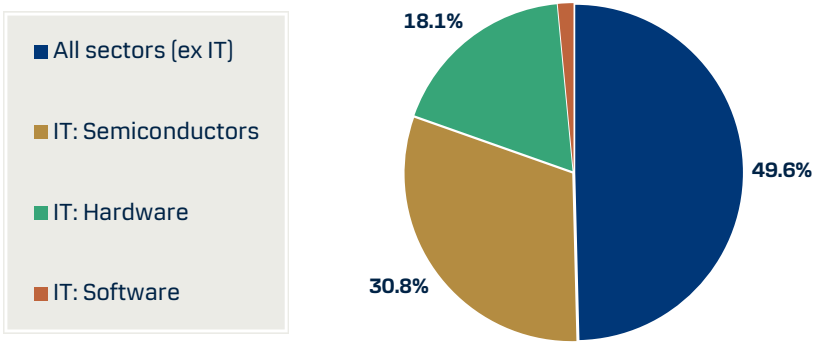
United States



Europe



Emerging Markets (Asia)

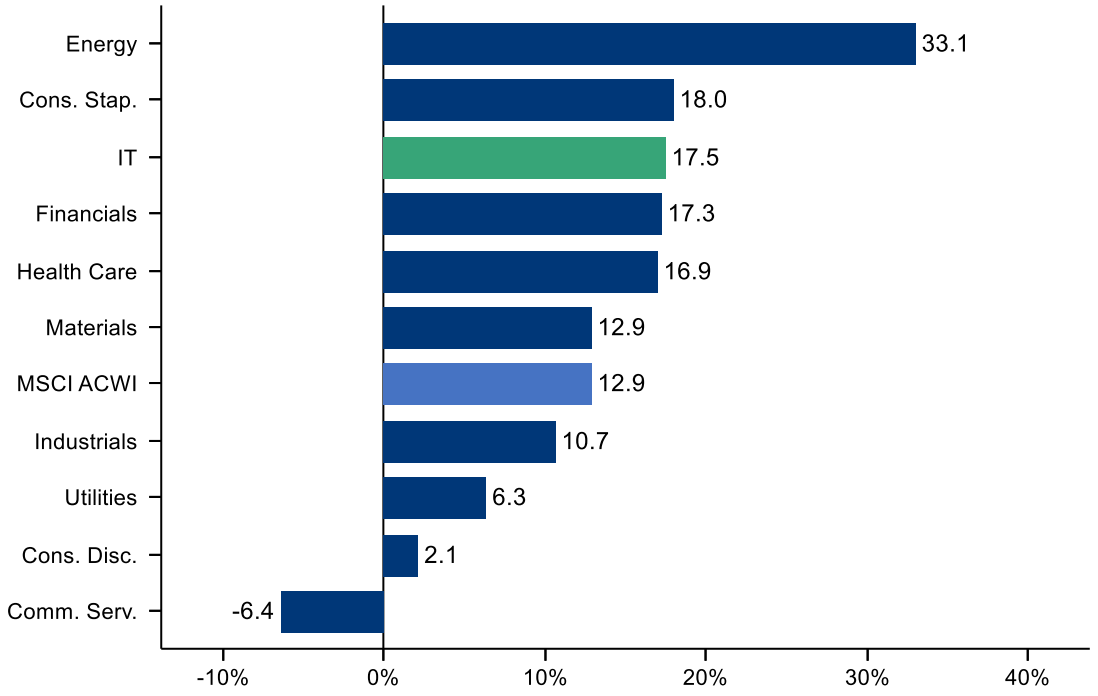


Source: MSCI, LSEG Data & Analytics, Bloomberg

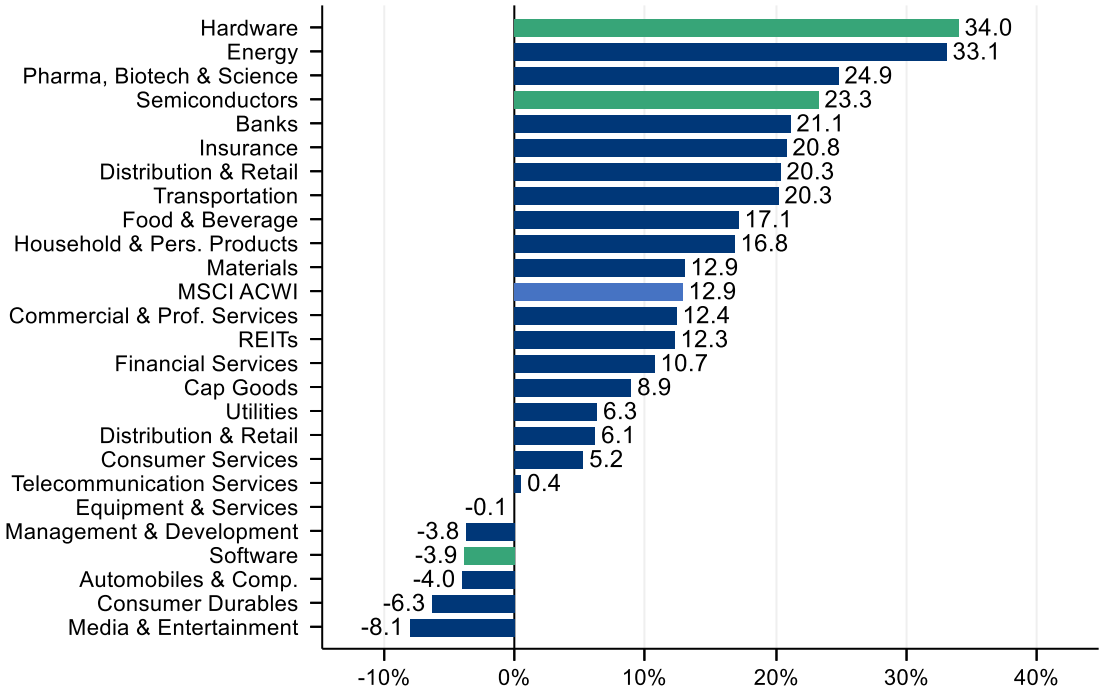
Performance: Technology leadership masks a sharp divide within the sector

Semiconductors and hardware have led global equities, while software has lagged over the past 12 months

12M total return by GICS Sector



12M total return by GICS Industry Group



Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

Earnings: Technology's exceptional earnings growth stands out

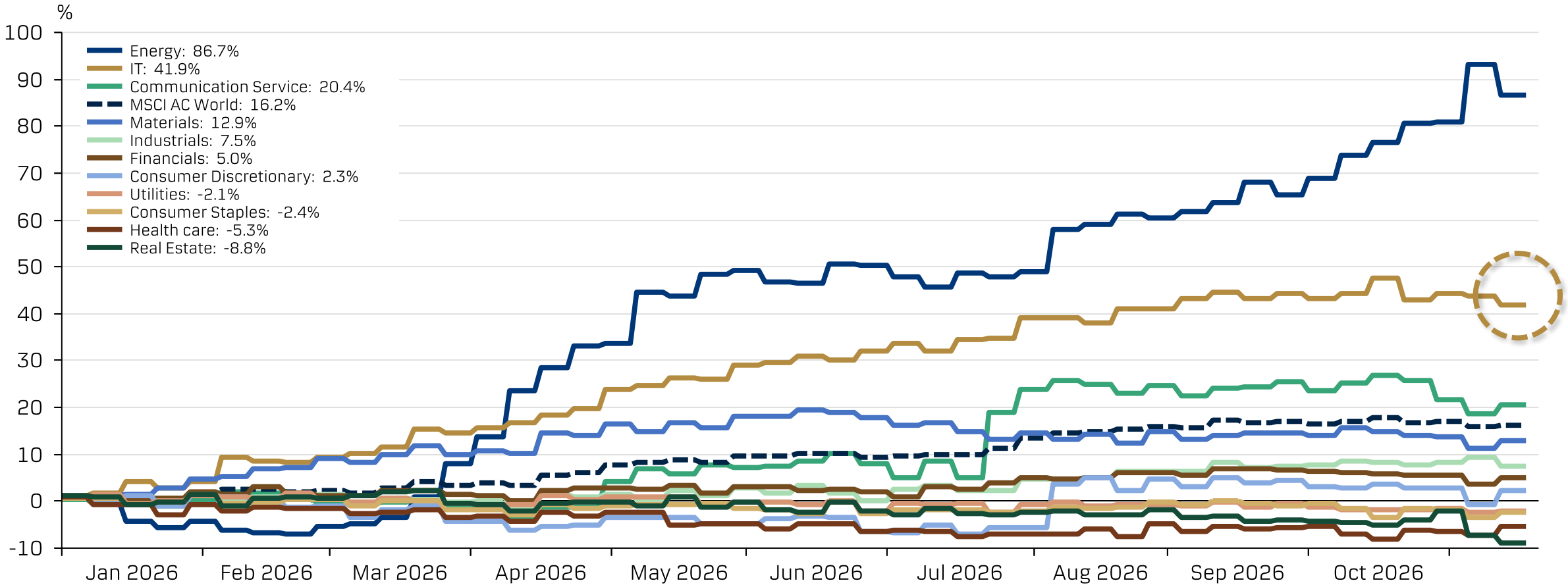
Global IT earnings are expected to nearly double in 2026, while valuation multiples decline sharply towards 2028

	EPS Growth (E)			P/E		
	2026E (%)	2027E (%)	2028E (%)	2026E (x)	2027E (x)	2028E (x)
MSCI ACWI	**38**	**18**	**14**	**18**	**15**	**13**
Industrials	26	14	14	21	19	17
Cons. Disc.	41	7	20	21	20	17
Cons. Stap.	7	7	8	22	21	19
Health Care	5	18	11	22	19	17
Financials	13	9	10	14	13	12
IT	**95**	**49**	**22**	**21**	**14**	**11**
Comm. Serv.	32	-4	17	16	17	14
Utilities	8	8	9	17	16	15
Energy	97	-8	-15	10	11	12
Materials	47	10	8	16	14	13
Real Estate	-4	1	15	16	16	14

Source: I/B/E/S consensus, LSEG Data & Analytics

Earnings: IT's earnings upgrades amount to several years of normal growth

YTD IT earnings estimates have risen more than 40% YTD, equivalent to roughly 4-5 years of normal earnings growth



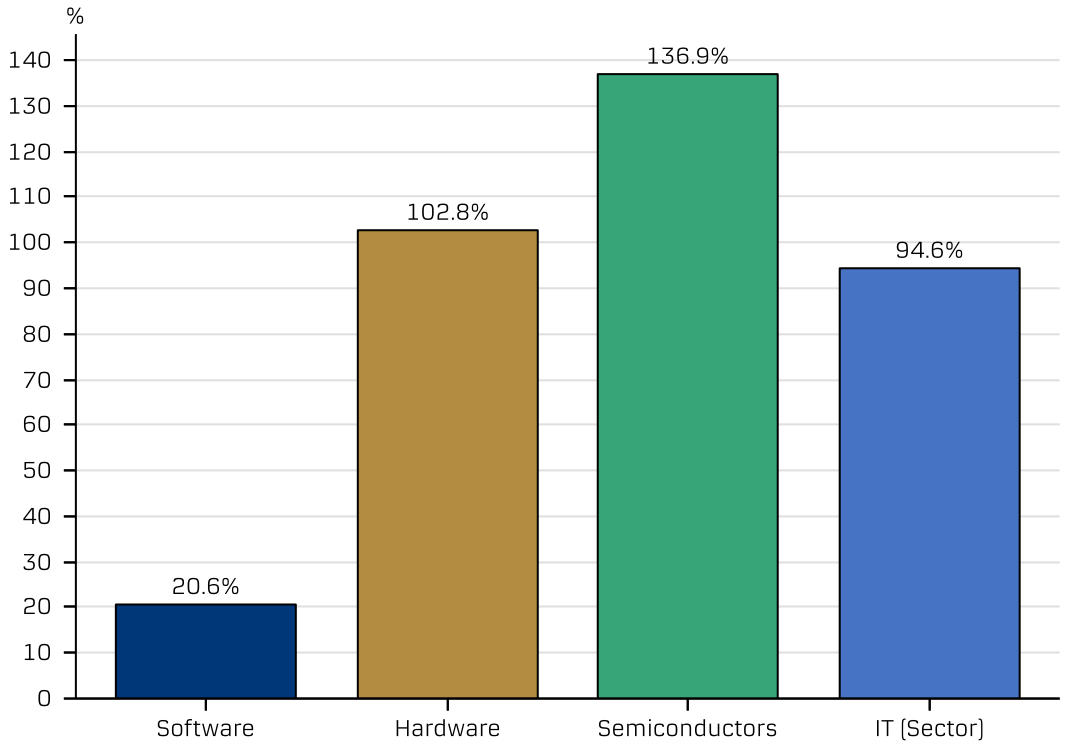
Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

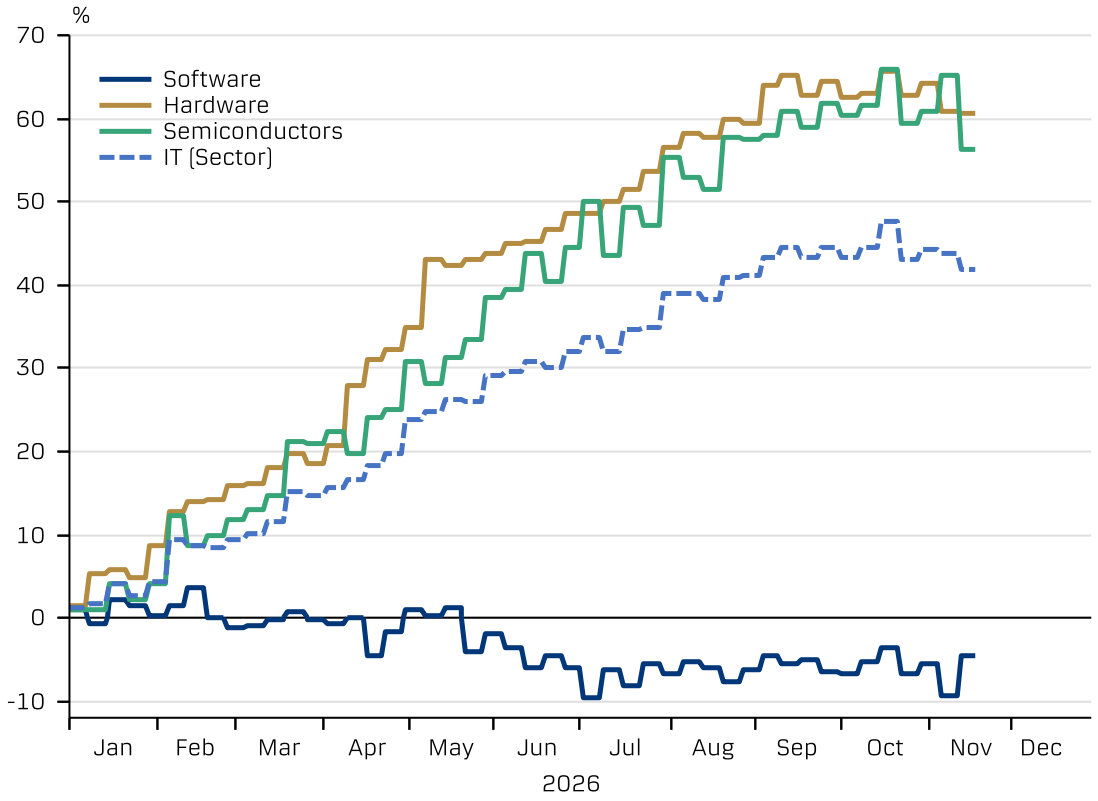
Earnings: Hardware and semiconductors are powering IT earnings

Both industries lead 2026 earnings growth and upgrades, while software remains the clear laggard

Expected 2026 earnings growth by IT industry group



YTD revisions to 2026 earnings estimates by IT industry group



Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

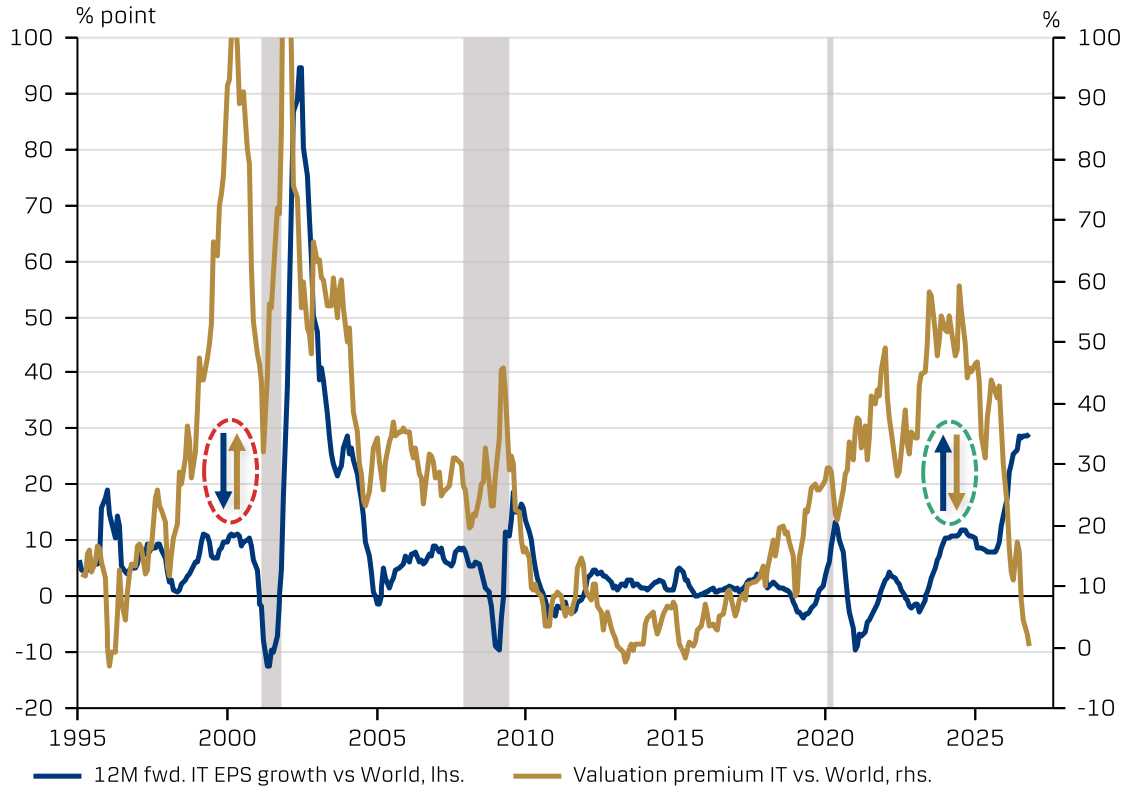
Valuation: Technology's earnings boom is not a valuation bubble

Unlike during the dot-com era, strong relative earnings growth has coincided with multiple compression

IT versus global market P/E



IT relative earnings growth versus valuation premium

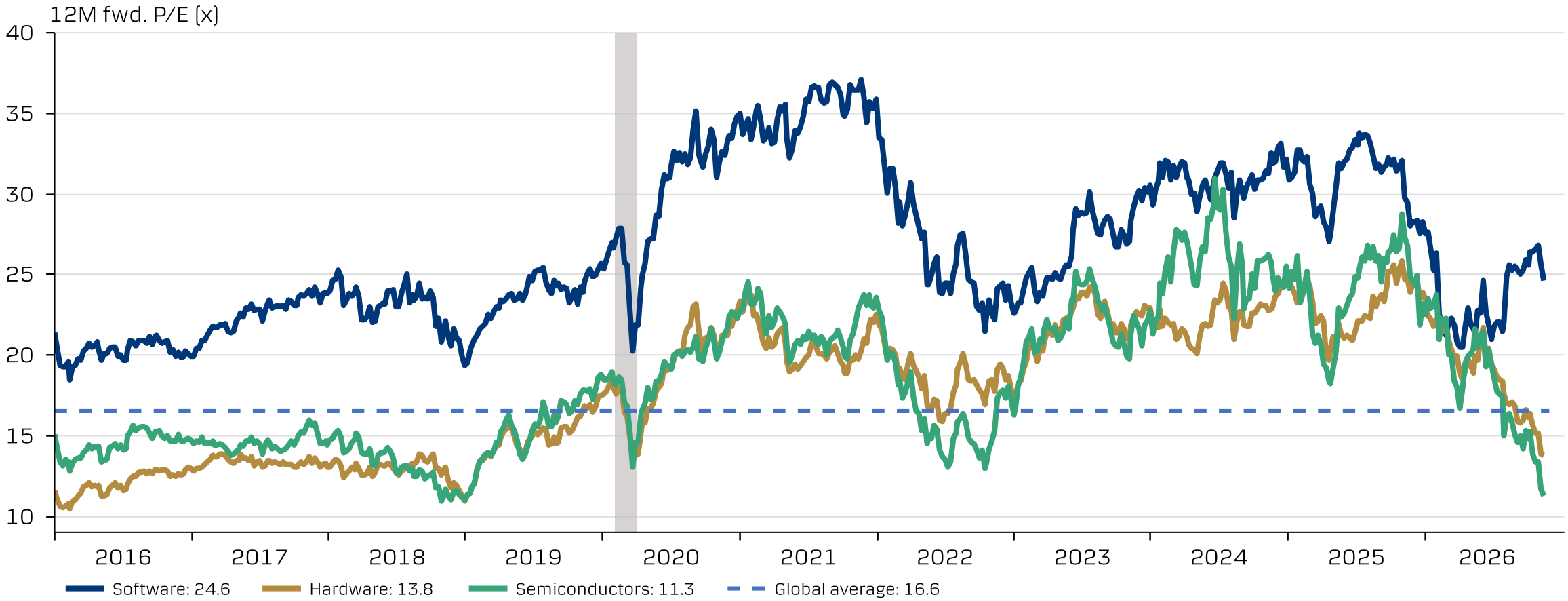


Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

Valuation: Technology valuations are below their post-2010 average

The IT sector currently trades at around 14x 12M forward earnings, below its 18.5x average since 2010



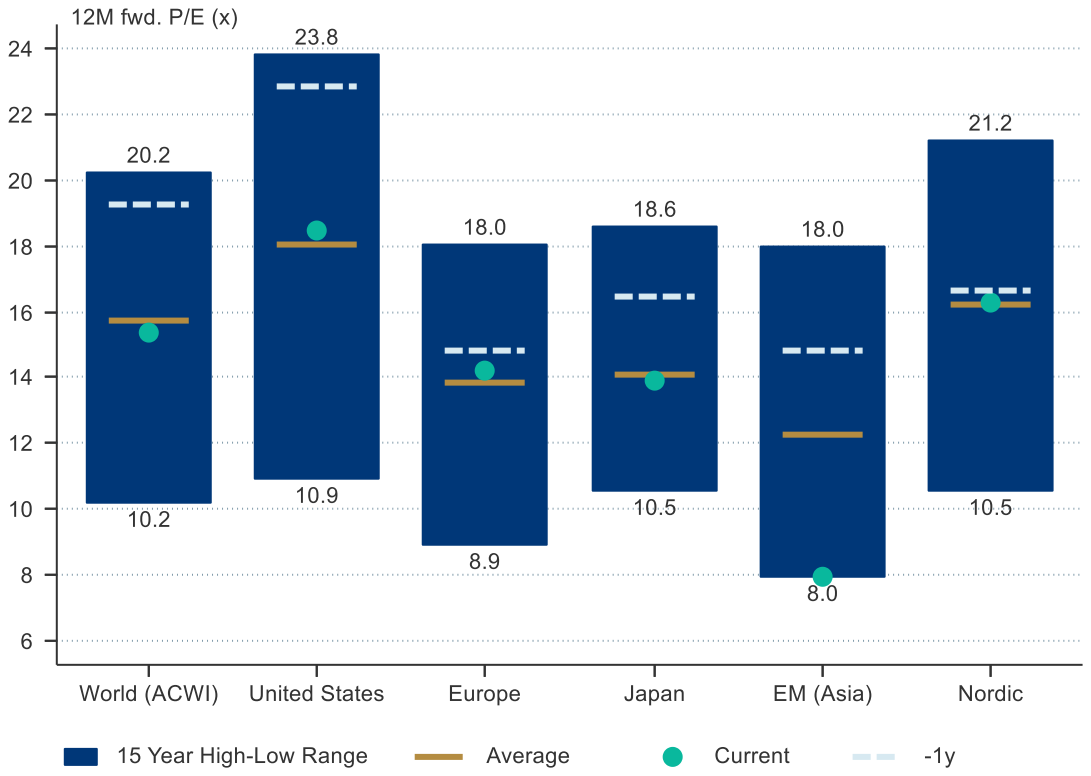
Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

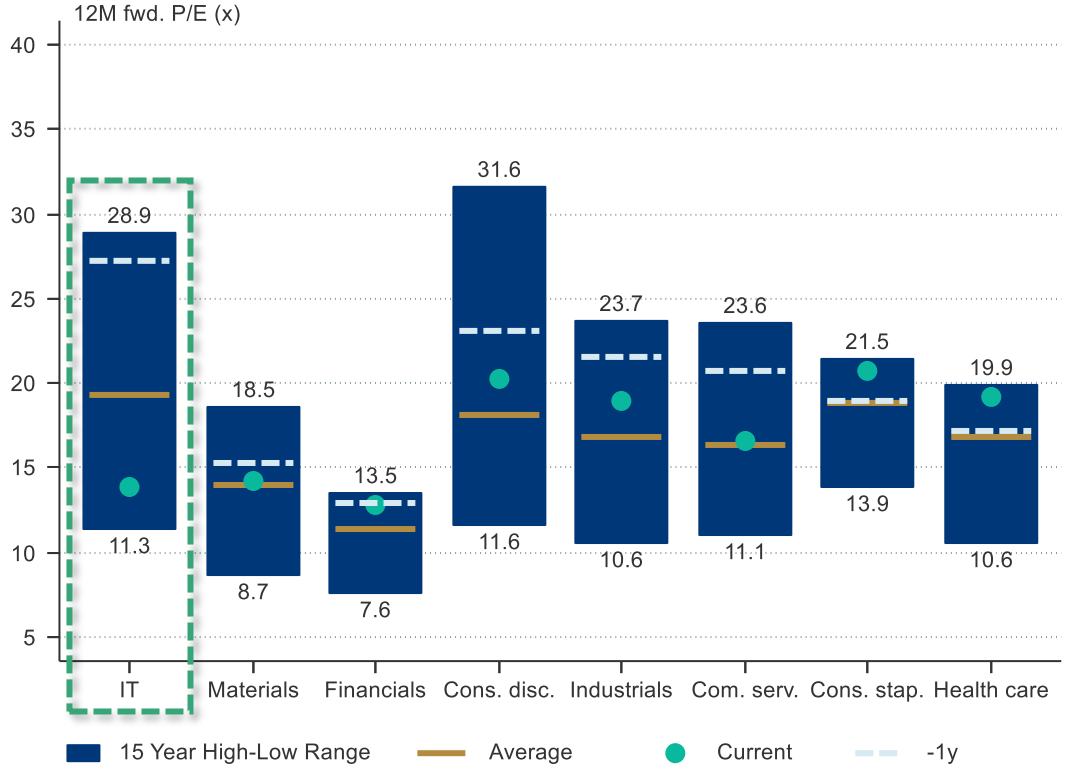
Valuation: The valuation data challenge the "expensive technology" narrative

