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Country	US
Sector	AI

Technology is moving faster than infrastructure can pay for itself

Technology and the price of useful computing are changing faster than capacity can be built and earn back its cost. Investors with long-term commitments may still be paying for capacity after its original economics have disappeared. Shortening the service life of an otherwise identical fleet from six years to four raises annual replacement spending by 50%. This is an illustrative calculation, not a forecast of every accelerator's useful life.

Efficiency gains need not cause an immediate collapse in equipment orders. Paid-for systems and contractual payments continue, while more workloads and higher utilisation can absorb the savings. If price halves and productivity triples, revenue grows when demand elasticity exceeds 1; the equivalent installed fleet grows only above 1.585 (worked example in Section 3). The same technological improvement produces different outcomes along the value chain.

Between 4–6 November, share-price declines ranged from 1.4% for Alphabet to 13.2% for Micron; the Nasdaq 100 fell 5.1%. These moves do not establish that a research paper or political event caused the sell-off. The central question is who captures the savings from useful computing and who remains liable for capacity already ordered. Flexibility over the next phase of investment has a different value from an existing, fixed fleet.

The current calculations give SELL signals on MSFT ($515.08), GOOGL ($240.66), AMZN ($214.30), META ($449.47), AMD ($213.51) and MU ($697.60), favouring reduced exposure or no new purchases on the central cash-flow paths. NVDA ($231.04; 24.3% total return) and AVGO ($459.13; 57.3%) give conditional BUY signals, with additions dependent on confirmation. NVDA clears its BUY hurdle by only 1.7 percentage points and falls to HOLD under the retained competitive stress. AVGO relies on $115.0bn/$230.0bn AI revenue anchors whose primary source is unverified; the $100.0bn/$132.0bn alternative returns only 1.0%. All stated price outcomes are for 6 November 2027. Neither candidate has established all four business-quality tests.

Table 1: Conditional arithmetic signals differ across the eight public companies.

Issuer	Price	Value	12m value	Return	Signal	Basis	Economics	Horizon	Allocation
NVDA	186.64	206.07	231.04	24.3%	BUY[1]	PR	Systems/ software	12 months	Development
AVGO	293.69	413.76	459.13	57.3%	BUY[2]	PR	ASIC/ software	12 months	Claims/SBC
MSFT	530.61	475.64	515.08	-2.3%	SELL	PR	Cloud/ software	12 months	Construction
GOOGL	284.78	220.68	240.66	-15.2%	SELL	PR	Search/Cloud	12 months	Capex
AMZN	259.30	194.60	214.30	-17.4%	SELL	PR	AWS/retail	12 months	Construction
META	610.15	409.55	449.47	-26.0%	SELL	PR	Advertising	12 months	Financing
MU	690.00	623.08	697.60	1.2%	SELL	PR	Memory	12 months	Cycle
AMD	449.04	183.60	213.51	-52.5%	SELL	PR	GPU/CPU	12 months	Customer claims

Source: dated issuer calculations; USD and 16:00 EST closes on 6 November 2026. V0 is value today; 12m value is for 6 November 2027; return includes forecast dividends. PR = partially reconstructed. Signal classifies TSR against each issuer's Ke ±10 pp; it is a numerical classification rather than an active issuer-note rating. No active recommendation is assigned here. [1] NVDA has a 1.7 pp cushion and its competitive stress gives HOLD. [2] AVGO requires confirmation of the $115.0bn/$230.0bn AI path. META is A plus its future C entitlement.

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For a 15–20 minute overview, read the first-page conclusions, then Sections 5 and 9. Sections 2 and 7 explain commitments and cash available to shareholders. Detailed sensitivity matrices follow the main text in the appendix; reading every matrix in sequence is not necessary to understand the sector conclusion.

Part II. The market

1. Customers define the market, even as usage outgrows spending

AI comprises several connected markets, each selling a different product. Training creates or modifies a model; inference uses a trained model to produce an answer or take an action. Both consume computing resources, but their workload profiles and payment arrangements differ. Graphics processing units (GPUs) perform many suitable calculations in parallel; high-bandwidth memory (HBM) supplies data to those processors. An application-specific integrated circuit (ASIC) is designed for a narrower set of tasks. A model developer sells access through an application programming interface (API) and the execution of tasks. A cloud provider sells computing, storage and services; an accelerator supplier sells a system with specified performance; a memory supplier sells capacity and bandwidth. Meta monetises computing mainly through advertising. An advertiser's dollar, an enterprise API payment and a cloud bill are not interchangeable units of output. This report examines the economic relationships between eight liquid US-listed companies and the privately held Anthropic. The listings are American; component production and customer demand are global.

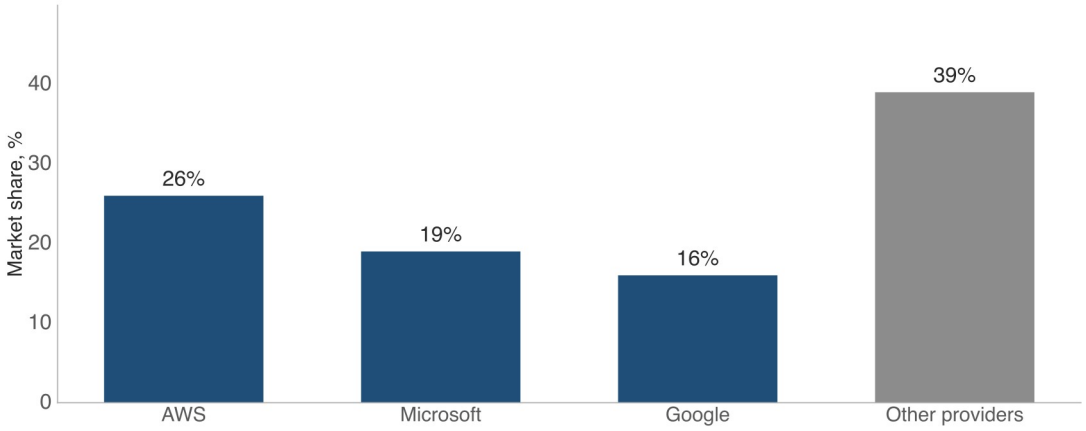
Cloud infrastructure spending provides an observable common revenue measure, although it includes conventional enterprise workloads. Synergy estimates Q3 2026 spending at $167.7bn, up 55% year on year; its $168.0bn headline is rounded