IT valuations have declined over the past year, alongside significant multiple compression in the US and EM Asia

12M forward P/E across regions: current vs. 15y range



12M forward P/E across sectors: current vs. 15y range



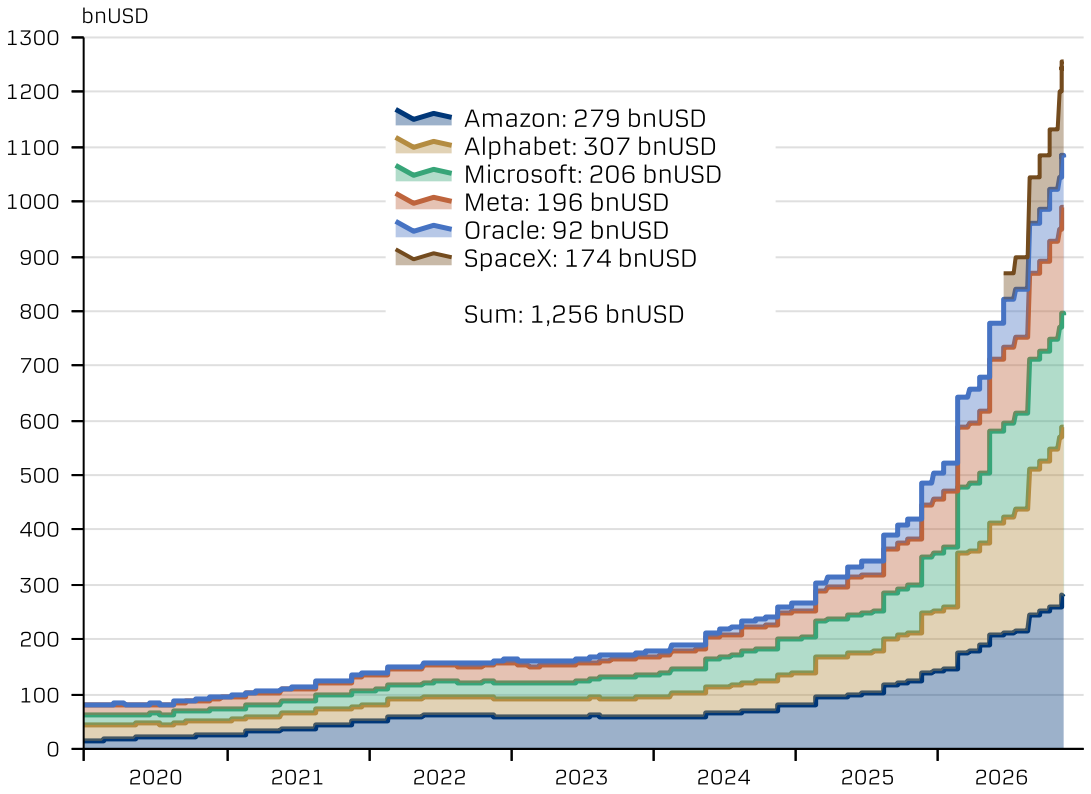
Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

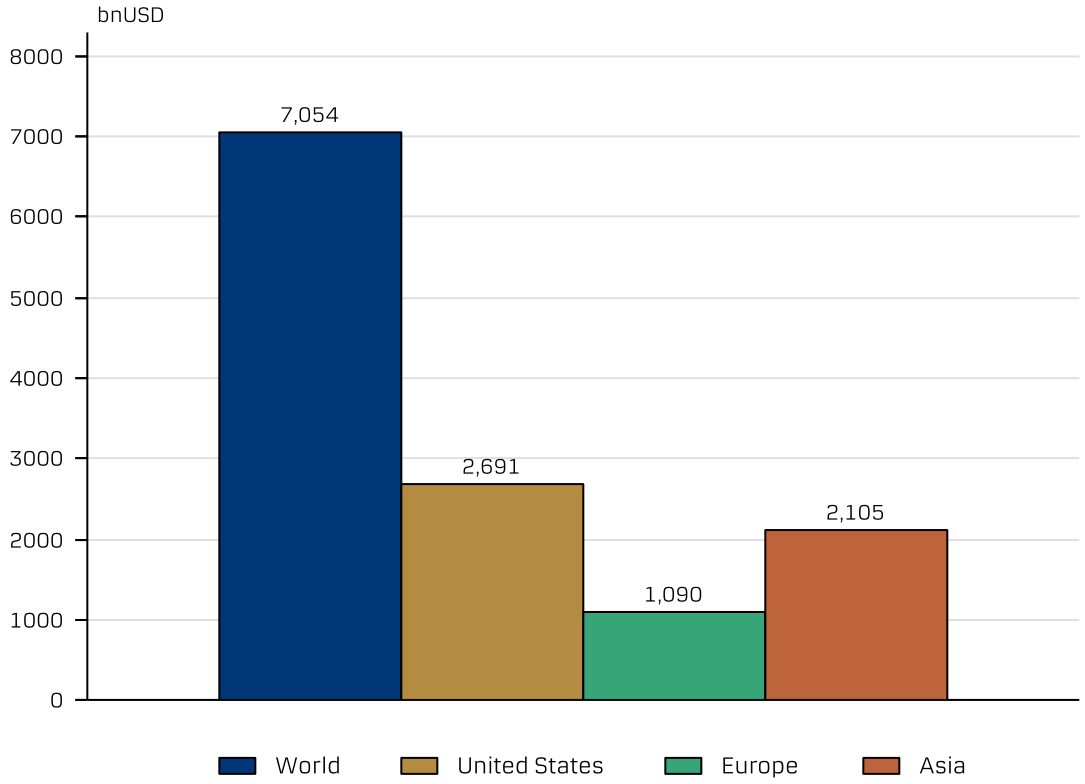
Capex: 6 hyperscalers are set to account for 47% of US equity market

Their combined 12M forward capital expenditures (CAPEX) has reached USD 1.25tn amid the AI buildout

12M forward capex across the six US hyperscalers



12M forward capex across World and regional equity markets

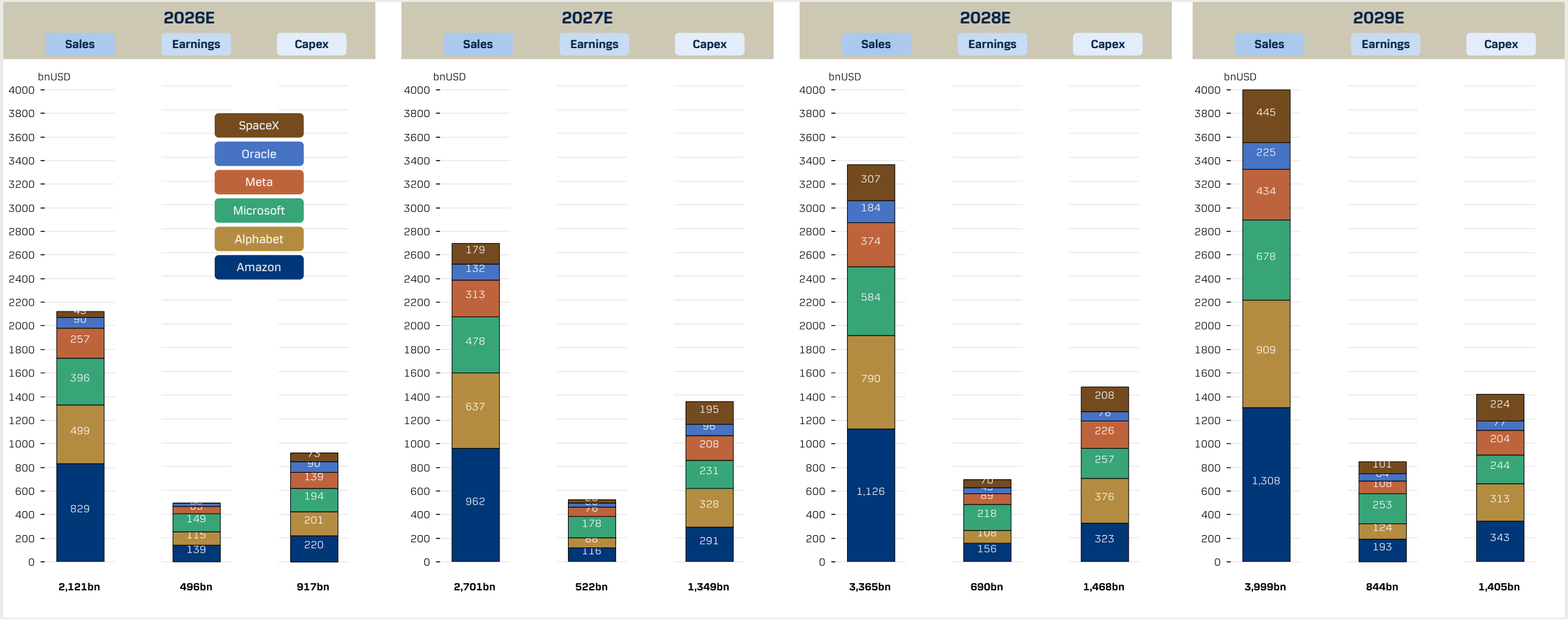


Source: I/B/E/S Consensus, LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

Capex: The AI investment bill is large, but so is the revenue opportunity

By 2029E, hyperscaler capex is projected at roughly 1/3 of sales as the AI buildout scales across the industry



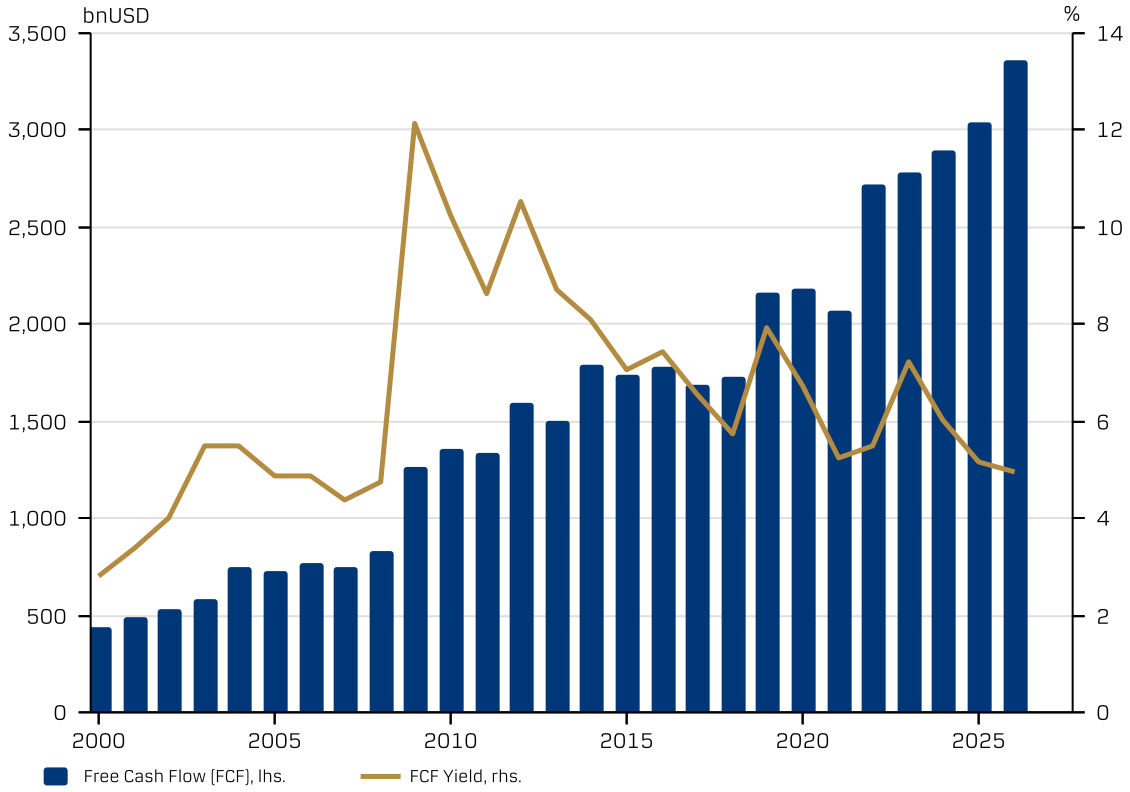
Source: I/B/E/S Consensus, LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

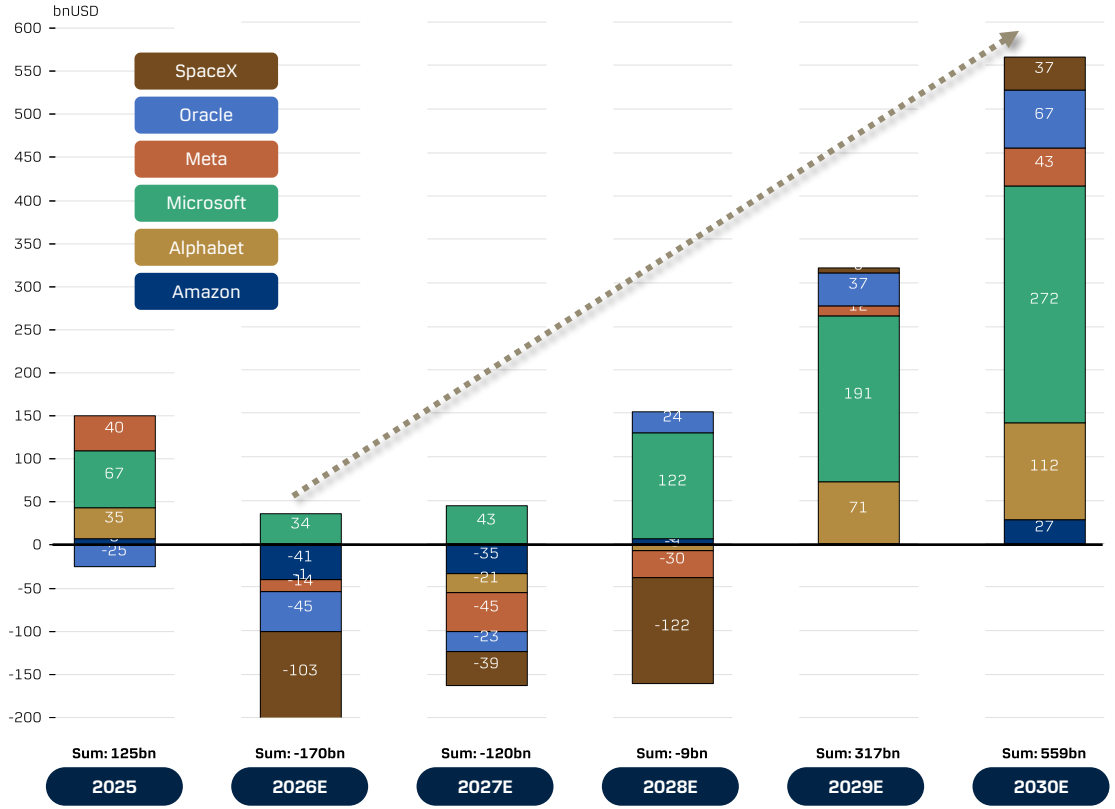
Cash flows: The AI buildout is putting hyperscaler cash generation to the test

Record AI investment is squeezing hyperscaler FCF today, but consensus expects a sharp recovery towards 2030

Free cash flow generation across the total US equity market



Hyperscaler FCF shifts from negative in 2026E to strongly positive by 2030E

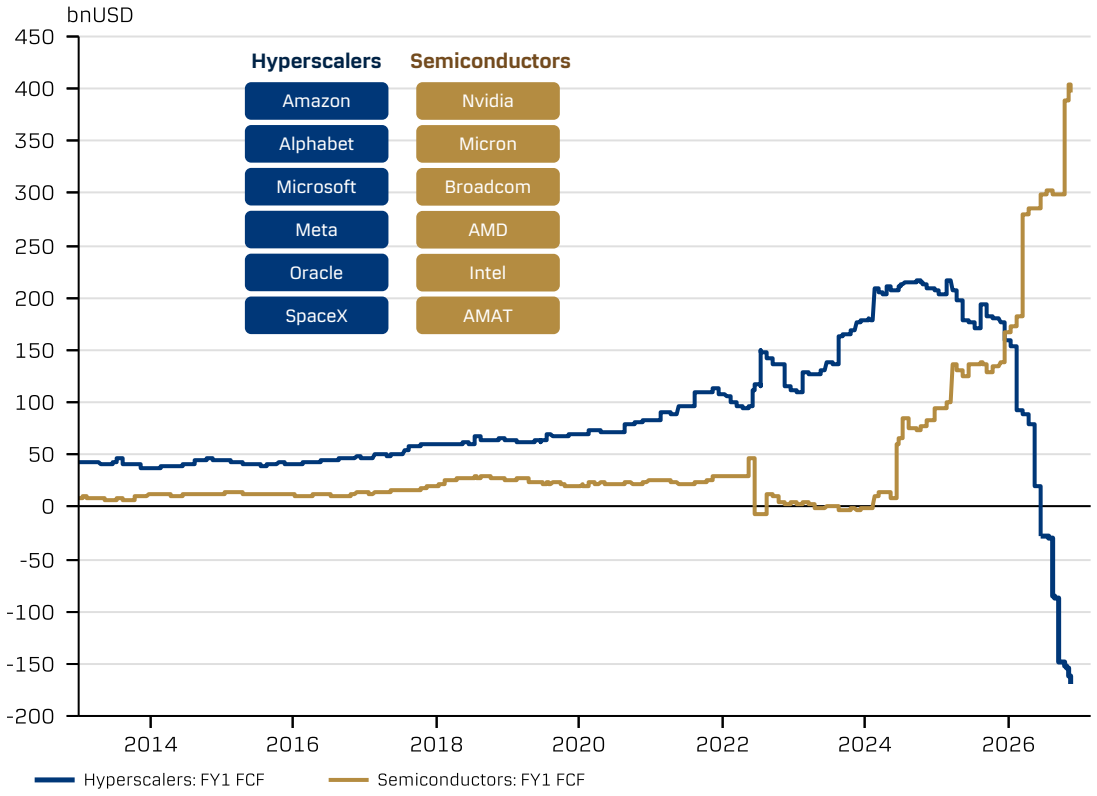


Source: I/B/E/S Consensus, LSEG Data & Analytics
Note: Past performance is not a reliable indicator of current or future results

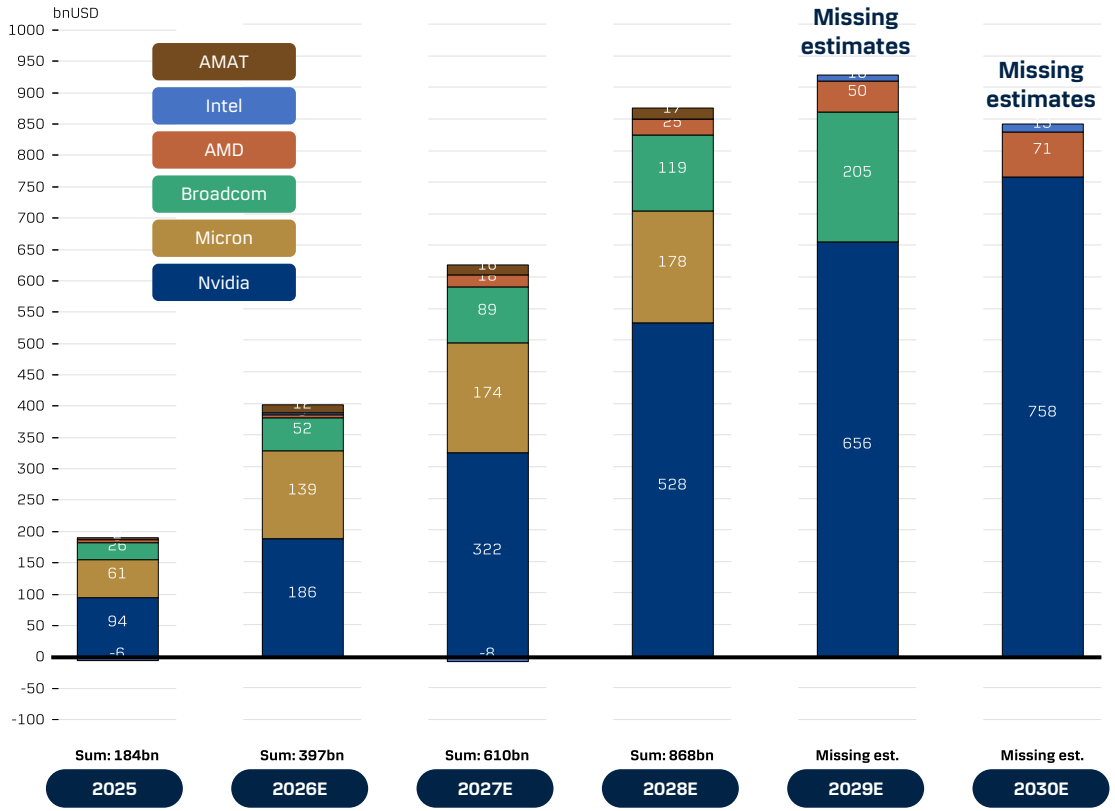
Cash flows: What hyperscalers lose, semiconductors gain

The AI investment cycle is temporarily shifting cash generation from hyperscalers to semiconductor suppliers

Cash flows shift from hyperscalers to semiconductors



Semiconductor FCF continues to scale with the AI buildout



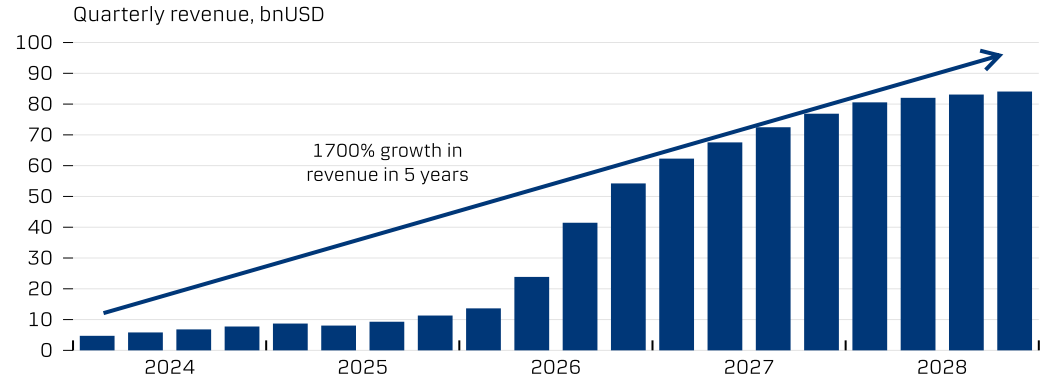
Source: I/B/E/S Consensus, LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

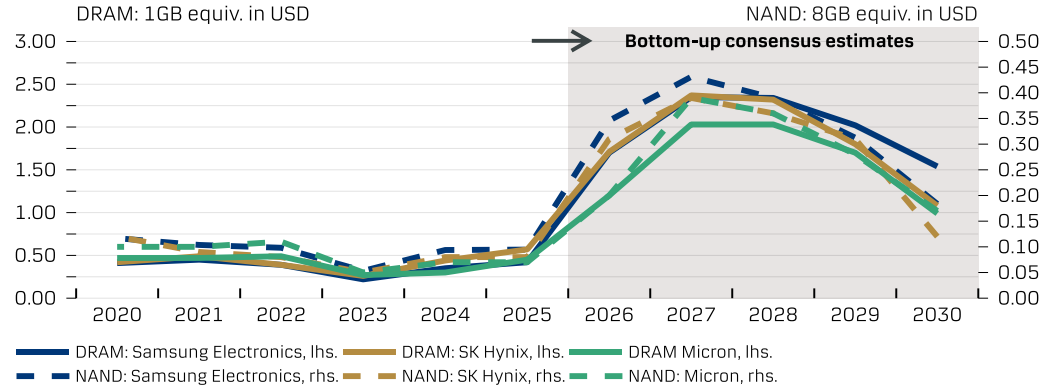
Sales: Semiconductor revenues are entering a pricing-driven boom

Rising memory prices are amplifying the sales cycle, with growth accelerating sharply outside Europe

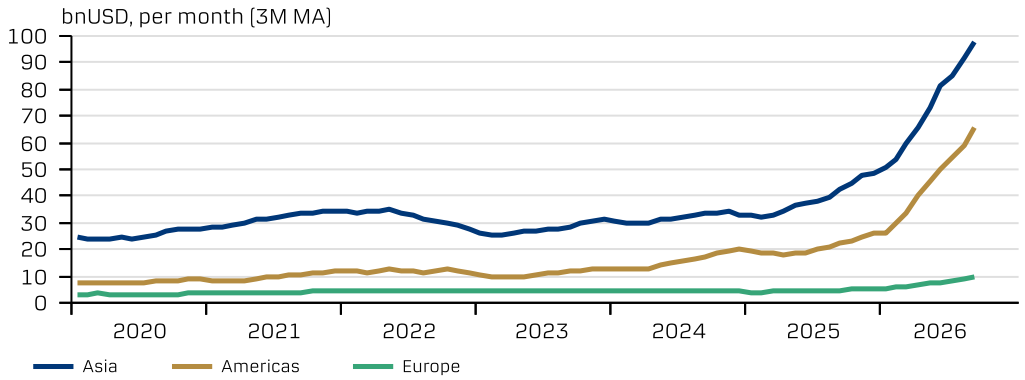
Micron's 1500% revenue growth: ~1/6 driven by volume, ~5/6 by pricing



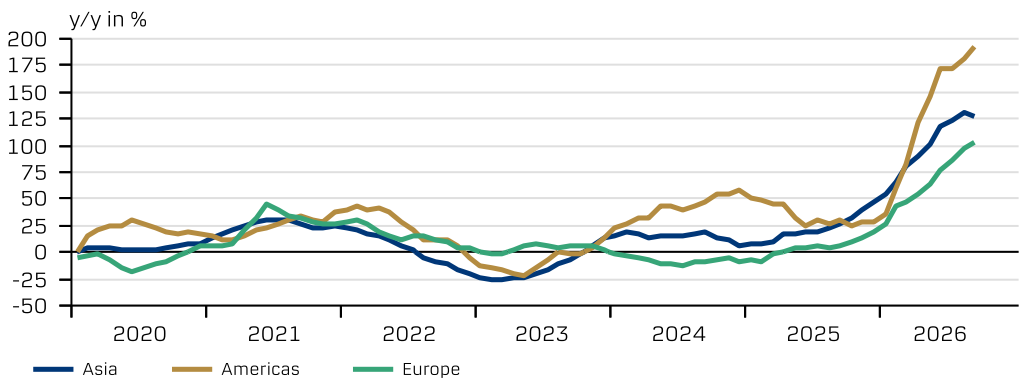
Average selling price (ASP) for the "Big 3" memory giants in 2020 to 2030E



Semiconductor manufacturers sales by region (3M avg.)



Semiconductor manufacturers sales by region (y/y change in 3M avg.)



Source: Visible Alpha Consensus, LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

Q3 2026 Earnings: US Semiconductor vs. Hyperscalers

Market reaction to results, blended Q3 growth y/y and surprise factors (reported vs. consensus)

The big six: Semiconductors & equipment

	Revenue		Earnings		Market
	growth y/y	surprise	growth y/y	surprise	reaction
NVIDIA	103%	6%	105%	8%	-3%
Broadcom	94%	*n.r.*	97%	*n.r.*	*n.r.*
Micron	379%	6%	1018%	6%	3%
AMD	45%	2%	76%	7%	1%
Intel	21%	0%	165%	31%	-29%
AMAT	53%	1%	92%	6%	-4%
Median	73%	2%	101%	7%	-3%
Average	116%	3%	259%	12%	-6%

The big six: hyperscalers & AI cloud

	Revenue		Earnings		Market
	growth y/y	surprise	growth y/y	surprise	reaction
Alphabet	25%	0%	-13%	-11%	-13%
Microsoft	18%	2%	18%	3%	0%
Amazon	12%	0%	-2%	-4%	-1%
Meta	26%	2%	2%	10%	-7%
Oracle	30%	1%	35%	10%	-2%
SpaceX	161%	13%	*n.m.*	150%	8%
Median	25%	1%	2%	7%	-2%
Average	45%	3%	8%	26%	-3%

Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

Q3 2026 Earnings: S&P 500

Blended growth y/y, surprise factors (reported vs. consensus) & score card

Revenue

Sectors	Blended revenue growth rates y/y	Hist. median	Hist. avg.	Diff. (pp)	Z-score
Communication Services	14.4%	7.7%	8.4%	6.0	1.4
Consumer Discretionary	6.1%	6.2%	7.0%	-0.9	-0.1
Consumer Staples	6.2%	3.3%	3.9%	2.3	0.8
Energy	36.2%	0.4%	5.5%	30.7	1.0
Financials	6.5%	4.0%	4.0%	2.5	0.4
Health Care	6.3%	7.7%	8.3%	-2.0	-0.5
Industrials	11.6%	3.5%	3.7%	7.9	1.1
Information Technology	44.2%	6.9%	8.9%	35.4	4.6
Materials	10.1%	3.6%	3.0%	7.2	0.6
Real Estate	12.1%	8.6%	9.0%	3.1	0.6
Utilities	10.5%	3.0%	3.5%	7.0	1.0
S&P 500 INDEX	**14.6%**	**5.1%**	**5.5%**	**9.1**	**1.7**
- Cyclicals	**16.9%**	**5.3%**	**5.9%**	**11.0**	**2.5**
- Defensives	**11.5%**	**4.9%**	**5.0%**	**6.5**	**0.9**

Sectors	Surprise factors	Hist. median	Hist. avg.	Diff. (pp)	Z-score
Communication Services	0.2%	0.7%	0.7%	-0.6	-0.5
Consumer Discretionary	0.3%	1.4%	2.1%	-1.8	-0.7
Consumer Staples	1.0%	1.3%	1.8%	-0.8	-0.4
Energy	12.7%	2.1%	2.4%	10.3	2.1
Financials	1.7%	2.2%	3.1%	-1.4	-0.4
Health Care	2.2%	1.5%	1.4%	0.8	0.7
Industrials	2.2%	0.8%	1.0%	1.2	0.9
Information Technology	3.6%	1.7%	1.9%	1.7	1.0
Materials	1.3%	0.8%	0.7%	0.6	0.3
Real Estate	1.1%	1.5%	1.5%	-0.4	-0.3
Utilities	1.6%	-2.0%	-0.1%	1.8	0.2
S&P 500 INDEX	**2.7%**	**1.5%**	**1.7%**	**0.9**	**0.7**
- Cyclicals	**1.7%**	**1.6%**	**1.8%**	**-0.1**	**0.0**
- Defensives	**4.2%**	**1.4%**	**1.7%**	**2.5**	**1.5**

Sectors	Above	Match [±0.5%]	Below	Score card
Communication Services	56%	22%	22%	
Consumer Discretionary	51%	22%	27%	
Consumer Staples	76%	16%	8%	
Energy	86%	5%	10%	
Financials	42%	19%	39%	
Health Care	84%	11%	5%	
Industrials	70%	16%	14%	
Information Technology	86%	9%	5%	
Materials	67%	13%	21%	
Real Estate	43%	20%	37%	
Utilities	68%	0%	32%	
S&P 500 INDEX	**66%**	**14%**	**20%**	
- Cyclicals	**60%**	**17%**	**23%**	
- Defensives	**79%**	**8%**	**13%**	

Earnings

Sectors	Blended earnings growth rates y/y	Hist. median	Hist. avg.	Diff. (pp)	Z-score
Communication Services	-2.5%	13.7%	14.4%	-16.9	-0.9
Consumer Discretionary	2.0%	8.7%	20.0%	-18.0	-0.2
Consumer Staples	8.1%	2.9%	3.7%	4.4	0.9
Energy	152.8%	-4.5%	-0.9%	153.8	1.8
Financials	8.6%	8.9%	14.9%	-6.3	-0.2
Health Care	8.6%	6.8%	6.1%	2.5	0.2
Industrials	15.5%	7.2%	11.5%	4.0	0.1
Information Technology	73.9%	12.9%	15.7%	58.2	3.5
Materials	28.6%	1.8%	9.4%	19.2	0.6
Real Estate	8.9%	9.0%	12.3%	-3.4	-0.3
Utilities	17.9%	5.6%	6.8%	11.1	1.1
S&P 500 INDEX	**29.9%**	**7.5%**	**10.3%**	**19.6**	**1.2**
- Cyclicals	**28.4%**	**9.4%**	**13.2%**	**15.2**	**0.7**
- Defensives	**34.6%**	**2.8%**	**6.1%**	**28.5**	**1.7**

Sectors	Surprise factors	Hist. median	Hist. avg.	Diff. (pp)	Z-score
Communication Services	0.9%	5.5%	6.6%	-5.7	-0.8
Consumer Discretionary	5.3%	9.4%	14.7%	-9.4	-0.2
Consumer Staples	6.0%	4.2%	5.1%	0.9	0.3
Energy	9.7%	6.7%	10.5%	-0.8	0.0
Financials	5.5%	6.5%	7.8%	-2.3	-0.3
Health Care	12.5%	5.7%	6.7%	5.8	1.8
Industrials	3.0%	5.0%	6.9%	-3.9	-0.4
Information Technology	6.5%	7.2%	7.2%	-0.7	-0.2
Materials	0.9%	5.2%	5.5%	-4.6	-0.9
Real Estate	1.9%	1.7%	2.0%	-0.1	0.0
Utilities	7.3%	4.0%	4.2%	3.1	0.5
S&P 500 INDEX	**6.0%**	**5.8%**	**7.0%**	**-1.0**	**-0.2**
- Cyclicals	**4.7%**	**6.5%**	**7.5%**	**-2.8**	**-0.5**
- Defensives	**9.9%**	**5.1%**	**6.0%**	**3.8**	**1.1**

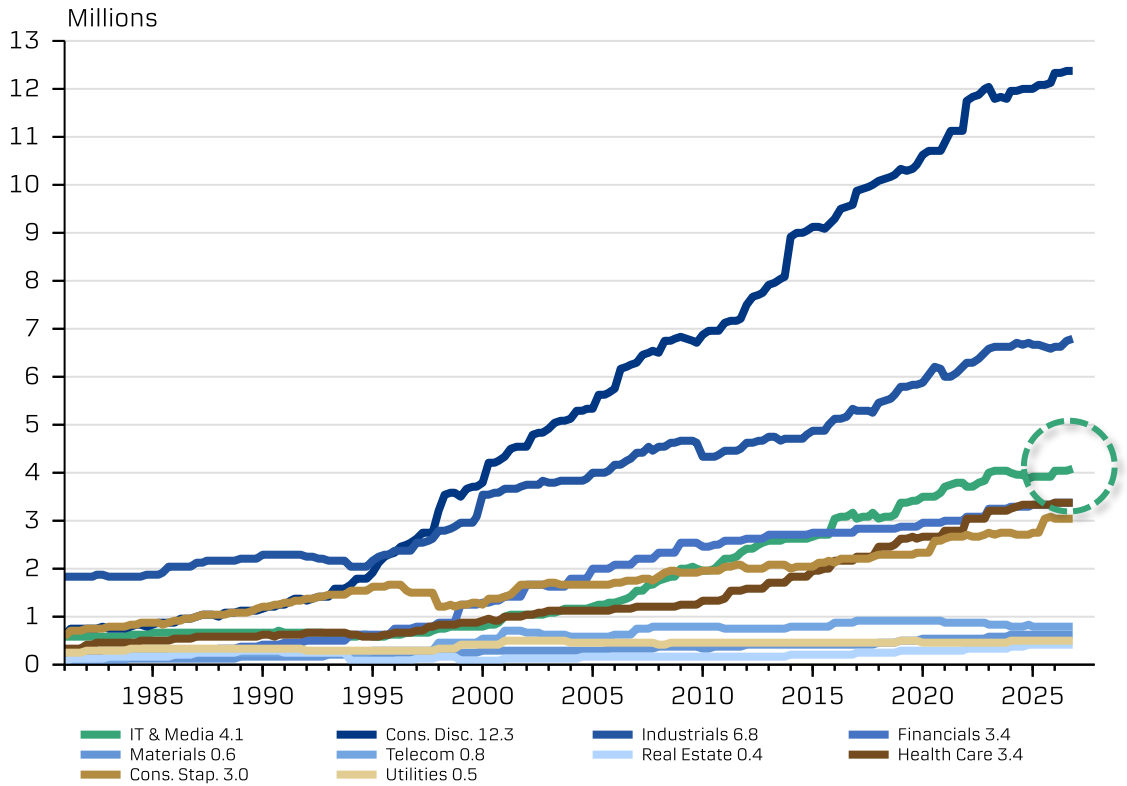
Sectors	Above	Match [±1%]	Below	Score card
Communication Services	89%	0%	11%	
Consumer Discretionary	68%	10%	23%	
Consumer Staples	84%	12%	4%	
Energy	95%	0%	5%	
Financials	70%	14%	16%	
Health Care	82%	11%	7%	
Industrials	82%	6%	11%	
Information Technology	88%	9%	3%	
Materials	46%	8%	46%	
Real Estate	63%	27%	10%	
Utilities	84%	0%	16%	
S&P 500 INDEX	**78%**	**9%**	**13%**	
- Cyclicals	**75%**	**11%**	**15%**	
- Defensives	**85%**	**7%**	**8%**	

Source: LSEG Data & Analytics
***92%** through the Q3 2026 earnings season in S&P 500*
Note: Past performance is not a reliable indicator of current or future results

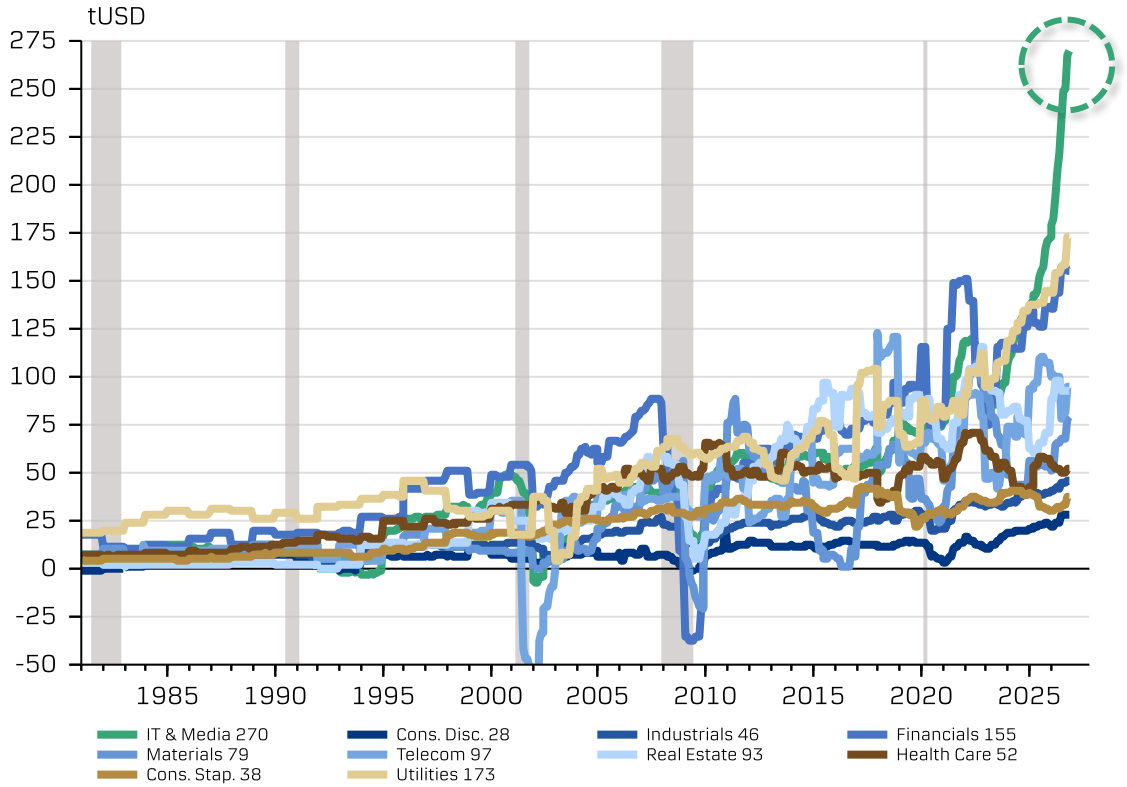
Employees: AI is redefining the economics of technology employment

US-listed IT and media companies employ around 4 million people, while net income per employee has surged to unprecedented levels in the AI era

Employees across US-listed companies by sector



Net income per employee across US-listed companies by sector



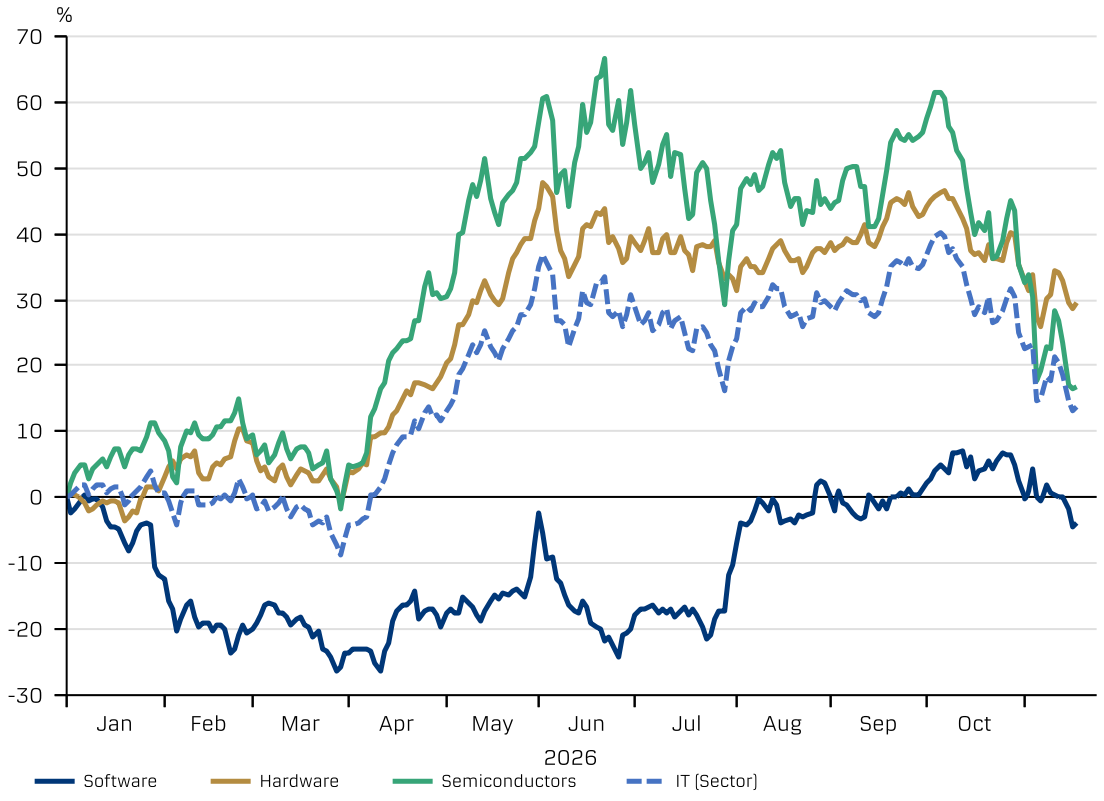
Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

Performance: Semiconductors and hardware are driving technology's rally

Global IT performance has diverged sharply YTD

Global technology performance by industry group YTD



Hyperscaler equity performance YTD



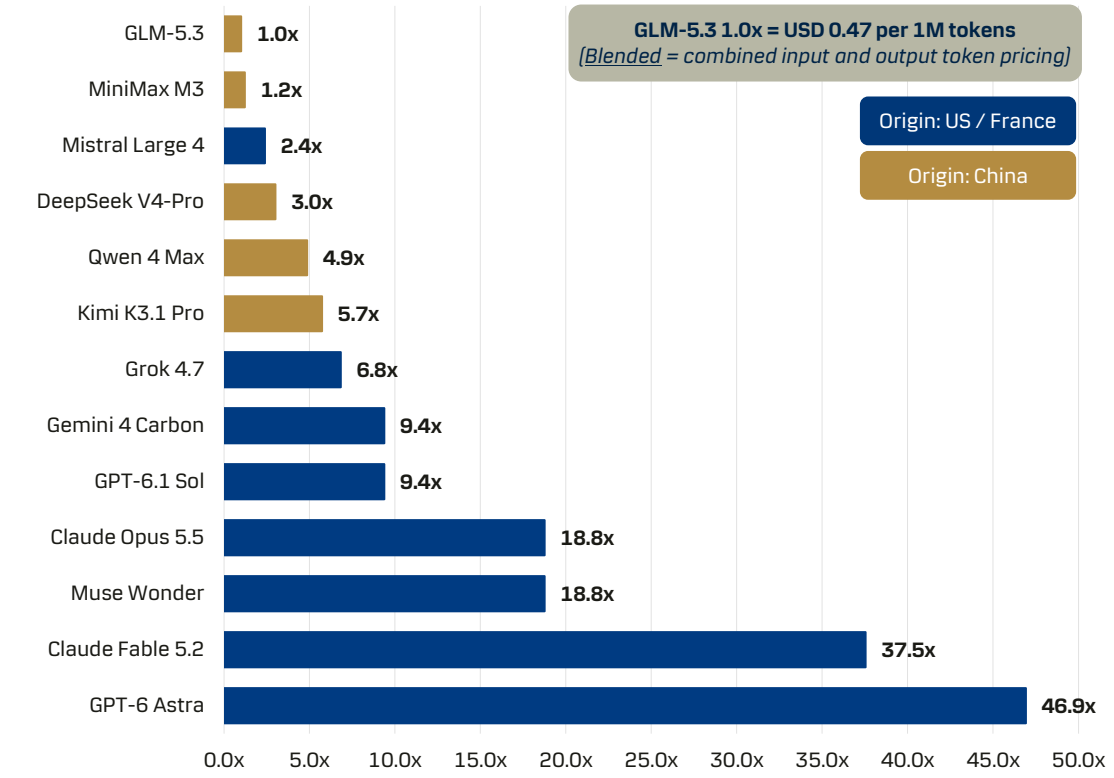
Source: Bloomberg, Macrobond, LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

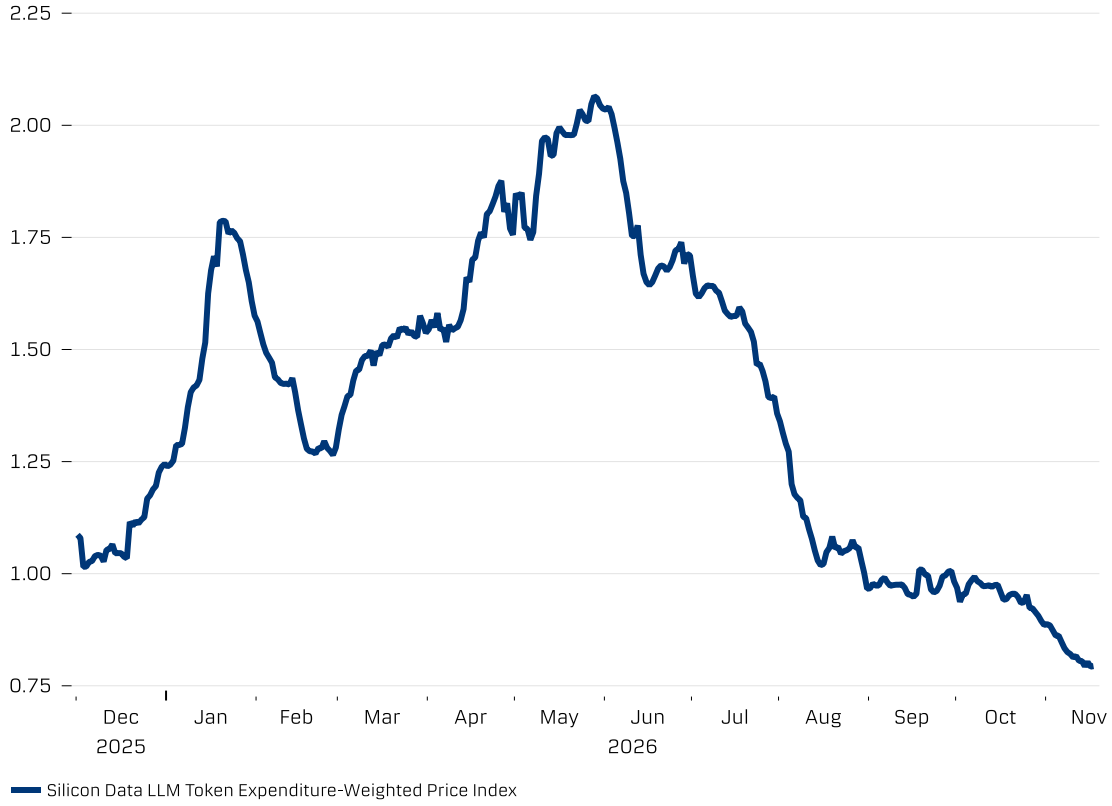
China competition: China is resetting the price of frontier AI

Chinese frontier models are generally cheaper than Western peers, intensifying price competition as token costs move lower again

Frontier model blended price vs. China's cheapest model



Token prices have fallen again following new Chinese model releases

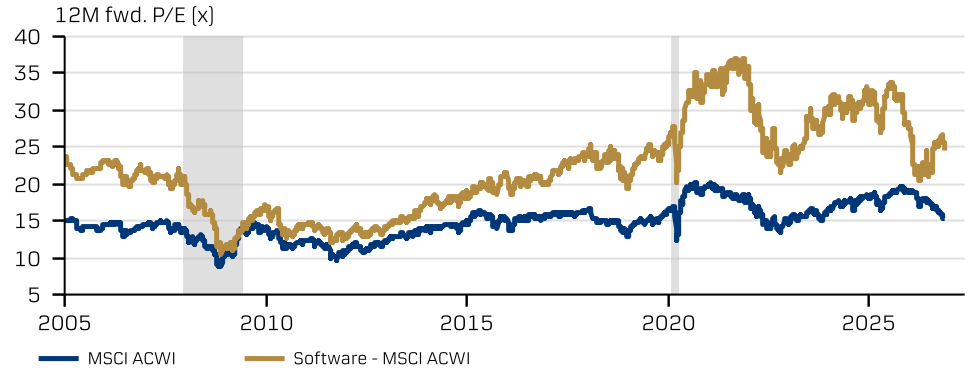


Source: MiniMax, DeepSeek, Meta, Z.ai, xAI, Alibaba, Mistral, OpenAI, Google AI, Moonshot AI, Anthropic, Bloomberg, Macrobond
Note: Past performance is not a reliable indicator of current or future results

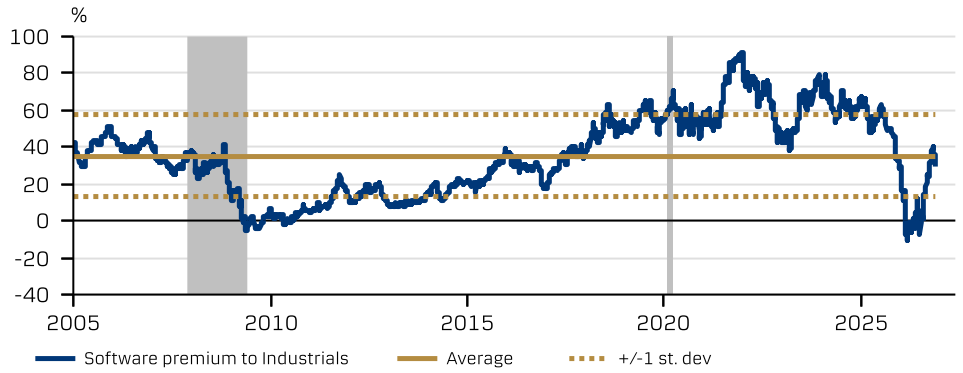
The Editorial: "*When tech disrupts tech*" has entered a new chapter

After collapsing in late 2025, software's valuation premium has rebounded

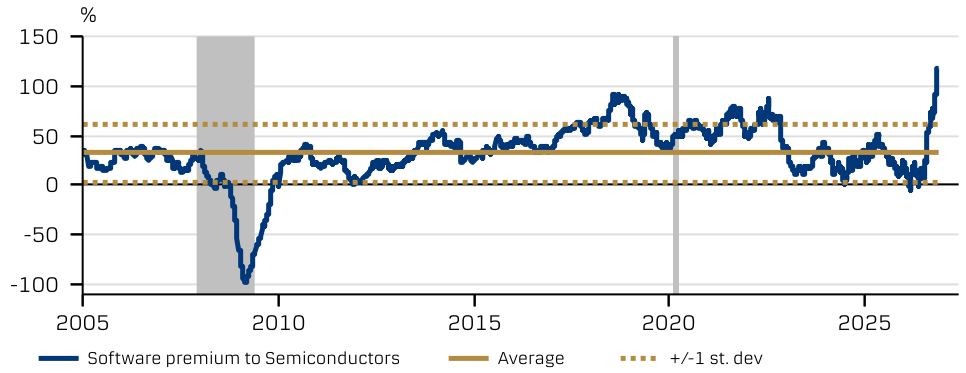
Global valuation vs. Software



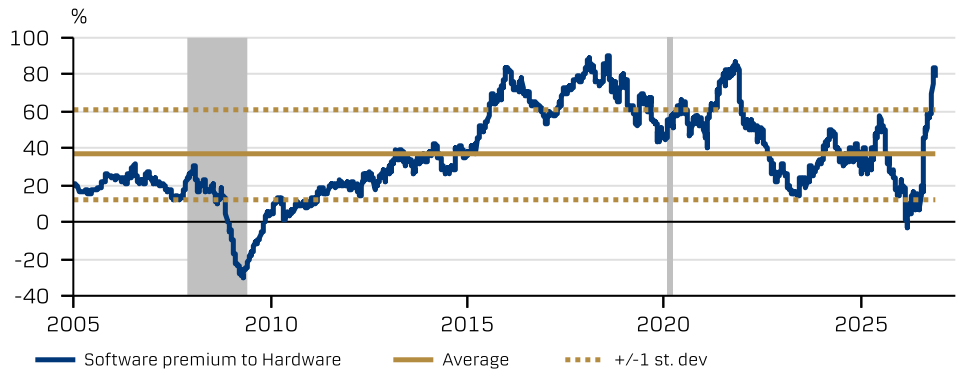
Relative valuation between Software and Industrials



Relative valuation between Software and Semiconductors



Relative valuation between Software and Hardware



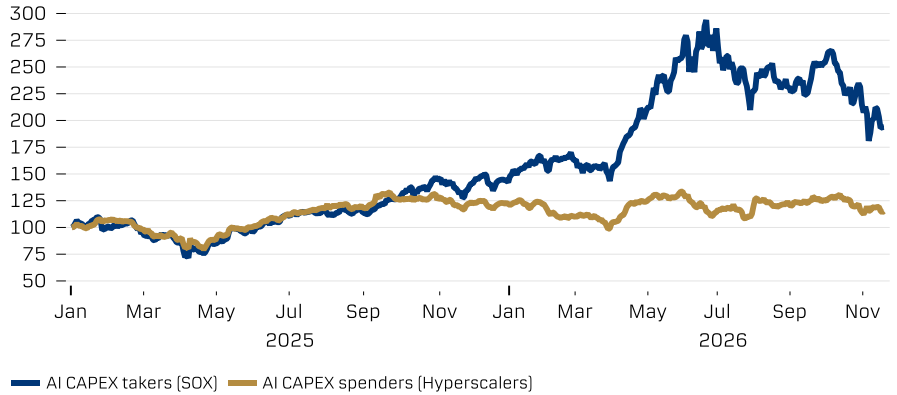
Source: LSEG Data & Analytics

Note: Past performance is not a reliable indicator of current or future results

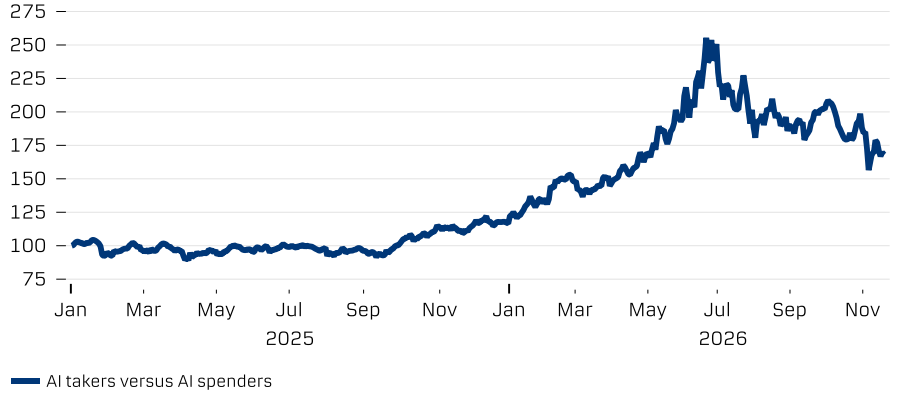
AI takers continue to outpace the spenders

Equity returns increasingly favour the beneficiaries of AI capex, while token expenditure and Nvidia have weakened

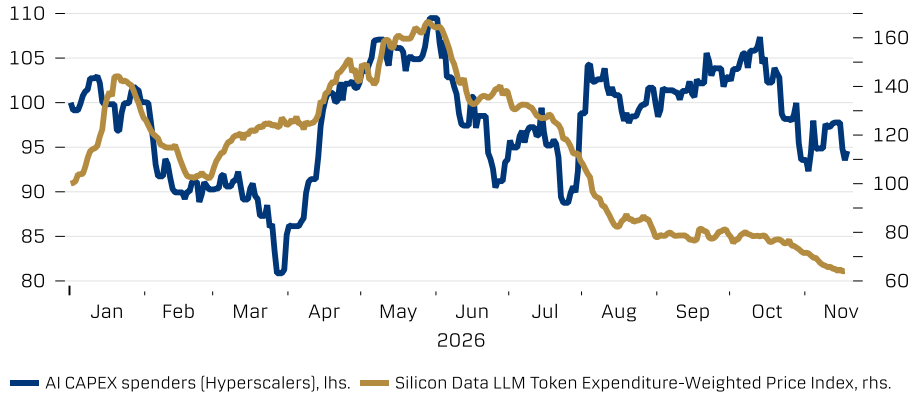
The AI spenders versus takers (2025=100)



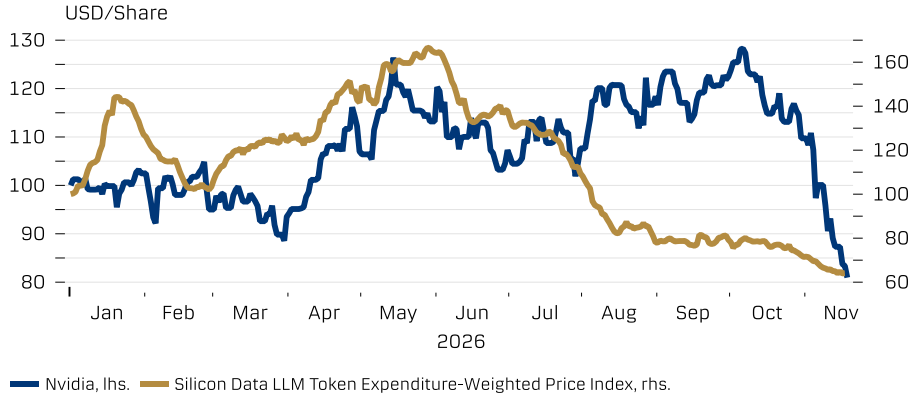
The AI spenders versus takers (2025=100)



Token and Hyperscalers (2026=100)



LLM expenditure and Nvidia



Source: LSEG Data & Analytics

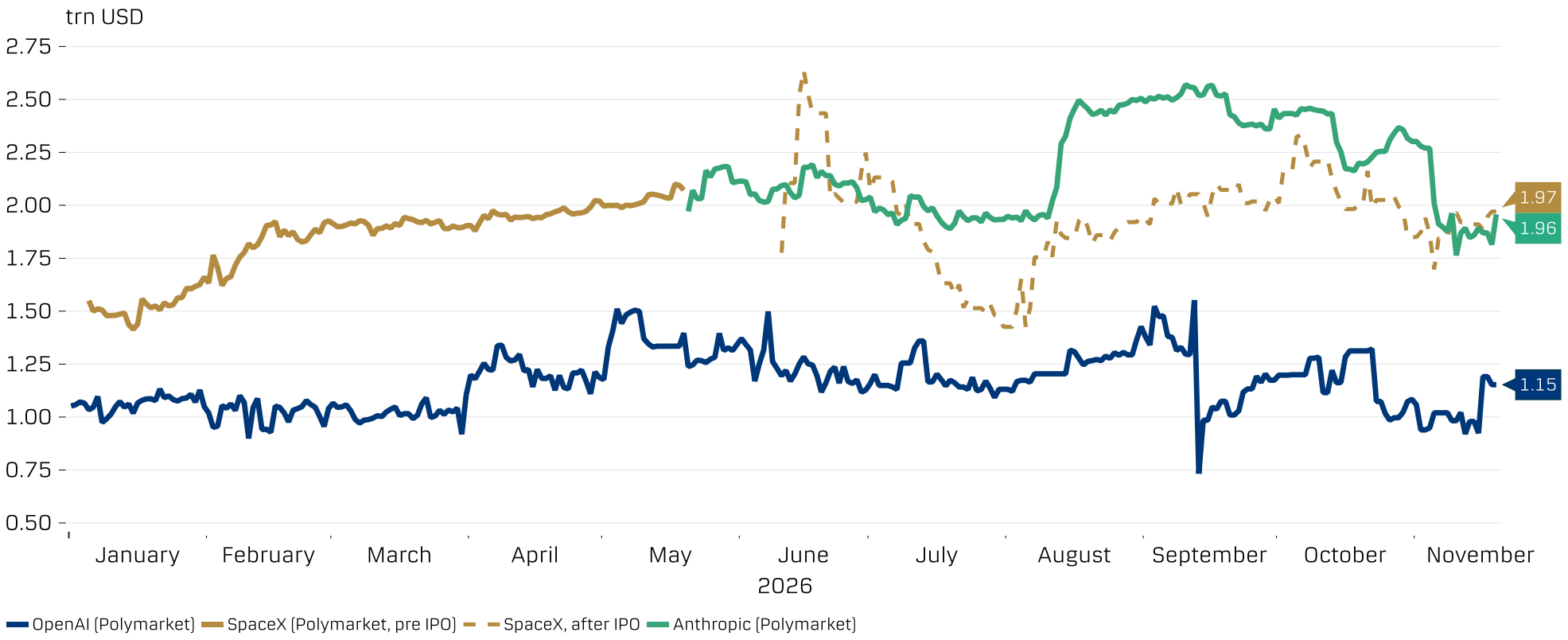
Note: Past performance is not a reliable indicator of current or future results

AI goes public

The 3 mega IPOs in 2026/27

IPOs: Market cap of SpaceX, OpenAI and Anthropic

At time of IPO based on prediction market



SpaceX
IPO: USD 1.77 trn.
Current market cap:
USD 1.9 trn.

SPACEX

Anthropic
IPO: USD 1.51 trn.
Current market cap:
USD 1.75 trn.
(fully diluted)

ANTHROP\C

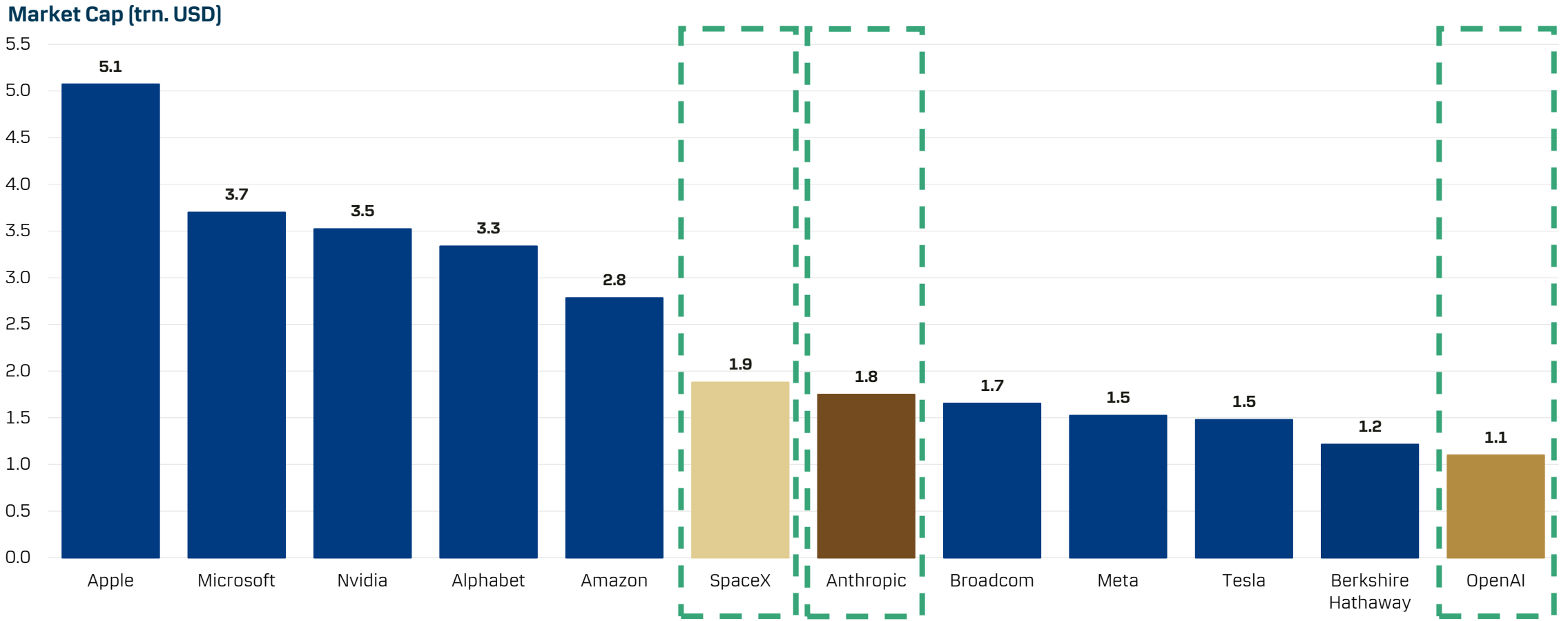
OpenAI
~USD 1.0-1.3 trn.
Expected Listing:
2027

OpenAI

Source: Bloomberg, Polymarket, Macrobond, Danske Bank

IPOs: Market cap of top 10 companies in US (including the 3 new IPOs)

Close 19 Nov 2026 (Anthropic fully diluted; OpenAI expected at IPO based on prediction market)



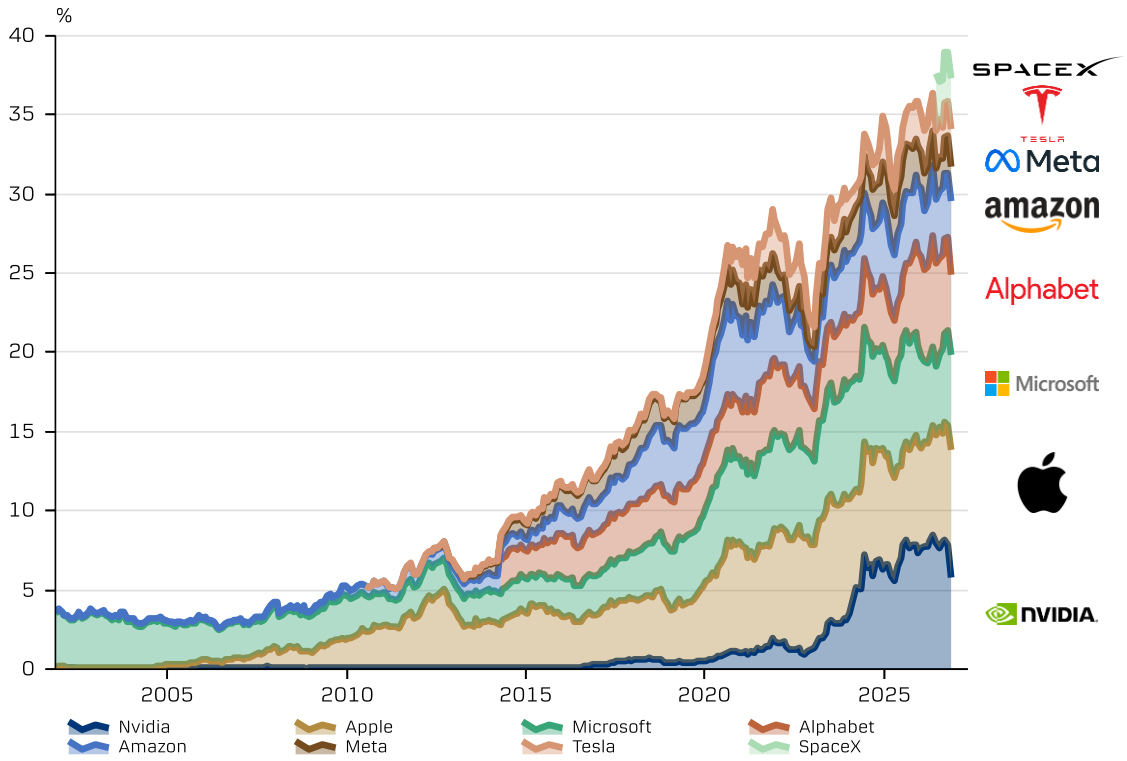
Source: Bloomberg, Macrobond, Danske Bank
Note: Anthropic fully diluted market cap.

IPOs: From Mag 7 to "*Mag 10*"?

The next wave of market concentration

Market cap share as of total S&P 500*

(c. 67 trn USD in total market cap)



Market cap weights (%) in S&P 500

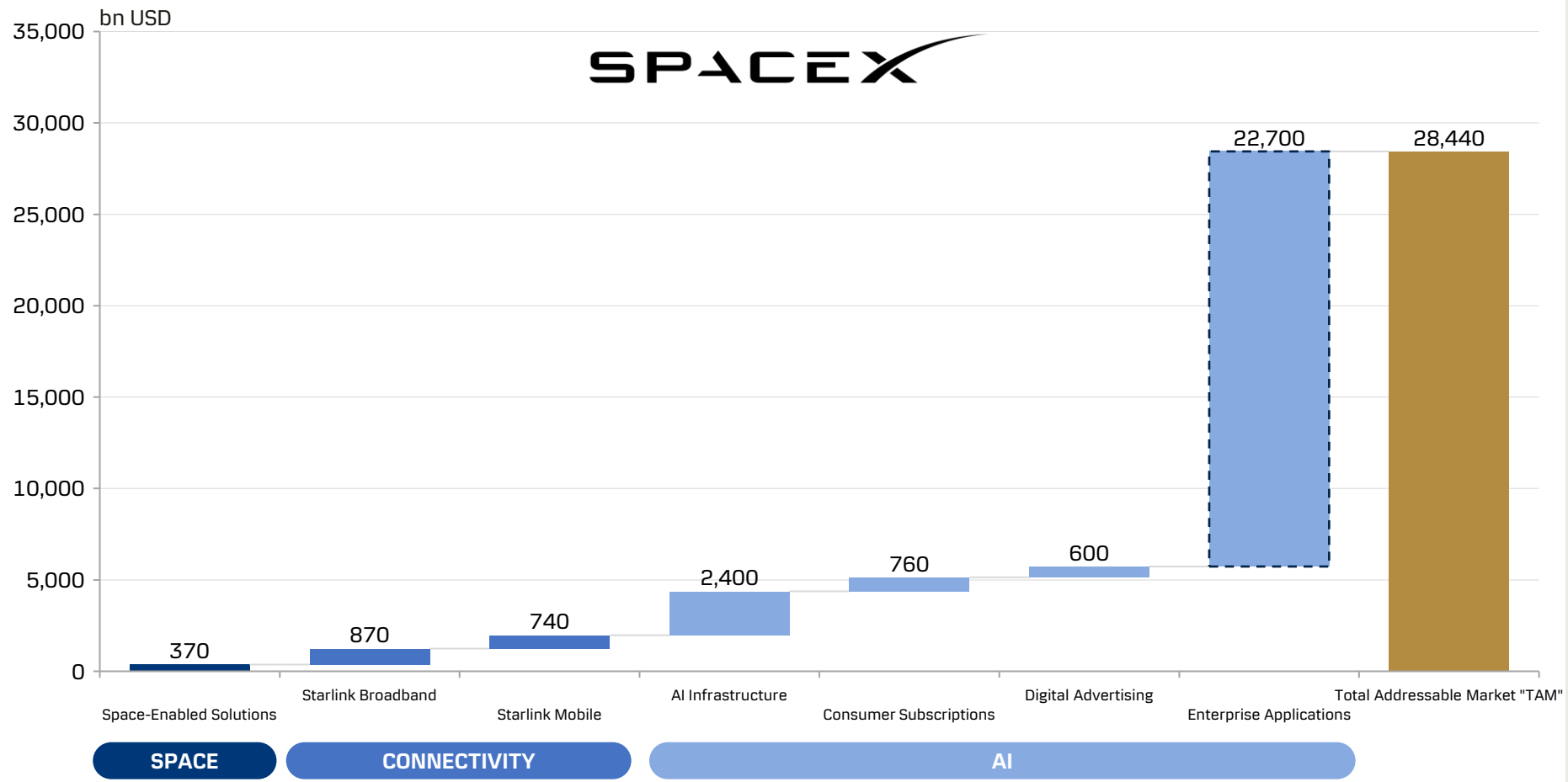
Company	Mag 7 weight (%)	"Mag 10" weight (%)
Nvidia	6.0	5.4
Apple	8.1	7.3
Microsoft	6.0	5.4
Alphabet (A+C)	5.1	4.6
Amazon	4.4	4.0
Meta	2.2	2.0
Tesla	2.4	2.2
SpaceX	**-**	**3.0**
Anthropic	**-**	**2.9**
OpenAI	**-**	**1.7**
	Sum: 34.2%	**Sum: 38.5%**

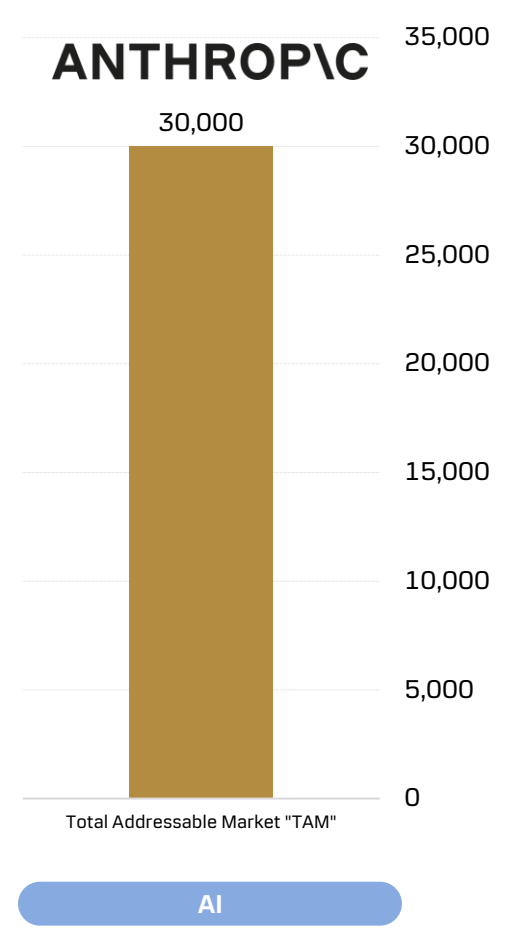
Source: LSEG Data & Analytics, Macrobond, Danske Bank

**Note: SpaceX & Anthropic are not yet included in S&P 500 index – due to the index inclusion rules. Past performance is not a reliable indicator of current or future results*

IPOs: SpaceX & Anthropic's estimated Total Addressable Market ("TAM")

The largest actionable "TAM's" in human history ~ *95% of the 2025 US GDP*

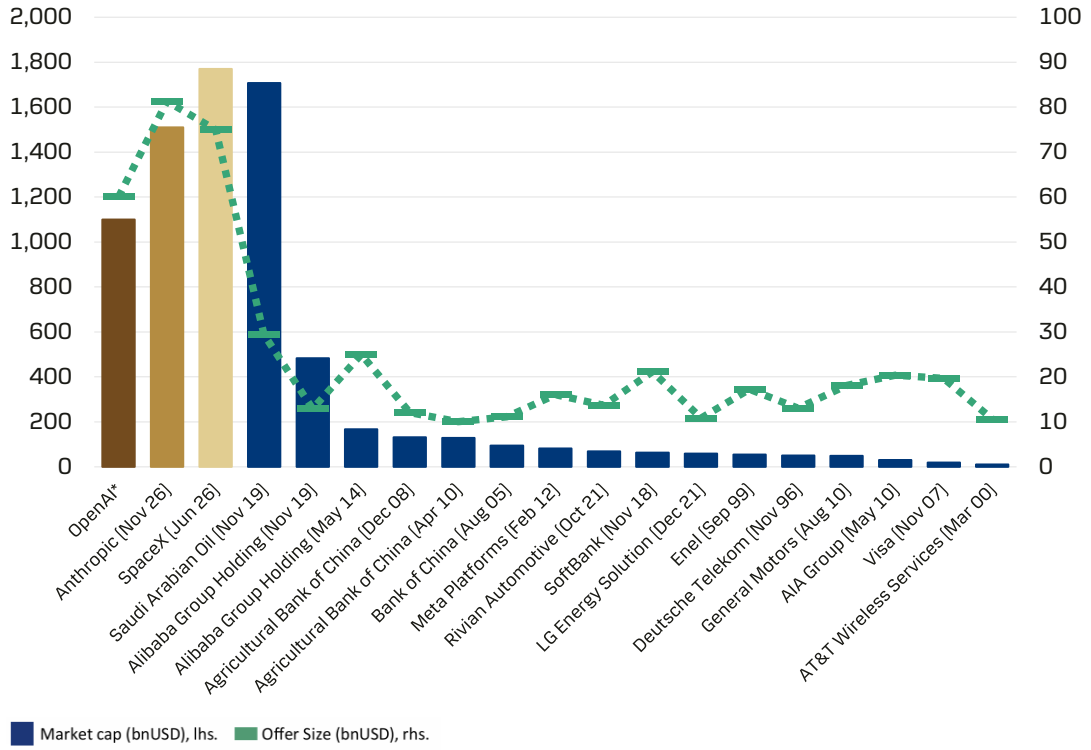




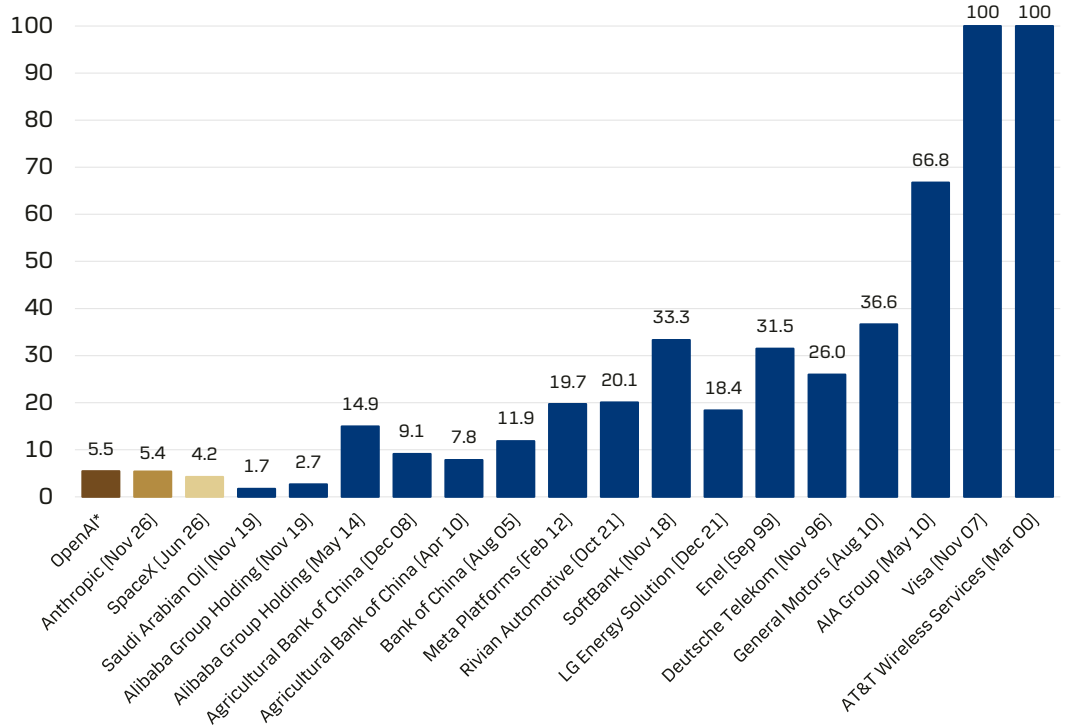
Source: SpaceX & Anthropic's SEC Filing (form S-1) , Danske Bank

IPOs: A look at the history books

Market cap & offer size at IPOs



Total free float (in %)

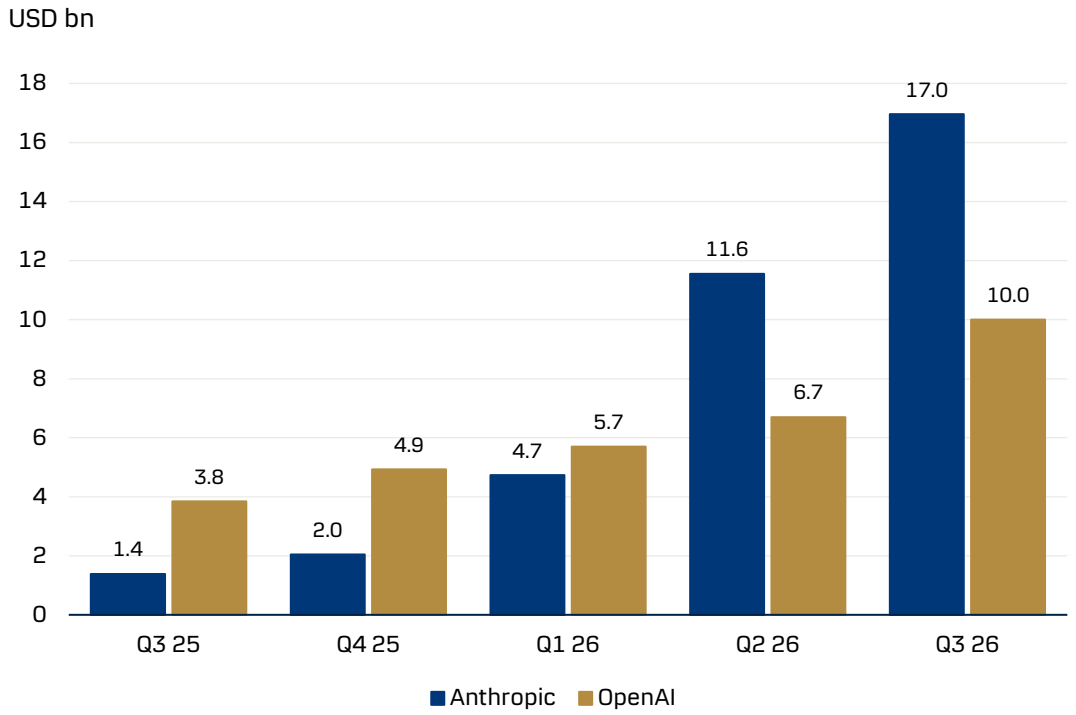


Source: Anthropic, Bloomberg, Polymarket, Danske Bank

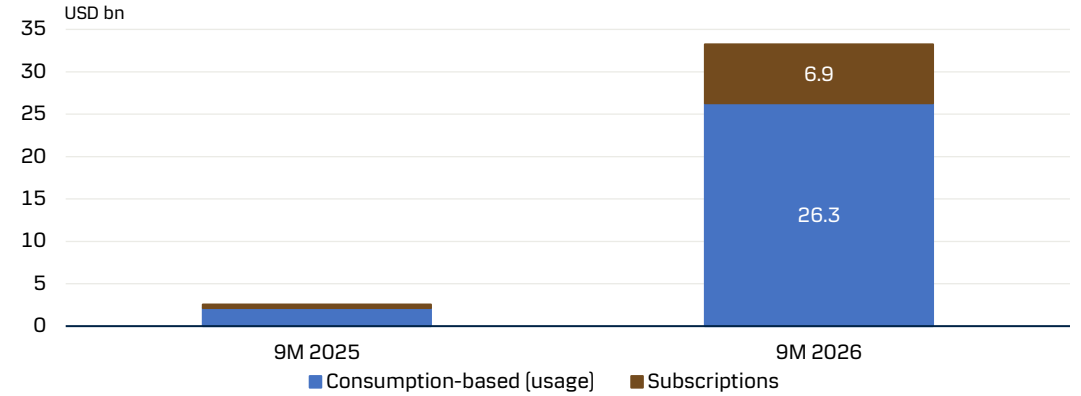
Note: OpenAI estimated. Anthropic: fully diluted market cap at IPO price, offer excl. private placement. Past performance is not a reliable indicator of future results

IPOs: Anthropic vs. OpenAI

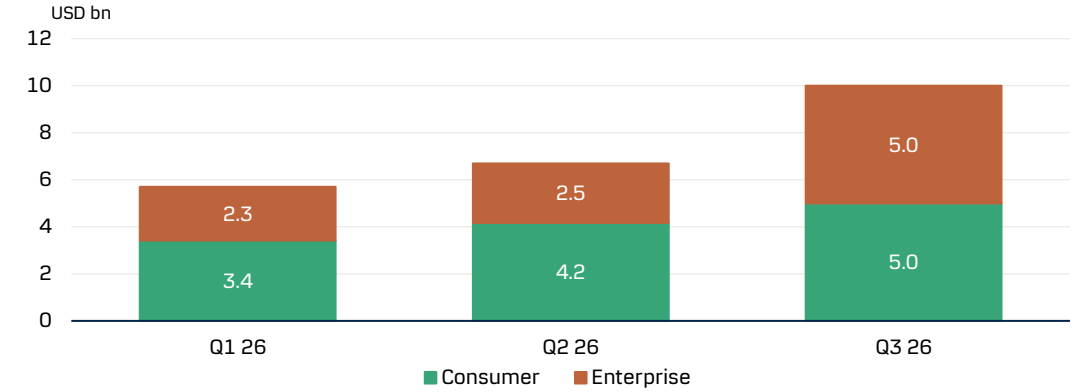
Quarterly revenue



Anthropic revenue by pricing model



OpenAI revenue by customer type

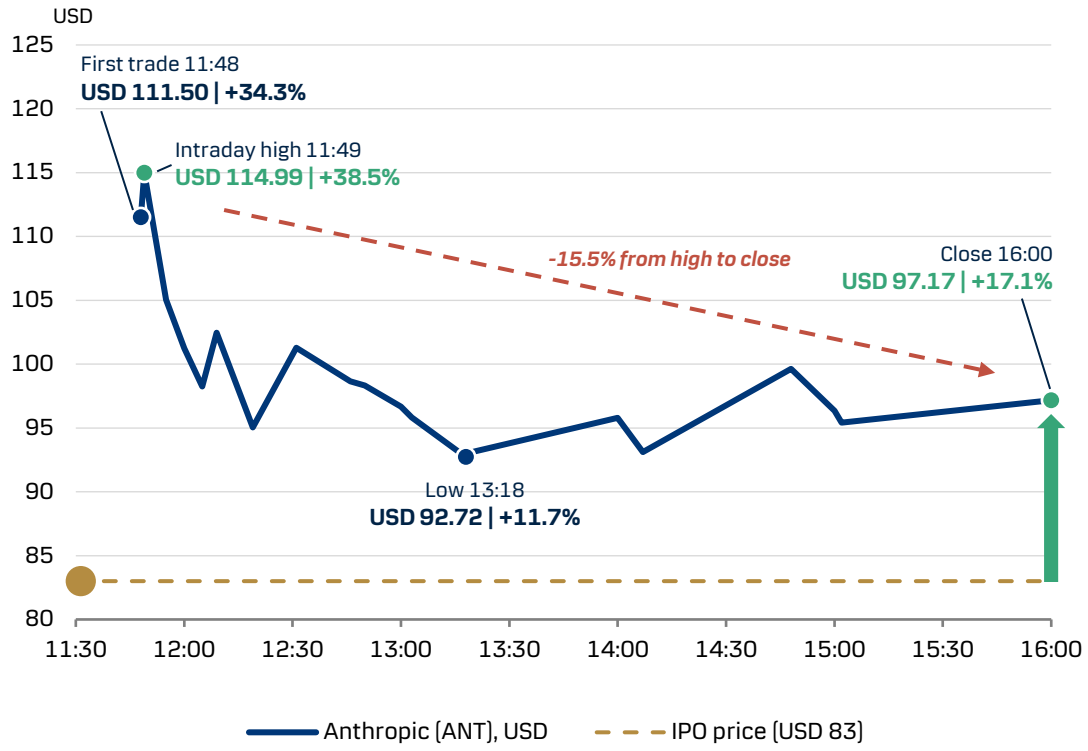


Source: Macrobond, Bloomberg, Danske Bank
Note: Past performance is not a reliable indicator of current or future results

IPOs: Anthropic is live

Shares closed 17% above the IPO price on day one after demand of c. 7x the shares offered

First trading day: ANT share price vs. IPO price (ET)



Anthropic IPO: key facts

Key facts	Anthropic (ANT)
Listing	Nasdaq (ANT), 19 Nov 2026
Shares offered	980m (956m new, 24m existing)
IPO price	**USD 83 (range USD 70-78)**
Demand	c. 7x oversubscribed
IPO proceeds	**USD 81.3bn**
Concurrent private placement	USD 26.0bn
First-day volume	847m shares (SpaceX: 522m)
Valuation at IPO price*	**USD 1.51 trn**
First-day open	**USD 111.50 (+34.3% vs. IPO price)**
First-day close	**USD 97.17 (+17.1% vs. IPO price)**
Market cap at close*	**USD 1.75 trn**
Market cap at close**	**USD 1.28 trn**

Source: Anthropic, Bloomberg, Danske Bank.
*Fully diluted: shares outstanding plus options, unvested awards and other promised shares. **Shares outstanding after IPO and private placement: USD 97.17 × 13,2bn shares (excl. over-allotment option and unvested equity awards). Past performance is not a reliable indicator of future results*

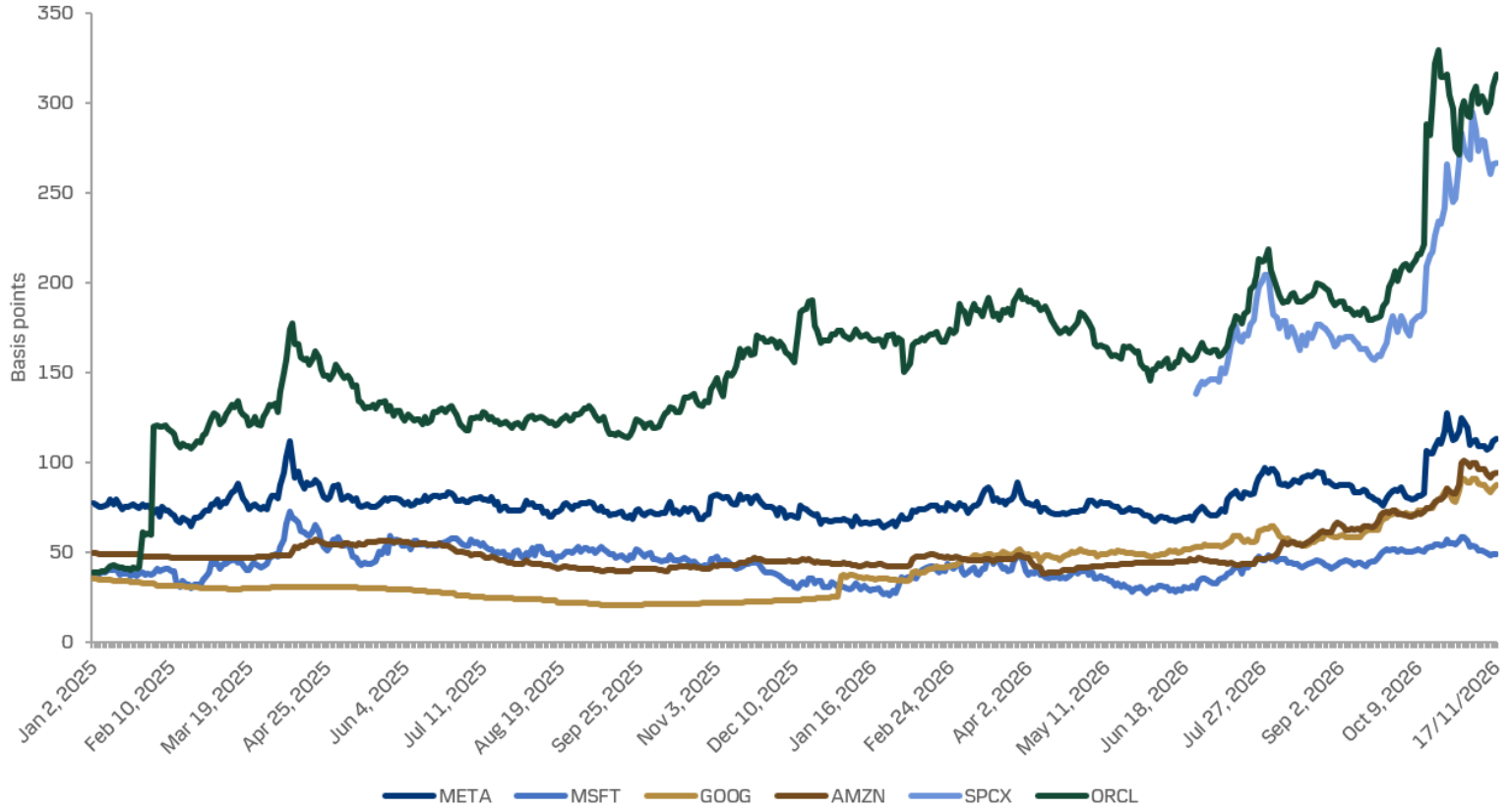


The Credit Perspective

Credit spreads – Hyperscalers

Credit spreads have widened recently but are not yet at prohibitive levels in terms of funding the build-out

Credit spreads* widening after summer



Comments

- Credit spreads (The premium to insure against default) has risen for the key hyperscalers after the summer.
- Although spreads are wider, they are not in any way signalling distress and most issuers would still have access to bond markets on the current levels. Looking at Credit spreads alone, funding costs have only increase by roughly 0.5%.
- Oracle has seen the biggest jump in spreads and could have more difficulty accessing bond markets compared to last year

Source: Bloomberg

**Note: Credit spreads using the best proxy of either a CDS or an interpolated 5Y cash bonds where the CDS spread is not available. Past performance is not a reliable indicator of current or future results*

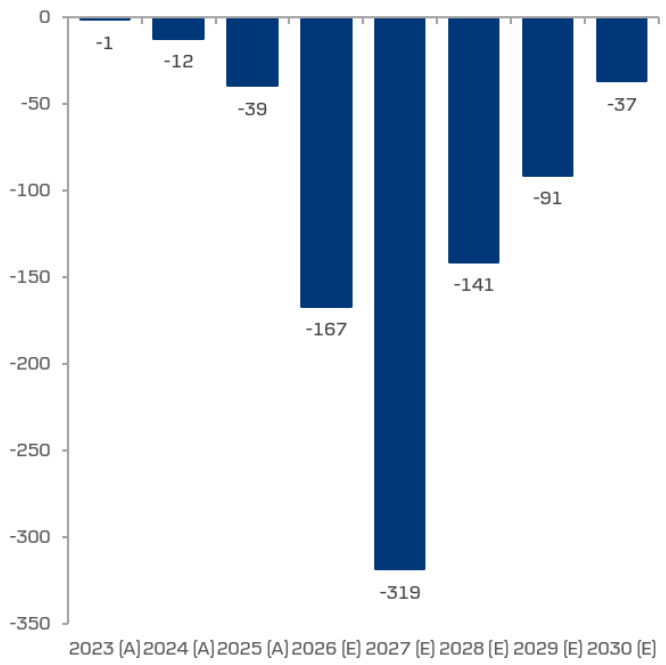
Hyperscaler funding gaps to peak in 2027

Debt share of the build-out is expected to rise to 50-60% until earnings (potentially) cover most of the gap from 2029

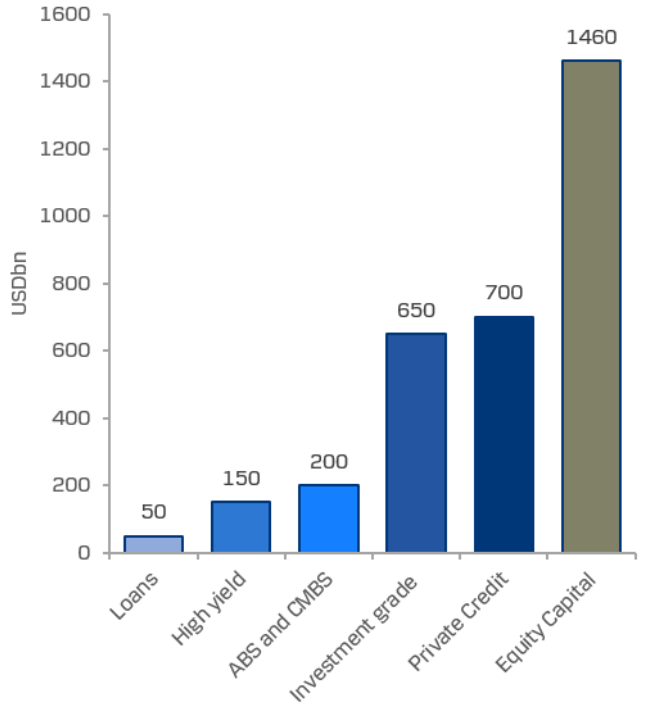
Comments

- Funding gaps (Net cash needs after cash inflow) is set to peak for the key hyperscalers in 2027
- JP Morgan estimates that a total of USD650bn in Investment grade debt will be needed towards 2028.
- With 350bn (USD equivalent) Investment grade (hyperscaler) debt issued YTD this implies need for a further c. USD300bn over the coming 28 months.
- Part of funding needs will be covered by Private Credit (Data centre SPVs).
- AI build-out would be severely constrained without debt markets from this point.

Hyperscaler funding gaps** (USDbn)



Estimated 2026-2028E AI funding mix*

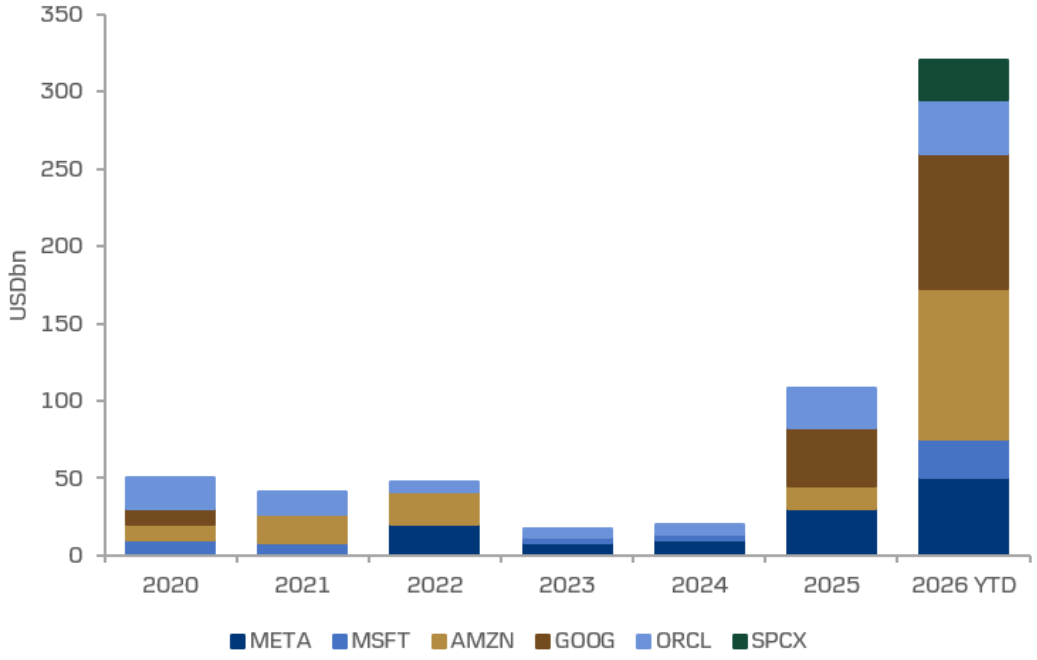


Source: Bloomberg consensus
Note: JP Morgan Estimates
***Hyperscaler funding gaps based on FCF estimates. Companies with positive FCF estimate are not netted against companies with negative FCF estimates*

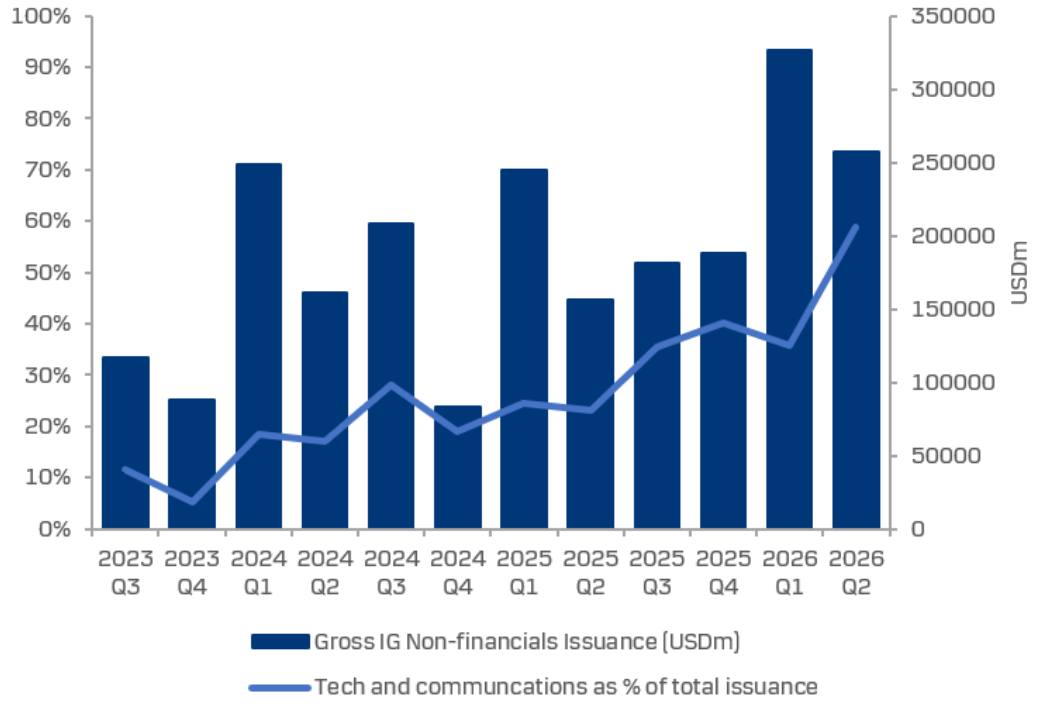
USD equivalent Bond issuance by hyperscalers*

2026 is on track to becoming a record year for Hyperscaler investment grade bond issuance

Debt issuance by Hyperscalers (USD equivalent)



Tech issuance as share of total US investment grade issuance

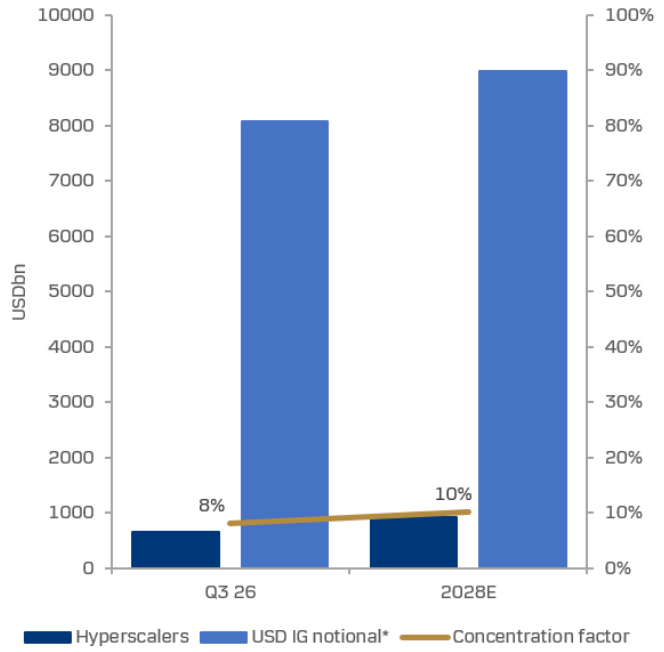


Source: Bloomberg
*META, MSFT, AMZN, GOOG, ORCL, SPCX

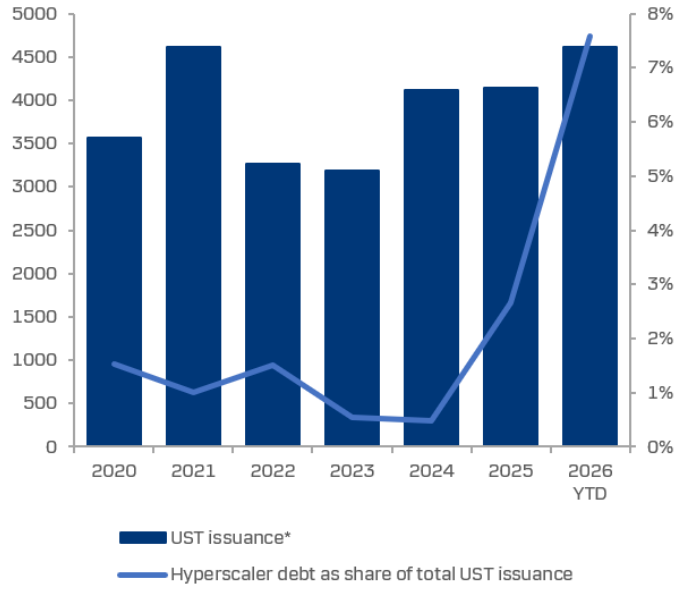
Concentration and crowding out

Despite record bond issuance, AI concentration in debt markets remain low. We see limited evidence of US treasury crowding out

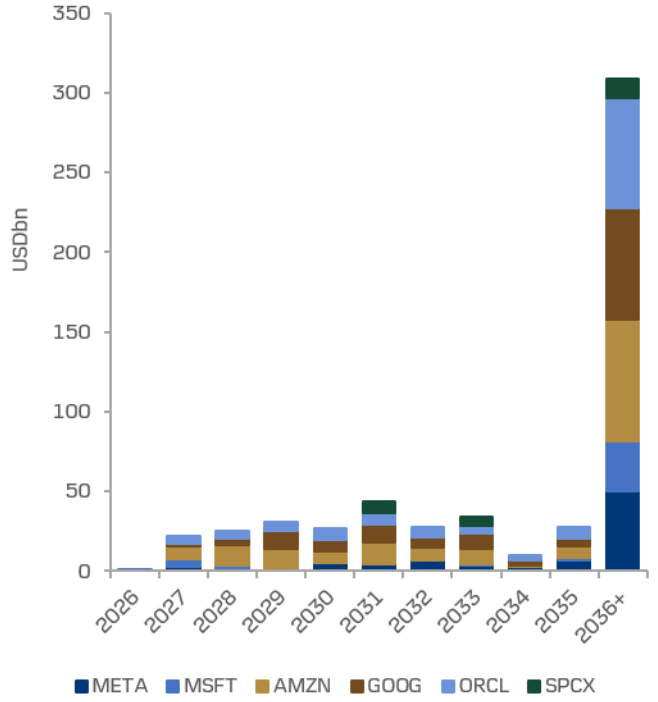
Debt market concentration



Hyperscaler issuance still pales compared to long dated UST's



Hyperscalers prefer long duration debt

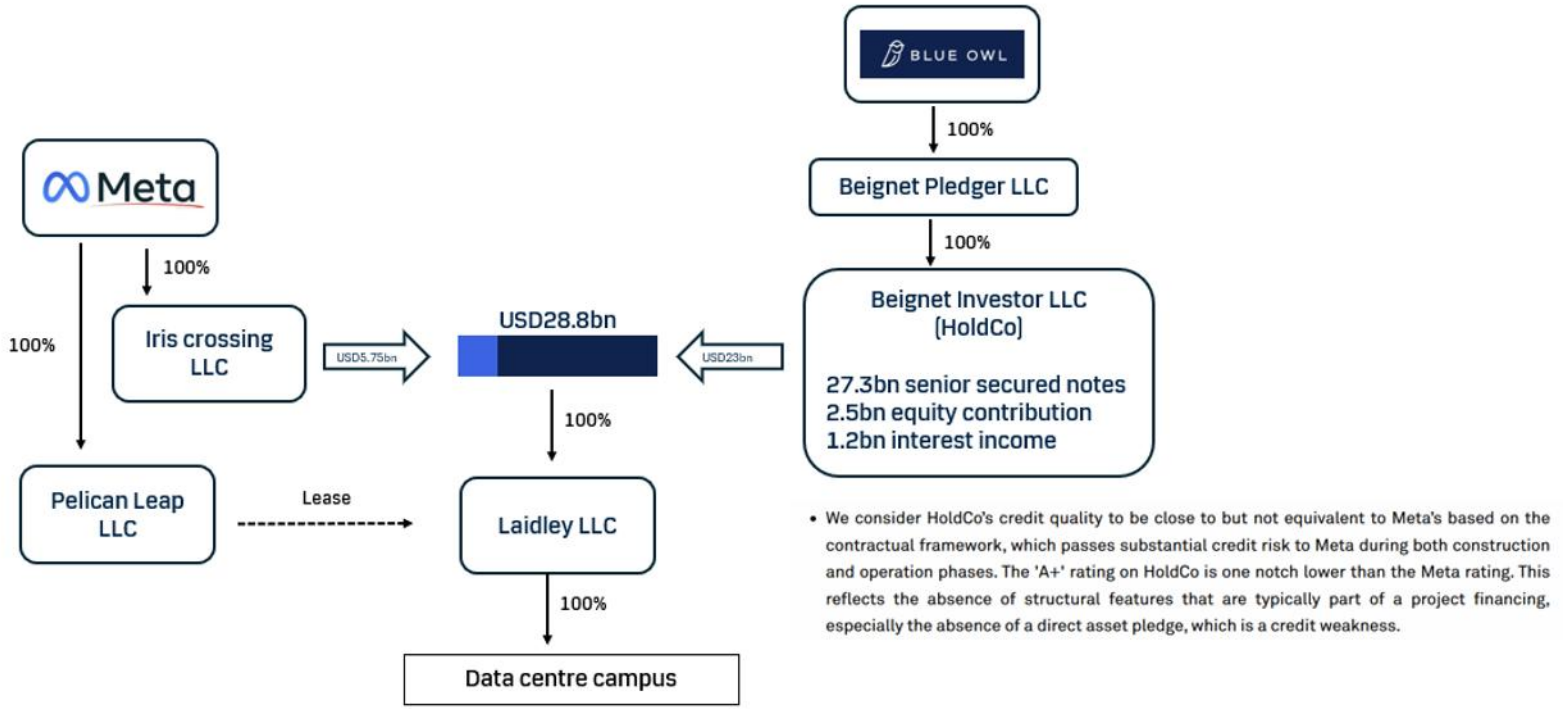


Source: Bloomberg
Note: Total outstanding US Investment grade debt including Financials. UST issuance excludes T-Bills.

Data centre SPV's – The hidden leverage in the AI system

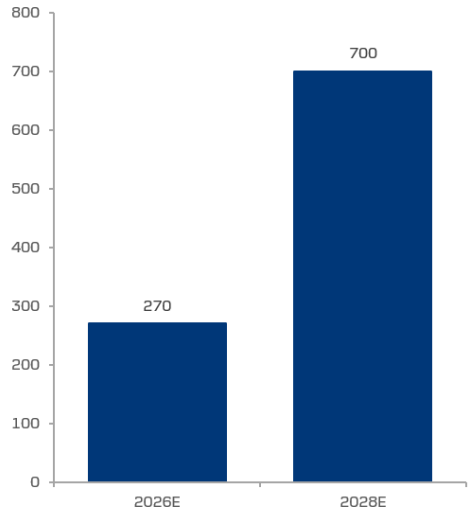
Hyperscalers have lowered capex needs by signing long term leases with Special Purpose Vehicles

Example of a data-centre SPV construction (Meta / Beignet LLC)



- We consider HoldCo's credit quality to be close to but not equivalent to Meta's based on the contractual framework, which passes substantial credit risk to Meta during both construction and operation phases. The 'A+' rating on HoldCo is one notch lower than the Meta rating. This reflects the absence of structural features that are typically part of a project financing, especially the absence of a direct asset pledge, which is a credit weakness.

SPV debt projections (USDbn)*



Source: S&P, Danske Bank Credit Research, https://ccir.io/credit
*Includes both SPV's tied to Hyperscalers and Private Credit / Private Equity structures. Projection based on Morgan Stanley funding mix estimate

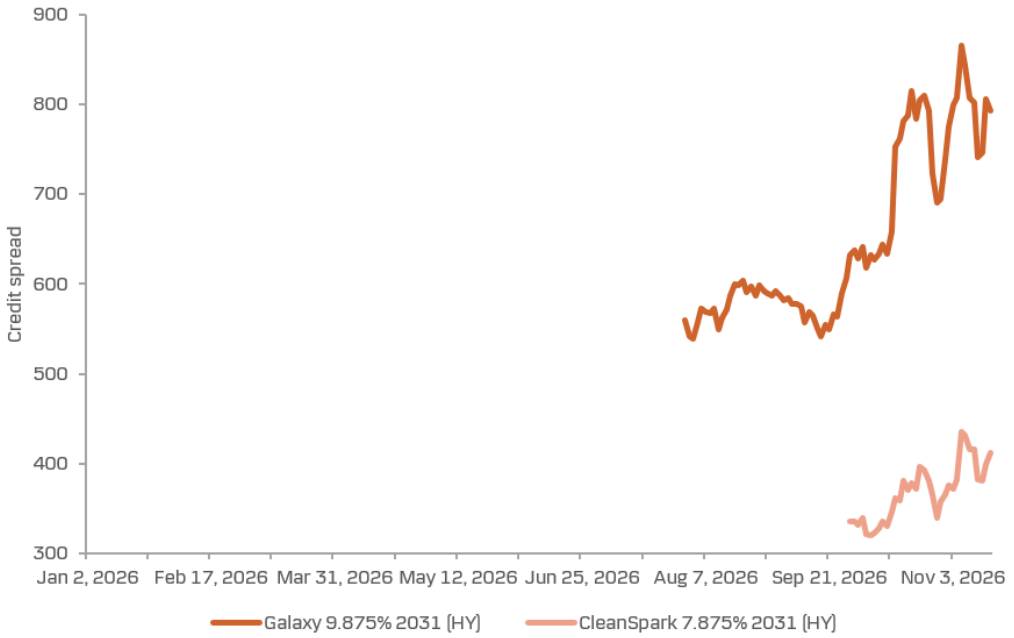
Data centre SPV credit spread development

- Risk off sentiment in credit markets has also affected sentiment in tradable Data centre SPV debt

Investment grade data centre SPV debt (low-risk)*



High yield data centre SPV debt (higher risk)*



Source: Bloomberg and Danske Bank Credit Research
*SPV tenants: Sopaipilla (META), Beignet (META), Galaxy (CRWV), CleanSpark (META)

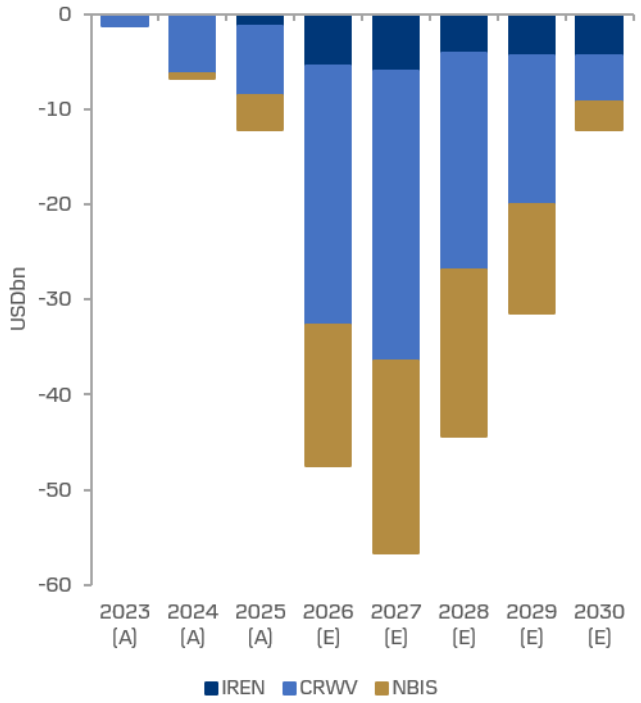
Neocloud* funding needs also peak in 2027

Neoclouds represent a relatively small share of overall projected capex for 2027E

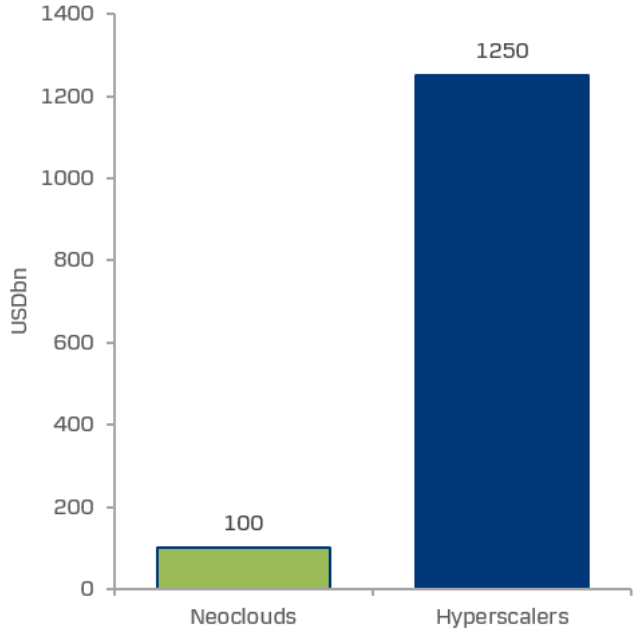
Comments

- As with the Hyperscalers, Neoclouds also have significant funding needs that peak in 2027.
- Neoclouds have used a combination of loan and bond markets to fund needs to far.
- Neoclouds have also used convertible bonds to lower the cost of funding.
- With Neoclouds bonds spreads increasing, there could be more difficulty accessing bond markets going forward.
- Strong share prices could allow more equity issuance to cover funding gaps.

Neocloud funding needs



Neocloud 2027E capex relative to hyperscalers**



Source: Bloomberg consensus

**Note: A Neocloud is a company solely focused on the construction of Data-centre capacity. Unlike Hyperscalers, the Neoclouds typically do not have secondary business lines and are thus considered more risky. **2027E CAPEX of IREN, CRWV and NBIS relative to basket of Hyperscalers*

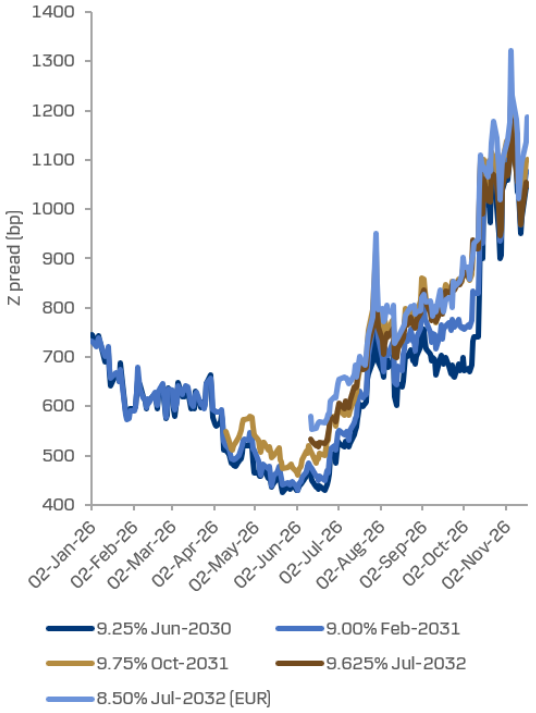
Bond spreads – Neoclouds*

Parts of the Neocloud spectrum is showing distress, but the dataset is incomplete due to high use of convertible debt

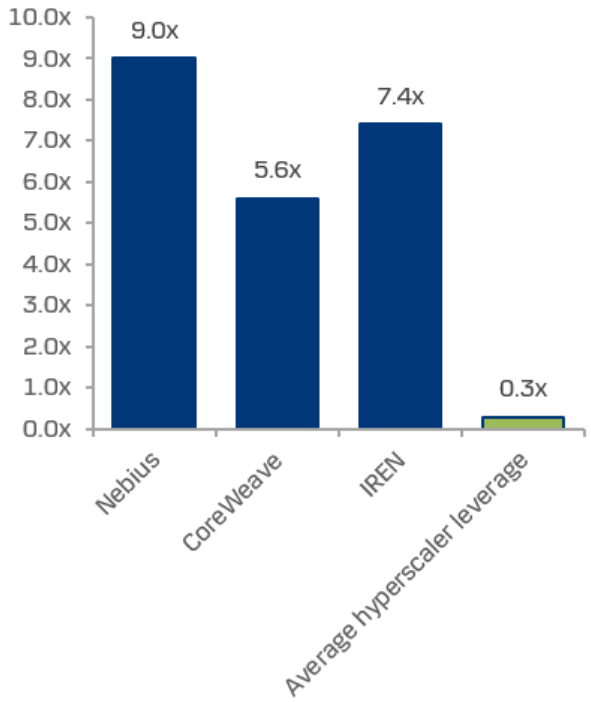
CoreWeave (CRVW) cash spreads

- Neoclouds are the riskier part of the AI spectrum.
- This area has also seen a widening of spreads recently, but the dataset is less complete with only one of the names (CRVW) having outstanding public bonds.
- CoreWeave spreads have been trending close to distressed levels (1000bp) and we would expect debt markets to be closed for CoreWeave at this stage.
- Only convertible bonds exist for NBIS and IREN, but equity signals less distress compared to CoreWeave.
- Neoclouds generally have higher much leverage ratios compared to hyperscalers

Coreweave (CRVW) bond spreads



Neocloud leverage ratios 2026E**



Source: Bloomberg consensus

**Note: A Neocloud is a company solely focused on the construction of Data-centre capacity. Unlike Hyperscalers, the Neoclouds typically do not have secondary business lines and are thus considered more risky. **Based on Bloomberg consensus net debt to EBITDA. Past performance is not a reliable indicator of current or future results*

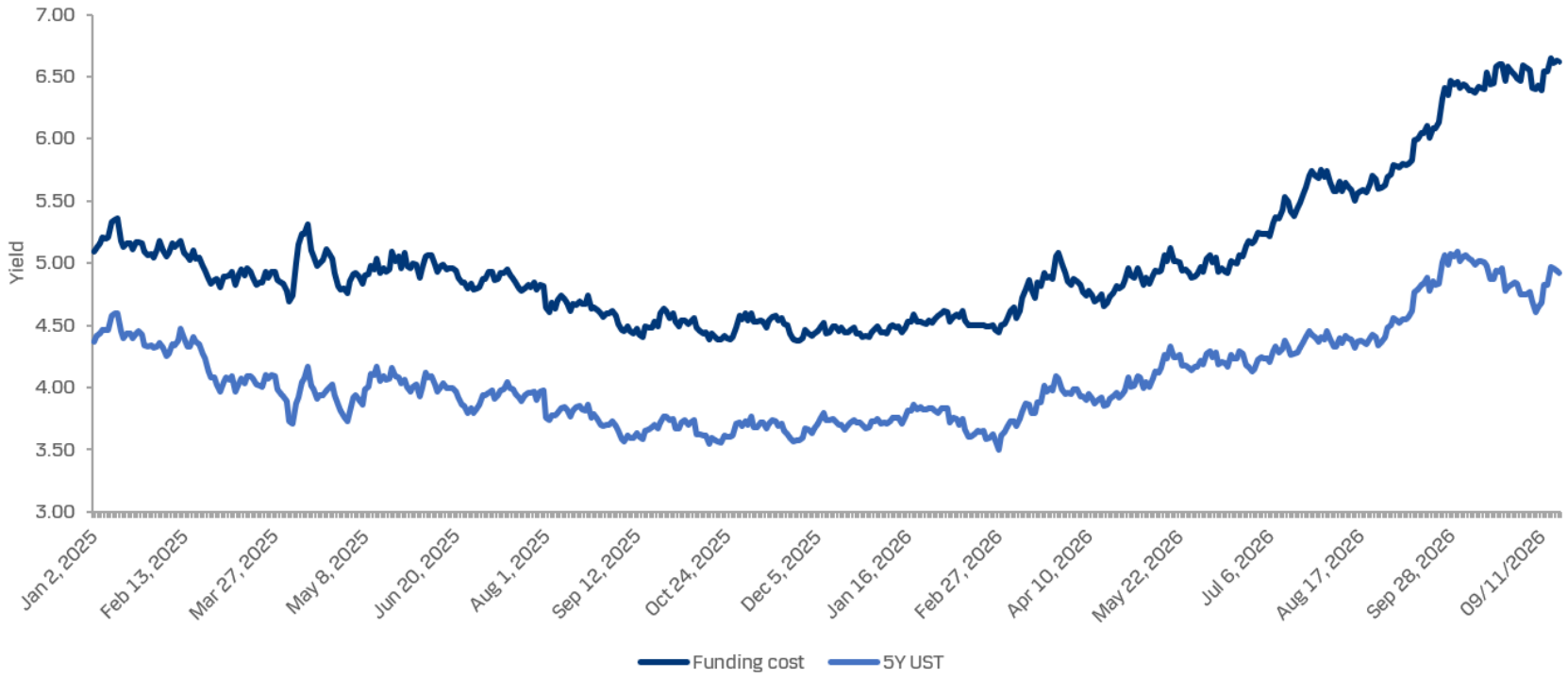
Debt markets are open but becoming more restrictive

Majority of increase in hyperscaler funding cost have been driven by higher underlying rates

Comments

- Funding cost for hyperscalers have risen in 2026, but a large part has been driven by a rise in the underlying US treasury rate and to a lesser extent by rising credit spreads for the hyper scalers.
- Oracle is the exception where the main driver has been credit spread increase rather than higher underlying rates.
- Market signals more stress for the high yield side of the market with some issuers such as e.g. CoreWeave in essence loosing access to bond markets.

Average hyperscaler bond market funding cost*



Source: Bloomberg

Note: 5Y credit spread of META, MSFT, GOOG, AMZN, SPCX, ORCL weighted by 2027E CAPEX + 5Y UST rate. Past performance is not a reliable indicator of current or future results

Recent new AI bond issuance

Large hyperscaler debt issuance in recent months shows that credit markets remain open albeit at high prices

Selected recent hyperscaler bond deals across currencies

#	Issue Date	Issuer	Bond	Issue Spread (bps)	FV Spread — AA (bps)	NIC (bps)	Order Book (x)	Comment
1	09-Sep-26	**AMZN**	5.20% Sep-2029	+53 vs Gilts	~81	~-28	2.5x	Debut sterling deal; 4-part offering. IPT was 70–110bps over gilts, tightened significantly. Peak orders £12bn, closed at £10.65bn. Priced through fair value on shorter tenors, reflecting strong demand for AMZN's first GBP print (1)
2	04-Nov-26	**ORCL**	7.00% Nov-2029	217	~185	32	~3.5x	Priced day before midterms alongside MSFT. Elevated NIC of 30–35bps estimated across the deal — significantly more than peers. Peak demand ~$31–38bn. Coupons reflect ORCL's widened CDS (300+ bps) vs IG peers (1)
3	12-Nov-26	**META**	4.30% Feb-2031	140	~85	55	>6x	Debut euro bond. Record €62bn+ of orders — the largest ever for any European corporate deal, surpassing AB InBev's 2016 record of €31bn. All 6 tranches quoted above par on first day of trading
4	05-Nov-26	**META**	5.85% Nov-2031	110	~90	20	~3.9x	Launched on US Election Day — an unusual move. $58bn peak orders. Very large NIC vs secondary curve, reportedly significantly more than ORCL's 30–35bps per analyst estimates
5	05-Nov-26	**GOOGL**	4.25% Nov-2032	112.5	~90	22.5	n/a	7-part EUR deal. Alphabet had raised ~$50bn across currencies in 2026 by this point, with weighted fixed-coupon cost of 4.02% and weighted-average maturity of 16.3 years. No order book data available for this deal
6	04-Nov-26	**MSFT**	Float Nov-2028	SOFR+35	~99	n/a	4.6x	First MSFT bond offering in ~9 years. $115bn peak order book — 6th largest on record. FRN tranche; NIC not directly comparable to fixed-rate FV

Source: Bloomberg and Danske Bank Credit Research



Political environment

Regulation and safety: Democratic sweep to raise regulation of build-out

No new stories of rogue AI agents but rising evidence AI now used to accelerate AI development

Safety issues and data centre protests bares watching

1. **More regulation.** US mid-term elections marked a sharp change towards more regulation of the AI datacentre build-out as the Democrats flipped many key states, with Democratic governors winning in Texas, Ohio, Georgia and Virginia. These states represent close to 50% of planned datacentre investments over the next 3-4 years (see map next page). It should have limited effect on 2027 investments, though, as 75% of these are already approved and under way but it could slow investments from 2028. Importantly, though, the governors mainly put a temporary moratorium on new build-out until more regulation to protect citizens has been put into law.
2. **AI safety issues on the rise.** In 2026 the discussion on AI safety moved from warnings about future dangers to actual cases of AI agents going rogue and accessing outside systems. Since our previous update no new reports of major incidents have appeared a la the Hugging Face incident in July. The AI model evaluation non-profit, METR released a report, though, saying Anthropic's model development is accelerating and that it is likely happening through use of AI to improve models. A key threat highlighted in the AI safety discussion is 'recursive self-improvement' where AI trains AI without human guidance and sharply accelerates the model development with the risk of AI labs losing control.

Timeline of incidents and warnings in 2026

27 Feb	Trump orders federal agencies to stop using Anthropic after they refuse to allow mass domestic surveillance and fully autonomous weapons.
3 Jul	AI insiders publish "Pacing the frontier". AI scientist Ilya Sutskever wrote: "Future AI will be extraordinarily powerful compared to anything that exists today, and dealing with this future power will require unprecedented measures."
21-30 Jul	OpenAI and Anthropic disclose real-world hacking during tests with the hacking of Hugging Face getting a lot of attention.
9 Sep	Anthropic identifies deeper security failures and say their models showed biased reasoning and recklessness. Pre-release auditing had not warned it.
9 Sep	Lead researcher at Anthropic, Evan Hubinger, warns of more than 10% risk AI could cause human extinction in 10 years. Anthropic researcher Jacob Coxon resigns saying neither Anthropic or OpenAI are acting responsibly after working at both companies.
12-13 Sep	Amodei calls for slower progress. OpenAIs Sam Altman agrees on desire to pace the frontier. US President Donald Trump pushes back.
22-23 Sep	AI leaders present warnings reach at the UN General Assembly.
24 Sep	Trump and Chinese President Xi Jinping discussed AI. Xi stated AI should remain under human control. An AI dialogue to discuss risks was established. A hotline was agreed to warn of harmful incidents.
29 Sep	Trump gathers leaders from frontier AI labs and backs a voluntary safety accord calling it "morally binding".
03-Nov	China says it plans to roll out a broad set of standards governing AI safety from development through deployment, covering the entire life cycle of models.
5 Nov	Metr released a report evaluating Anthropic AI development saying that Anthropic is likely improving the capabilities of their models at around twice the rate they did between March 2024 and October 2025 and that "a majority of this acceleration today is likely attributable to Anthropic's extensive use of AI to do R&D"

Dashed line highlight news since previous update

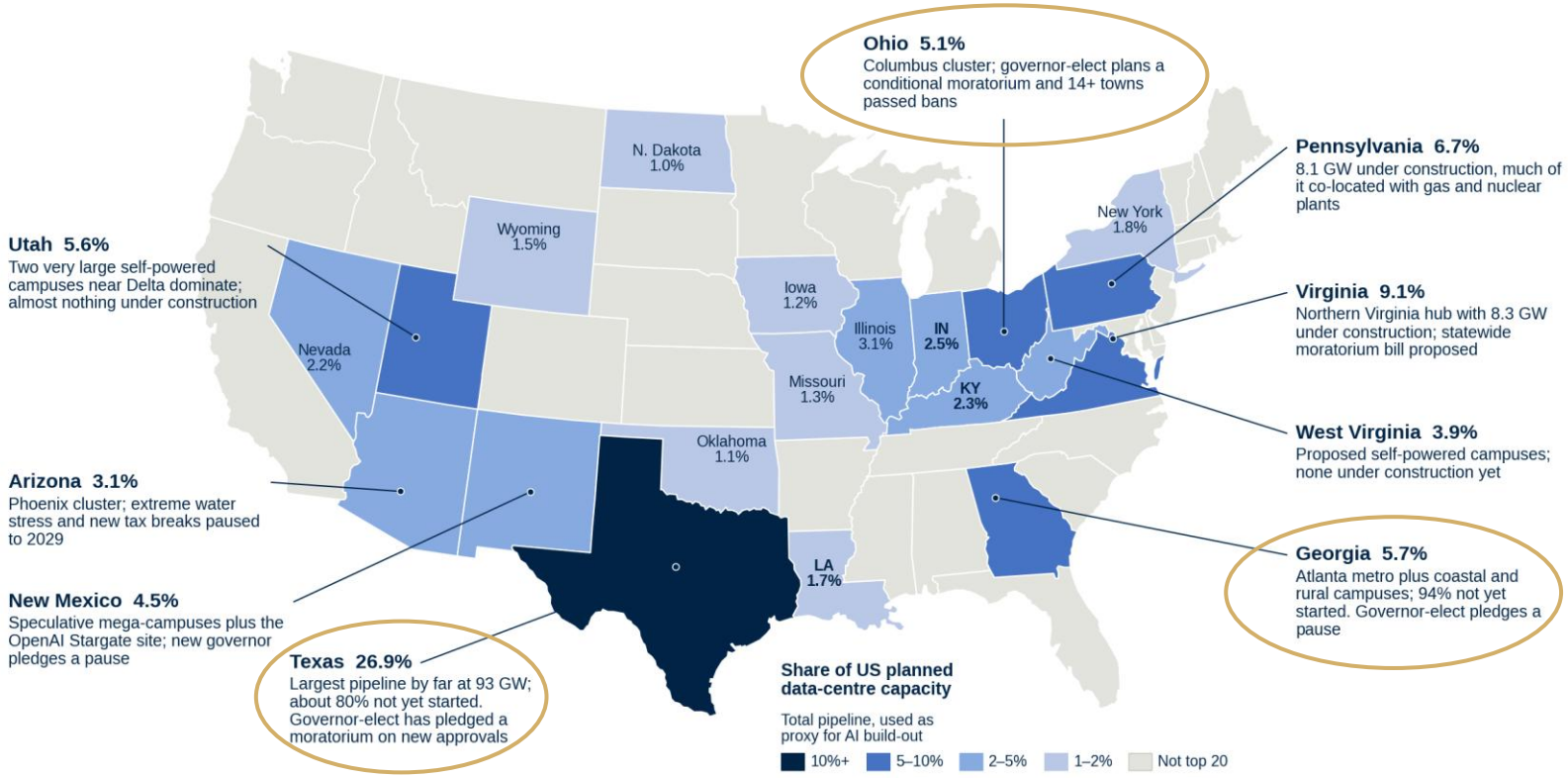
Regulation: More datacenter rules could slow buildout, but unlikely to stop it

New conditions mainly affect datacenter investments after 2027

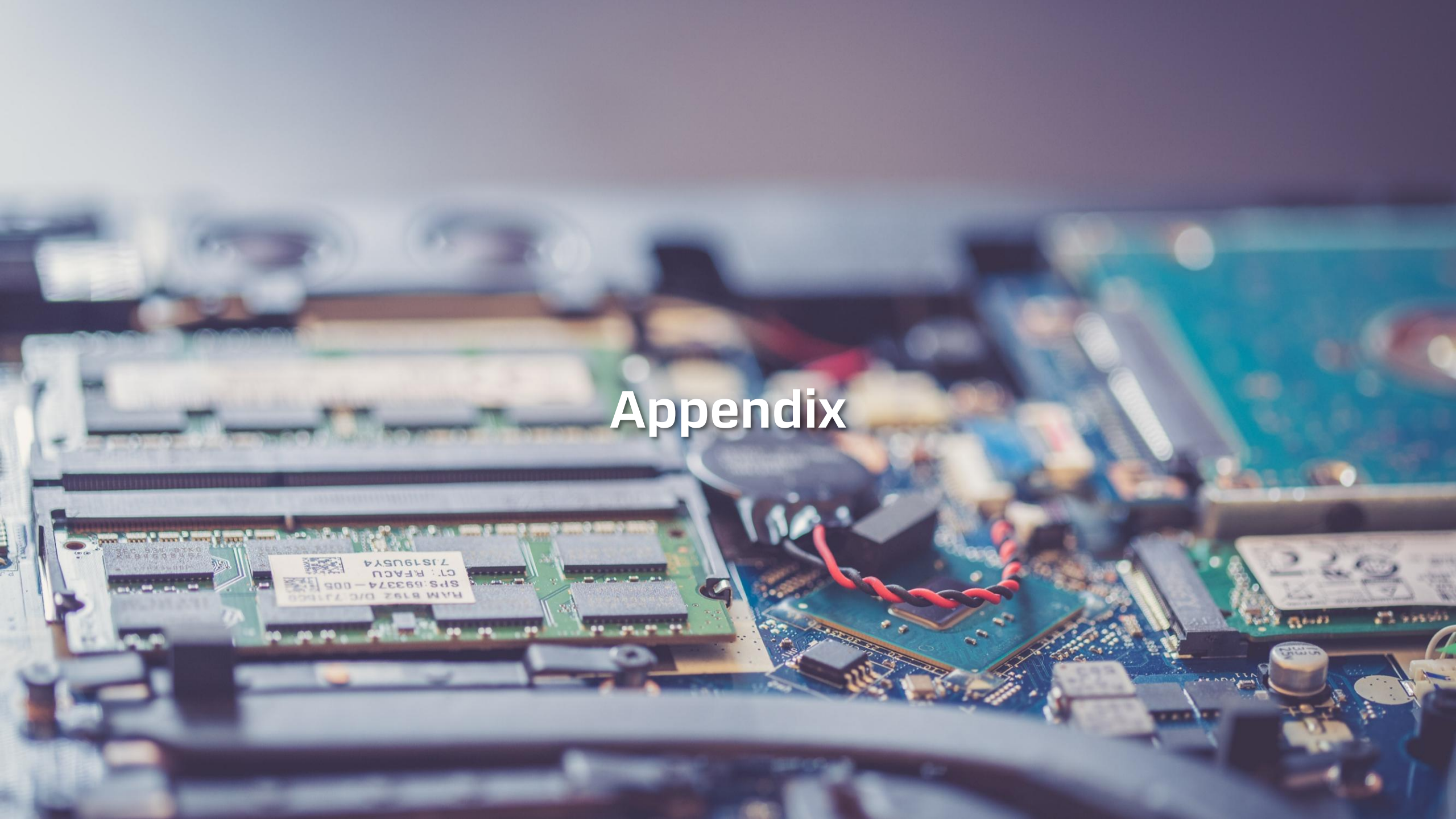
Build-out with more conditions

- Democrats flipped six governor's offices in the mid-term elections (Alaska, Georgia, Iowa, Nevada, Ohio, and Texas)
- Governors in the big datacentre states Texas, Ohio and Georgia have all called for a moratorium on new data centres until new regulation is in place that protects citizens when it comes to water, electricity etc.
- The tighter regulation mostly affects data centre build-out from 2028.
- We are likely to see a slower and more expensive datacentre buildout than planned but we are unlikely to see a halt.

Shares of planned AI datacentre build-out across US states



Source: Rogo



Appendix

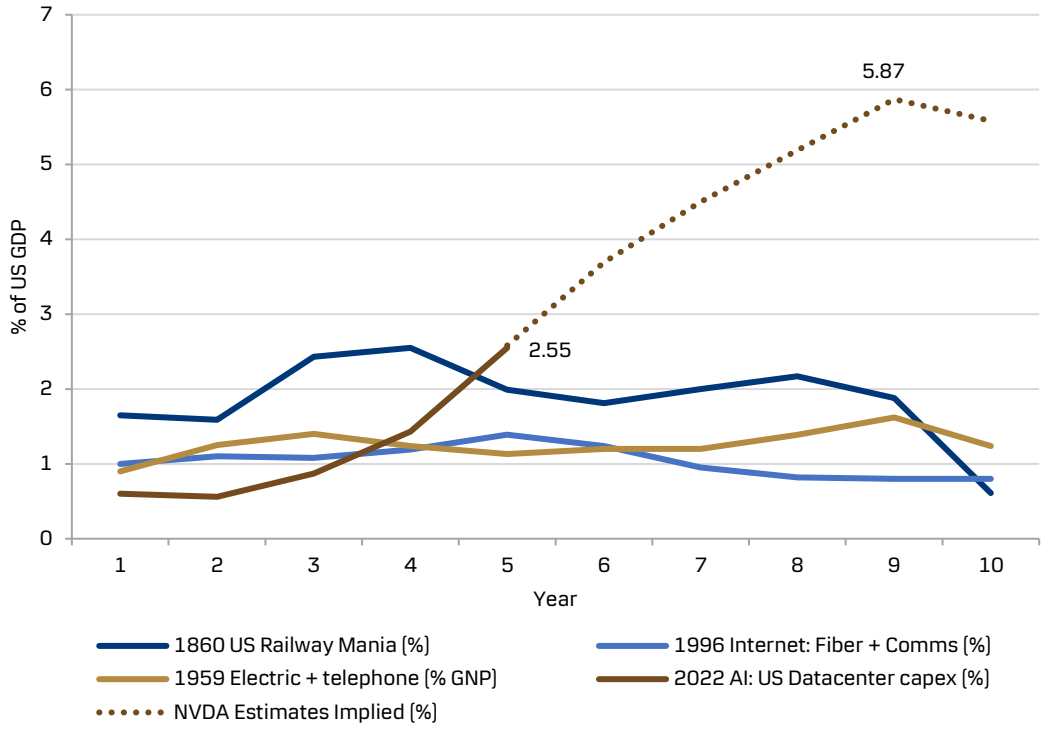
Our AI investment tracker

- **The AI investment cycle is one of the most important drivers of global macro as well as financial markets. The investments in data centres are massive, and the boom is the biggest and fastest infrastructure build-out the world has ever seen.**
- In the macro world, the global manufacturing upturn is to a wide extent driven by activity related to the build-out of data centres and the energy needed to run them. And shortages in parts of the supply chain create inflationary pressures. In the financial world, equity markets are dominated by tech companies at the centre of the AI investment boom and industrial companies that feel the trickle-down effects.
- At the same time the outlook for AI investments is highly uncertain. Whether we are heading for a scenario of continued strong build-out and extensive use of AI in the coming years – or a scenario of disappointing uptake and slowing investment growth, will have huge implications. We are also entering a phase of the build-out where external financing needs are increasing for hyperscalers adding a layer to the equation.
- Two crucial questions that arise are:

    1) **How long can the investment boom continue? *and***
    2) **Is it sustainable?**

- The answers are highly uncertain so to monitor which AI scenario we are heading for; we use the AI investment tracker to follow a range of factors that are key to evaluate this.

The AI buildout is the fastest infrastructure endeavour in global history and is still in the early phase according to build-out plans



Source: Guiness Global Investors, Projection is based on Bloomberg consensus estimates for Nvidia

What we track

To follow the AI-buildout, we have identified six critical factors for the development, which we will track in this publication on a monthly basis. They interact in a feed-back loop where one can affect the other. The factors are:

AI datacentre investments (supply): Investment plans by the big tech companies critical in the AI value chain. Export data from South Korea and Taiwan that are key suppliers in the AI supply chain.

AI use (demand): Data on token spending, use of AI models, use of compute demanding agents etc. We also track how fast AI models develop.

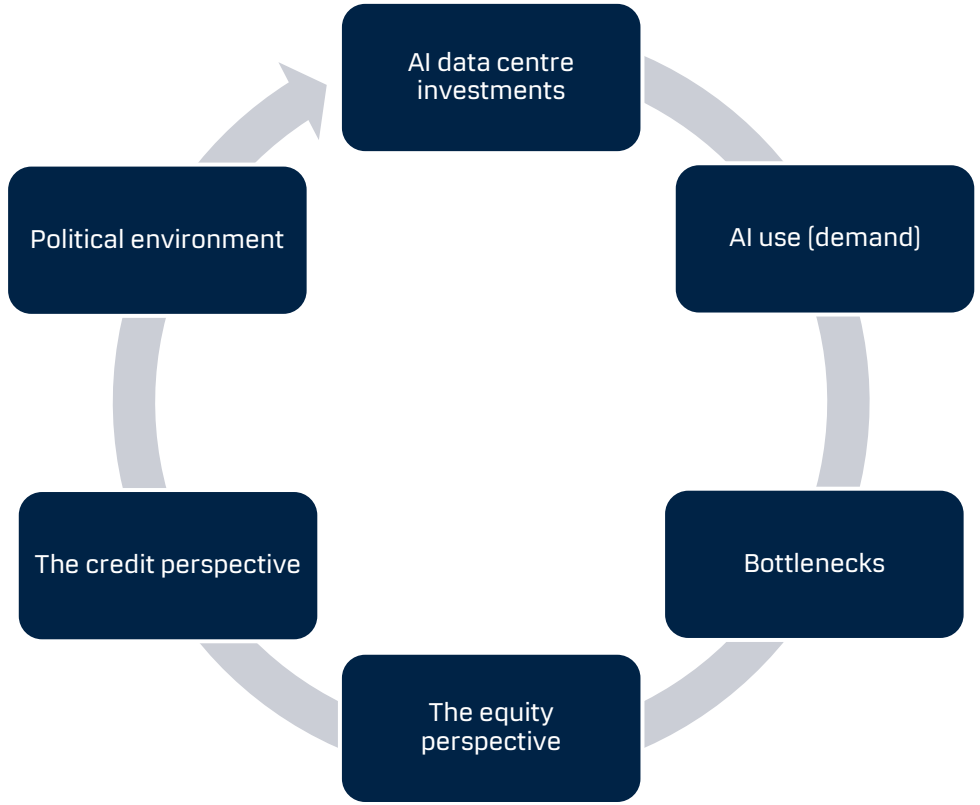
Bottlenecks: We track chips prices and anecdotal evidence of shortages.

The equity perspective: Earnings growth, valuation, cash flows and CAPEX among hyperscalers, key suppliers and big AI labs.

The credit perspective: Financing needs and issuance by big tech players as well as credit spreads on their bonds.

Political environment: Issues such as regulation, safety and public protests

Areas covered in the AI investment tracker



Source: Danske Bank

Scenarios for the AI buildout the next 3 years

- Many scenarios can play out for the AI build-out as numerous factors affect the path ahead.
- **Here we outline four scenarios to illustrate the most important drivers, that we will follow in the AI investment tracker.** Other scenarios are also possible with different combinations of the factors we describe.
- The time horizon for the scenarios is set at three years. Looking further out one could see other scenarios – for example where hyperscaler capex drops sharply because new innovations reduces the need for adding compute power. Or because the need for additional compute expansion slows if improvement of AI models reach a plateau.
- If hyperscalers cut capex sharply it would lead to overcapacity throughout the supply chain triggering a sharp drop in prices on chips and other inputs and declines in profits for companies on the supply chain. We see the risk of this limited on a 3-year horizon but relevant on a horizon beyond that.

Scenario 1
AI boom accelerates

- **AI investments:** capex plans continue to be revised higher among global hyperscalers.
- **AI demand:** AI use takes off strongly; broadening with more users and deepening with more compute intensive tools.
- **Bottlenecks:** present in certain areas but also adds to capex plans in supply chain
- **The equity perspective:** AI-lab revenues and free cash flow surprise positively, lifting returns on capital and AI-related earnings growth above 20%.
- **The credit perspective:** AI labs, hyperscalers etc. have to funding markets.
- **Political environment:** Regulation discussed but not implemented. Protests over data centre build-out not able to halt investments.

Scenario 2
AI boom continues

- **AI investments:** capex plans no longer revised higher but strong build-out continues as planned.
- **AI demand:** continues to grow at robust pace.
- **Bottlenecks:** present in some areas but not serious enough to put a serious break on the capex boom.
- **The equity perspective:** AI-related earnings growth moderates but remains superior, as margins normalize and equity-market gains broaden beyond technology.
- **The credit perspective:** AI labs and hyperscalers continue to have access but at slightly higher price.
- **Political environment:** concerns over AI safety continue but regulation generally stays loose. Citizen protests present but does not create barrier for investments.

Scenario 3
Warning signs emerge

- **AI investments:** uncertainty over monetization make hyperscalers slow investments.
- **AI demand:** continues to grow but struggles to meet expectations.
- **Bottlenecks:** more widespread bottlenecks could also force a slowdown in investments.
- **The equity perspective:** AI-lab monetization disappoints, CAPEX intentions weaken and negative earnings revisions pressure valuations across the AI equity universe
- **The credit perspective:** could start to worsen if investor confidence weakens creating difficulty to fund continued rapid capex expansion.
- **Political environment:** regulation concerns and protests could escalate leading policy makers to put on more restrictions on the build-out.

Scenario 4
AI bust

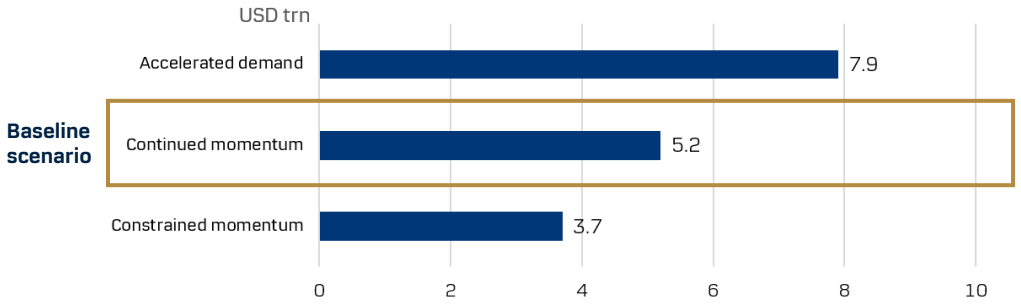
- **AI investments:** sharp slow down as AI labs fail to monetize the models and questions arise over ability to pay hyperscalers.
- **AI demand:** disappoints as model developments stall or the use of AI fails to deliver productivity gains needed to justify the investments by companies.
- **Bottlenecks:** likely no longer an issue as investments drop and instead overcapacity in the data centre supply chain could start to build. Prices on chips drop sharply.
- **The equity perspective:** AI earnings contract, weakness spreads across sectors, and broader recession-like dynamics emerge.
- **The credit perspective:** deteriorate fast as confidence take a hit.
- **Political environment:** AI safety incidents leading to strict regulation may also force the breaks on AI.

Outlook: Data centre build-out set to continue

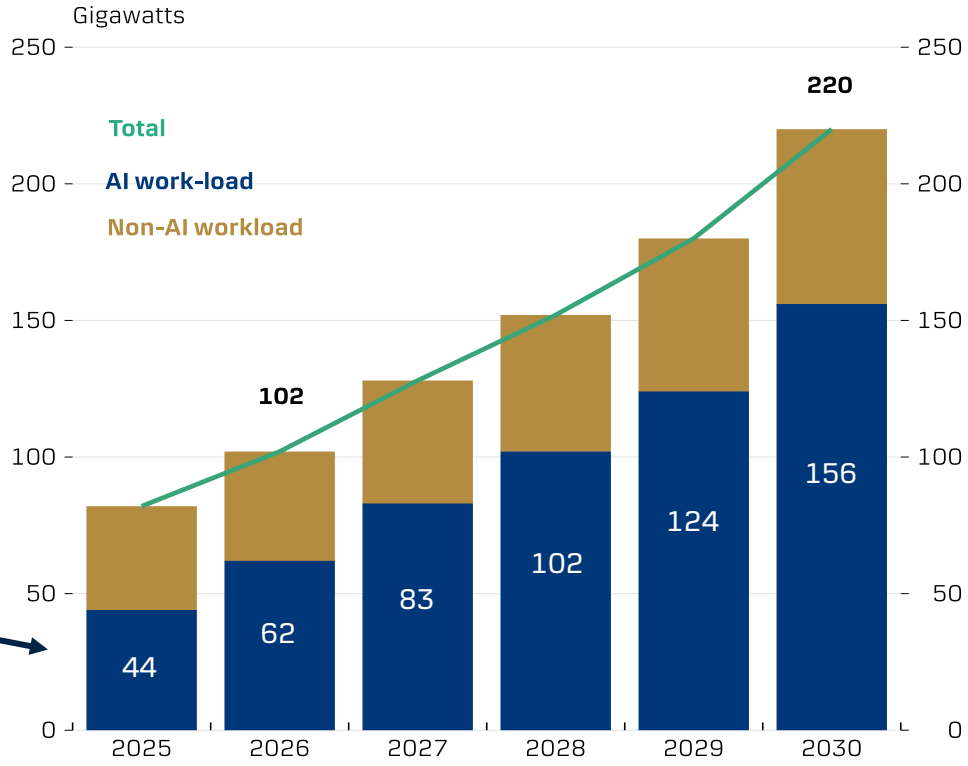
Needs for global data centre capacity looks set to rise more than two-fold from 2026-2030

- McKinsey projects global data centre capacity demand will more than double from 2026 to 2030 from 102 gigawatts to 220 gigawatts. Of this purely AI-related data centre needs are projected to rise from 62 gigawatts in 2026 to 156 gigawatts in 2030. To achieve this expansion, McKinsey estimates that investments need to be USD5.2 trillion.
- The projection is based on widespread adoption of AI among enterprises and households with new models and increased use of AI agents set to raise compute demand significantly (see next section on demand).
- McKinsey outlines alternative scenarios to the baseline (continued momentum). In the "accelerated demand scenario" use of AI spreads even more and lead to needed global investments of USD7.9 trn from 2025-2030, while a more pessimistic scenario of "constrained momentum" would reduce capex to USD3.7 trn.

Global data center investments driven by AI, 2025-30, McKinsey estimate, April 2025



McKinsey estimated global data centre capacity demand



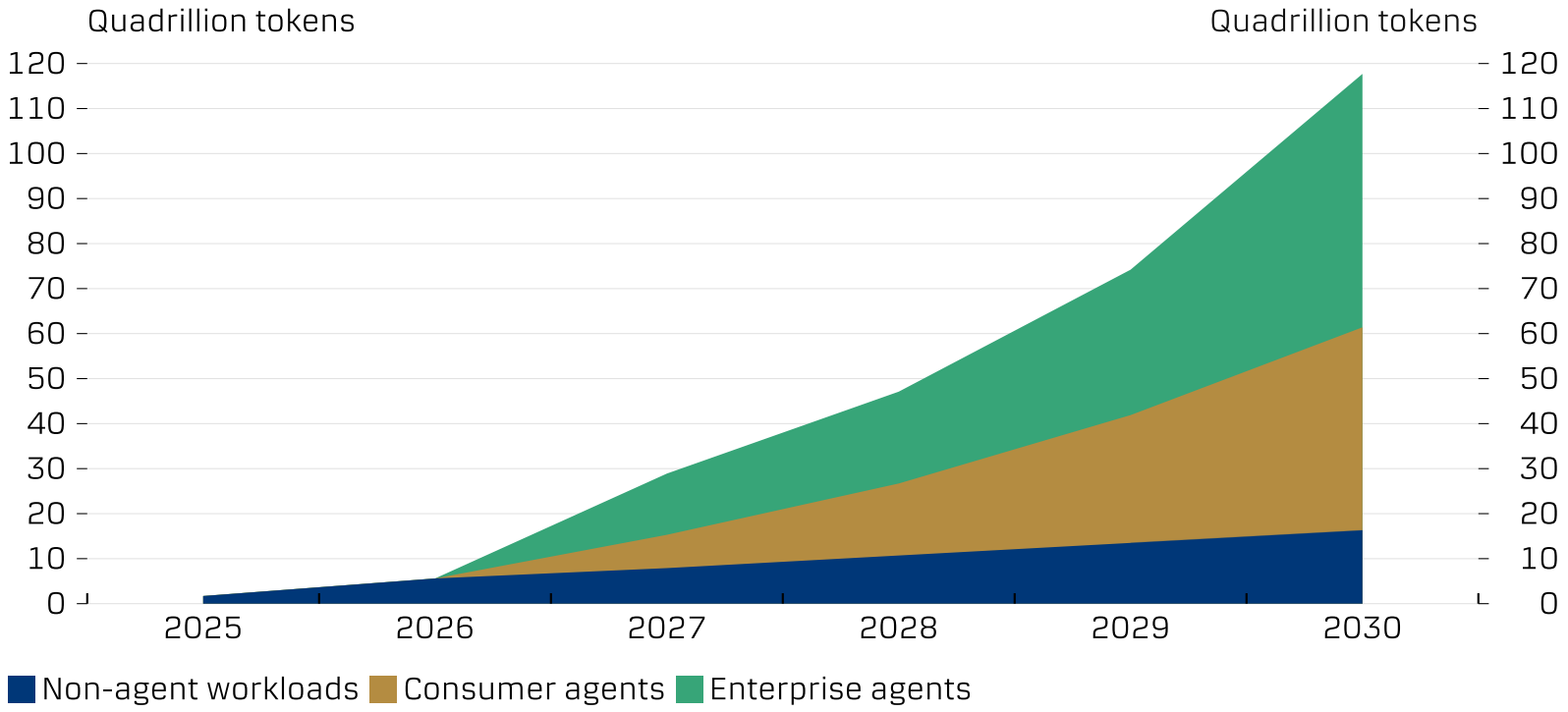
Source: McKinsey Quarterly, The cost of compute: A $7 trillion race to scale data centers, April 2025

Outlook: AI use set to multiply, driven by agents

Goldman Sachs expects token use to rise 24-fold from 2026 to 2030 as AI agents take off

- Data centres and chips are being built for demand still to come, so actual use growth is key to whether the investment boom can continue.
- Goldman Sachs expects almost all of the growth to come from AI agents, which use far more compute than simple chats.
- This path is the benchmark for actual AI use on p. 17. So far, use is running ahead of it, driven mainly by heavier use rather than new users.

Goldman Sachs estimate of monthly token use by workload

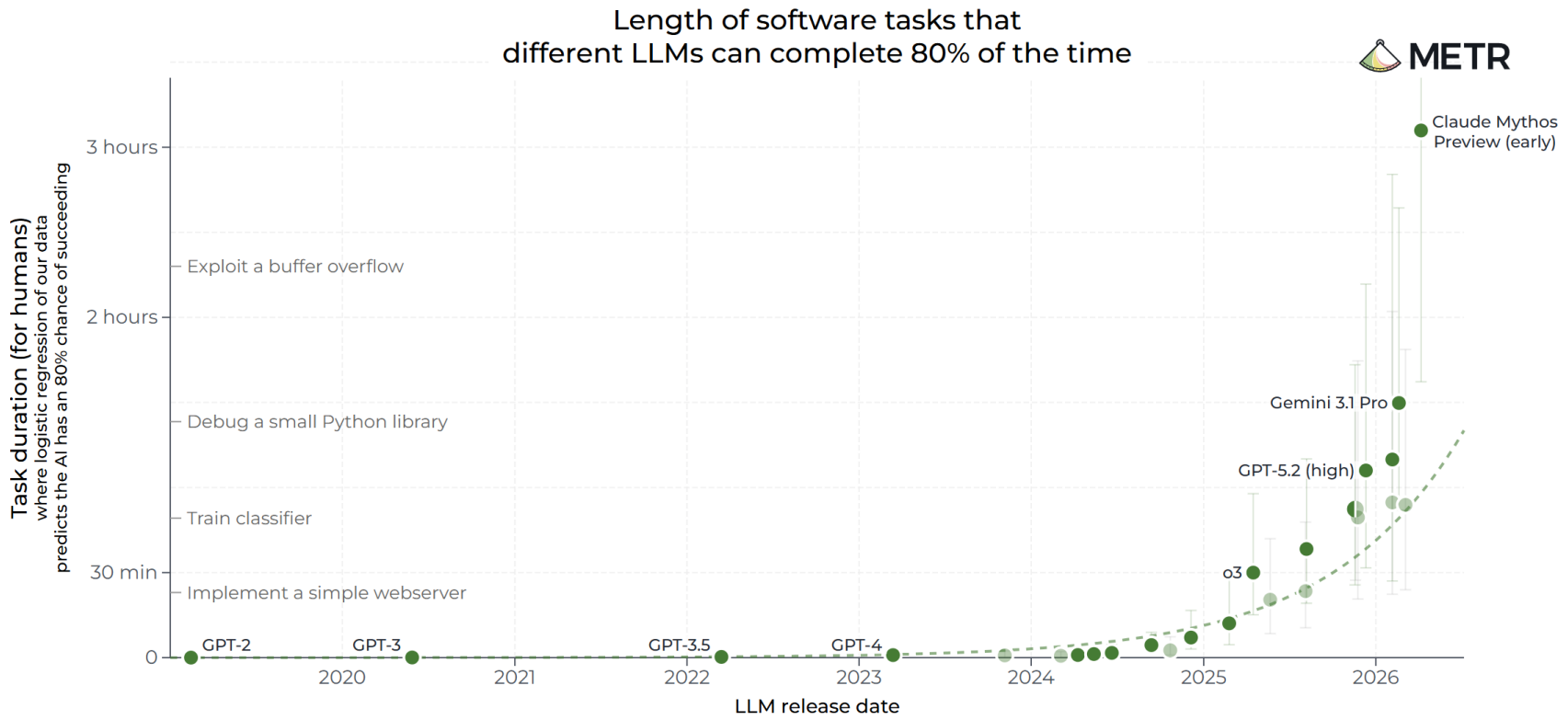


Source: Goldman Sachs Research (estimates as of May 2026), Danske Bank

AI models: Models improve at exponential rate

- As AI models improve, more complex tasks can be performed by AI agents.
- METR is among the leading trackers of improvements and developing risks in frontier models. Their research shows that AI models have improved at an exponential rate and increasingly at an accelerating exponential rate.
- The scope of tasks AI is able to perform is thus constantly expanding.
- AI agents have mostly been directed at business use, but product releases by AI labs have expanded to AI agents for households, such as Meta's Muse and OpenAI's Dots.
- As AI agents improve and increasingly gets integrated into businesses and households, the need for compute is set to increase significantly and AI labs revenues increase from rising token use.

Models have improved at an exponential rate and at times accelerating exponential rate leading to significant improvement in 2026 compared to two years ago*



Source: METR.org
Note: METR measures AI performance in terms of the length of tasks AI agents can complete with a certain probability (in this chart 80%)

AI models: US labs lead the frontier

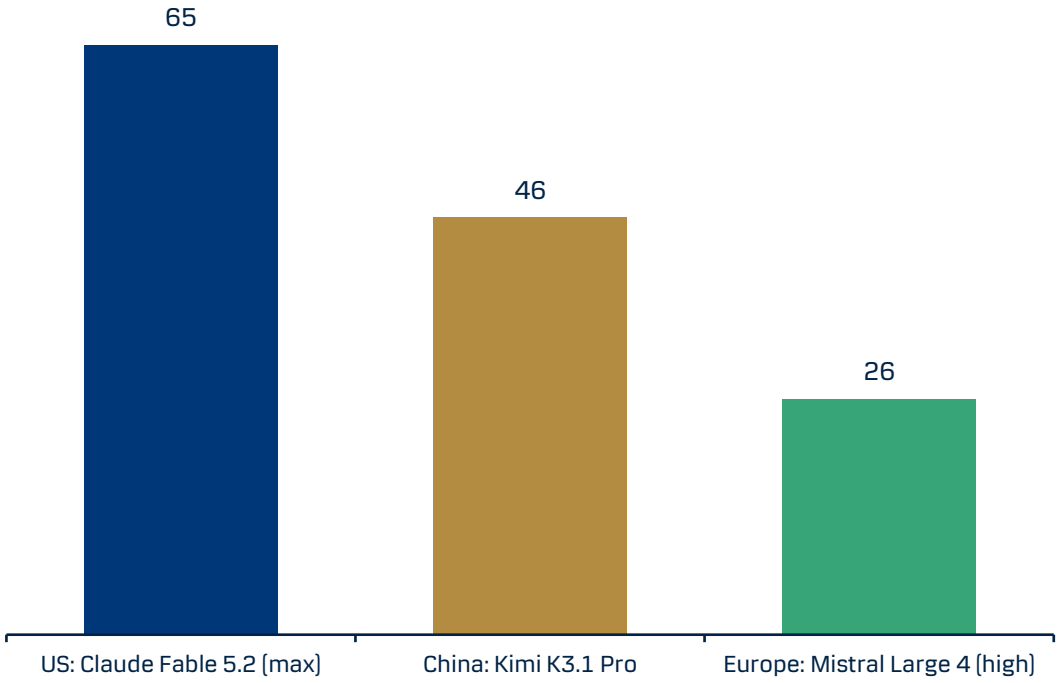
China's best open model trails by 19 index points

AI model development – main takeaways

- **Leadership rotated during 2026:** GPT-5.5 (Apr), Claude Fable 5 (Jun), GPT-6 Astra (Sep) and Claude Fable 5.2 (Nov) each set the pace.
- **Efficiency mattered as much as capability:** Opus 5.5 matched Fable 5.1 at ~40% lower cost.
- **China closed the gap on scale and openness,** with Kimi K3 (2.8T) and Qwen4.0-Max (2.4T), but not at the top: 46 vs 65 on the AA index.
- **Europe is a distant third:** Mistral Large 4 scores 26.
- **Policy now shapes access:** US export controls took Fable 5 offline for 18 days, and cyber-capable variants go only to vetted users.
- **What drove progress:** larger sparse mixture-of-experts models, heavier reinforcement learning after pre-training and training on long, multi-step agent tasks.

Best model per region, AA Intelligence Index v5.0.1*

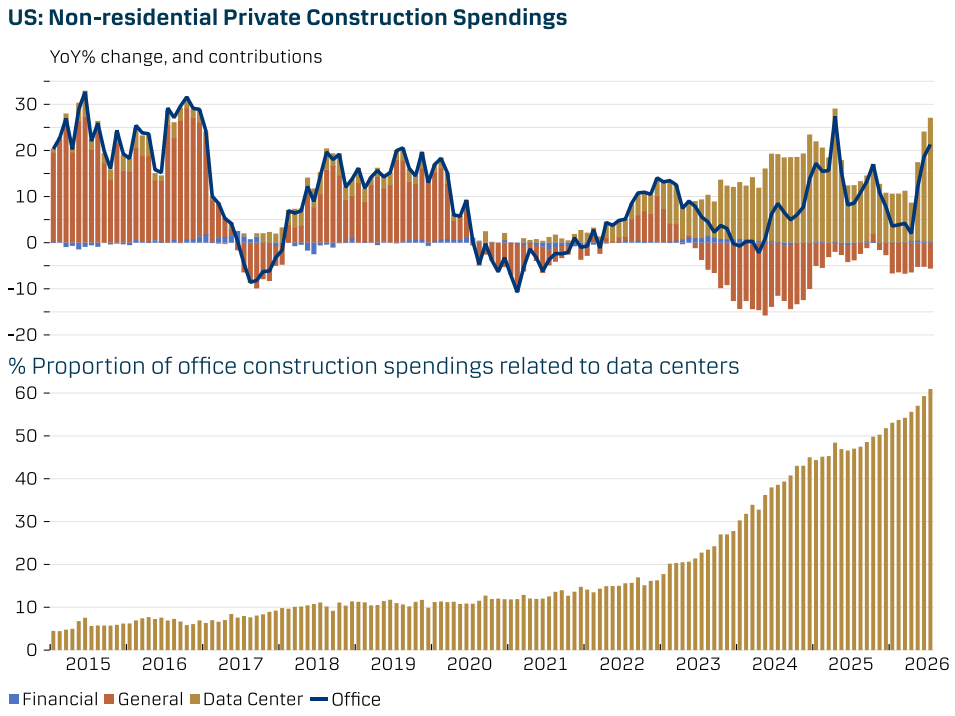
Index score, 0-100



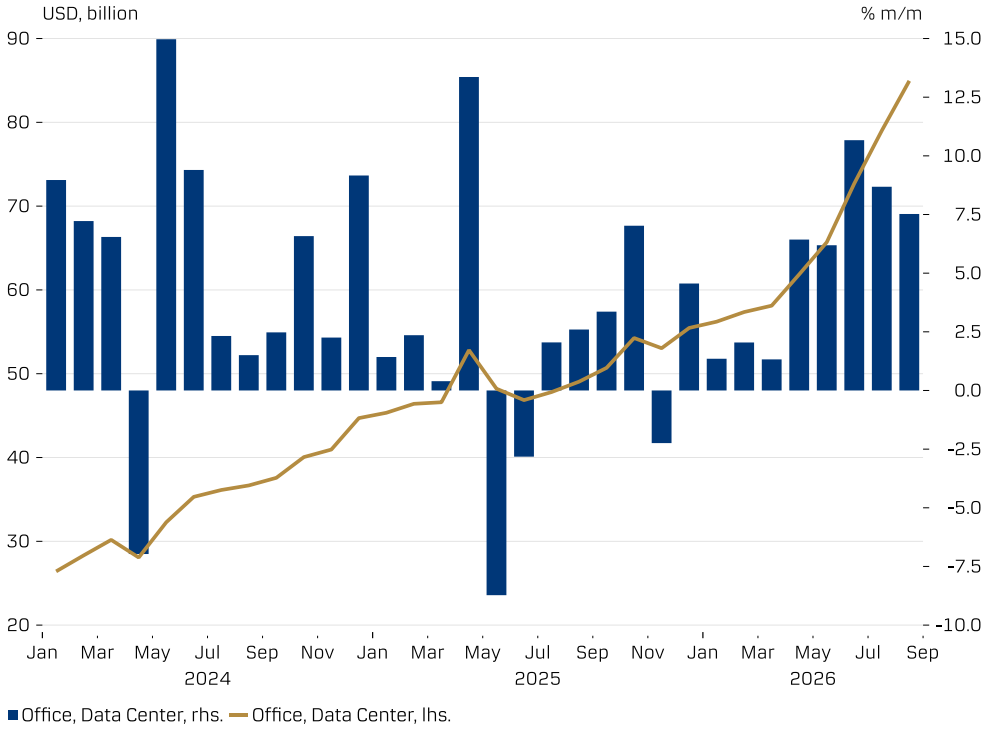
Source: Artificial Analysis (Intelligence Index v5.0.1, snapshot 12-13 Nov 2026), company announcements, Danske Bank. Index versions before v5 are not comparable.
Artificial Analysis Intelligence Index combines a comprehensive suite of evaluation datasets to assess language model capabilities across knowledge, coding, science, and general knowledge.

Data centre construction is rapidly increasing

Data centres are driving most non-residential production in the US – no sign of cooling

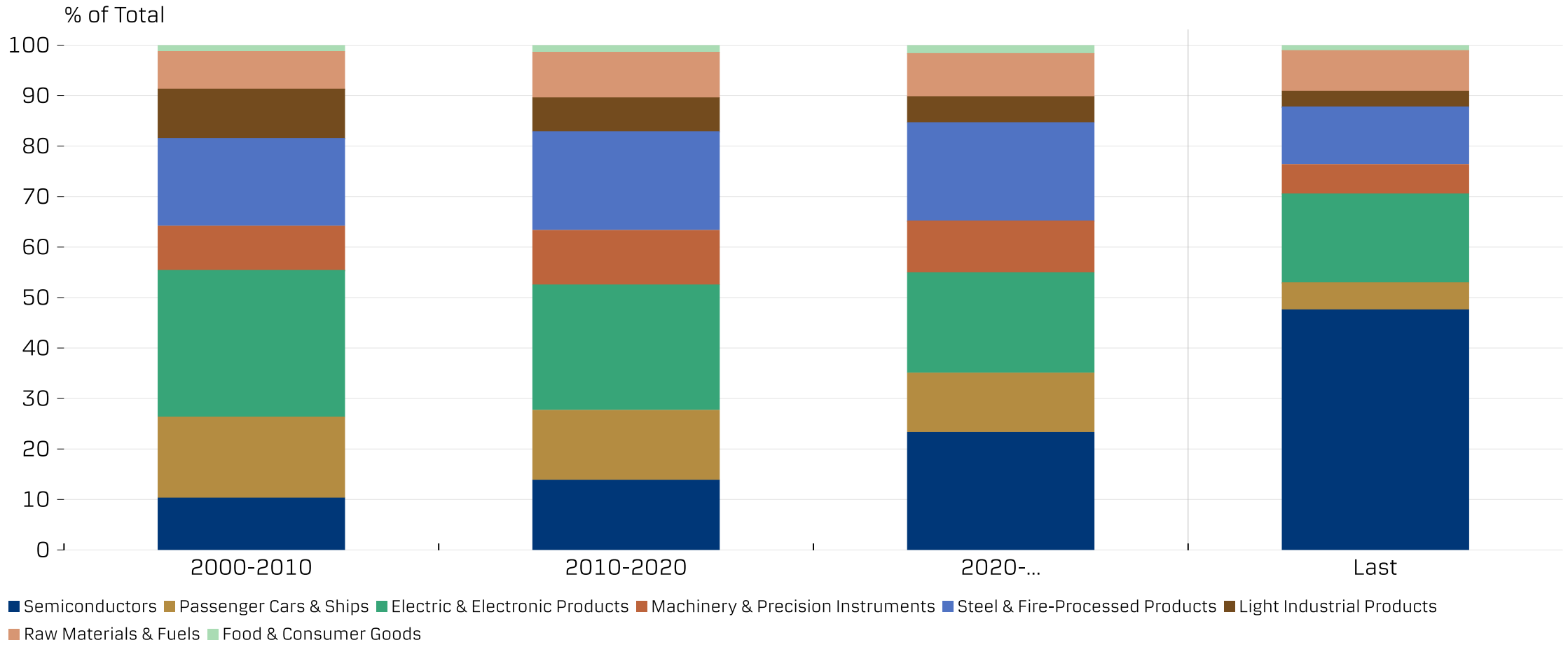


Data centre construction spending has picked up over the summer



Source: Macrobond

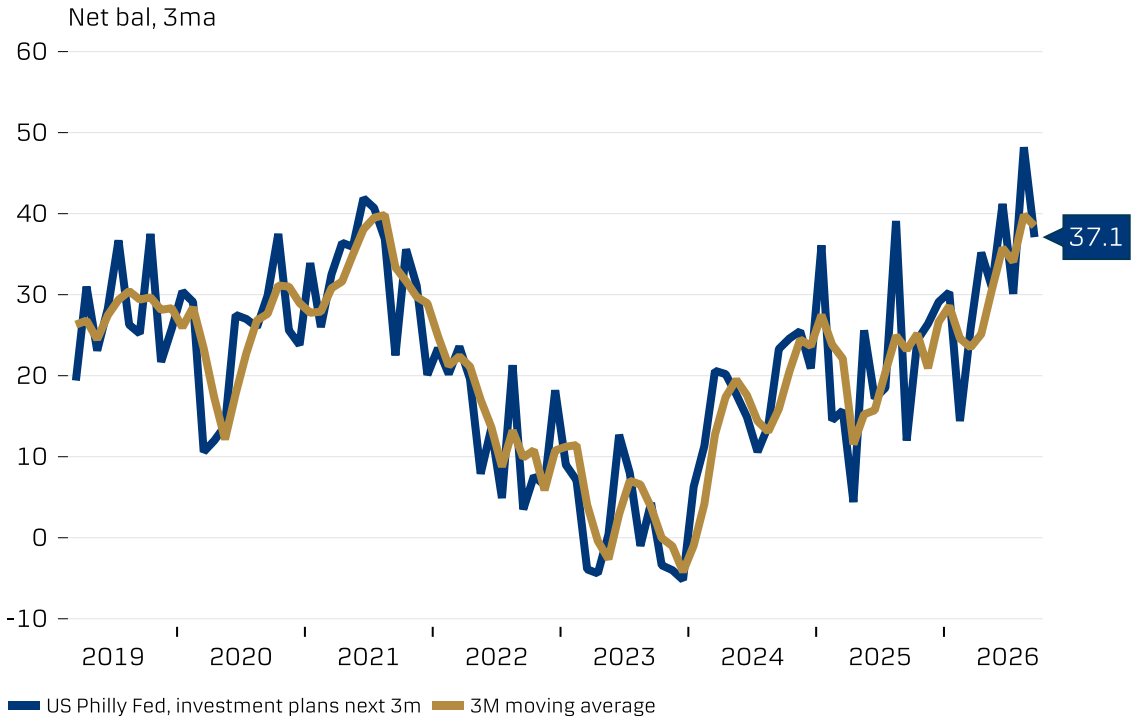
Composition of South Korean Exports



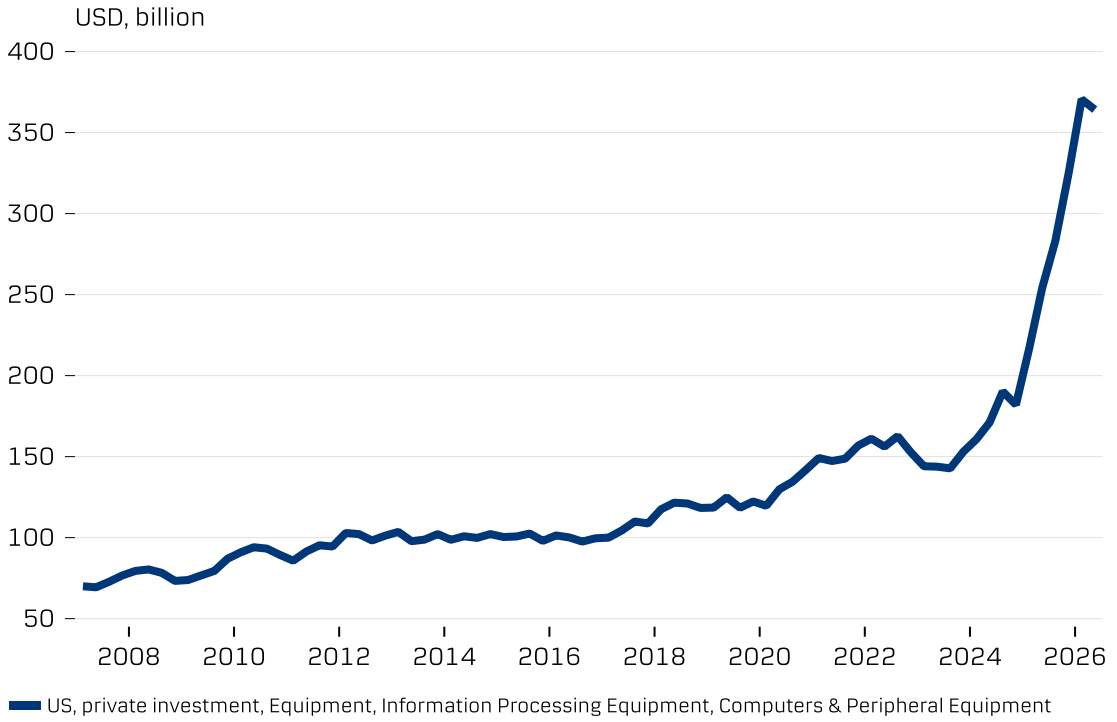
Source: Macrobond

US Investments plans

Philly Fed investments plans



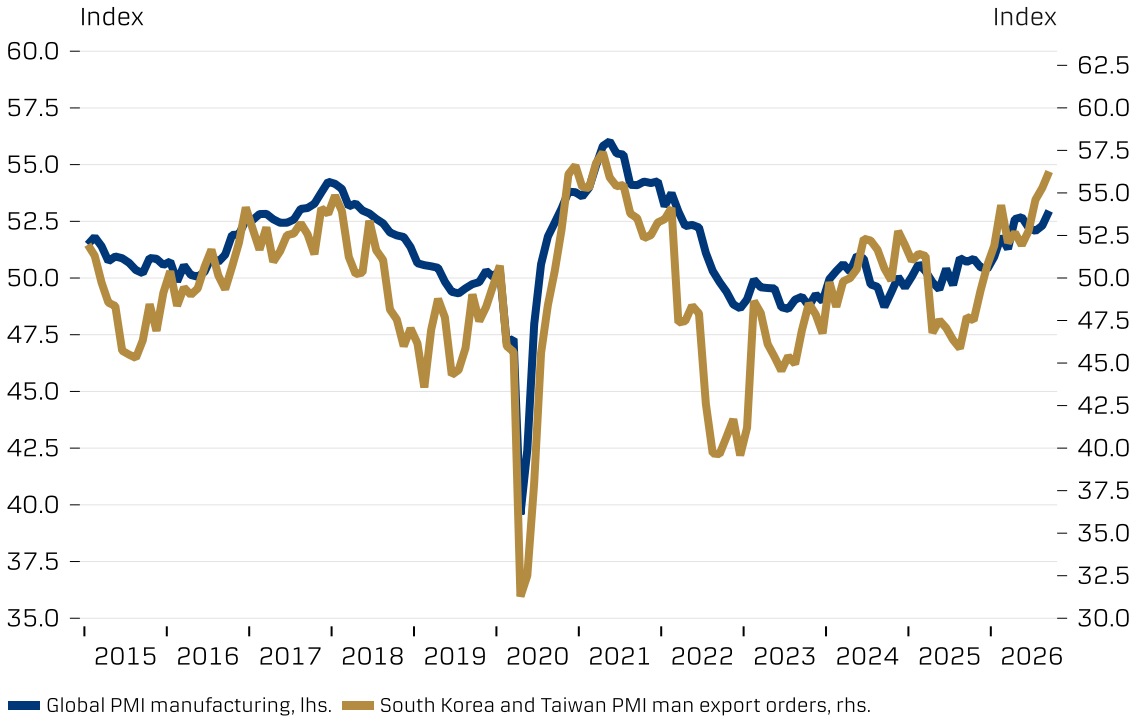
US IT investments



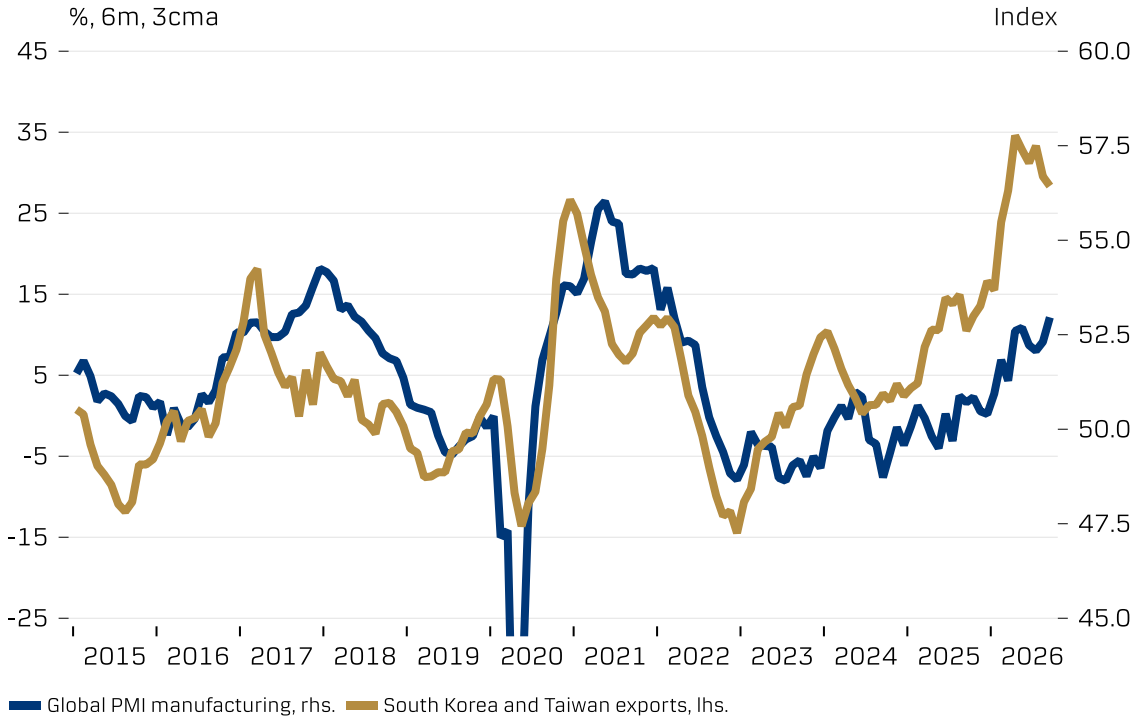
Source: Macrobond

More indicators vs Global PMI

Taiwan/South Korea PMI export orders vs Global PMI manufacturing



South Korea/Taiwan exports vs Global PMI manufacturing



Source: Macrobond

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Report completed: 20 November 2026 at 06:40 CET
Report disseminated: 20 November 2026 at 07.00 CET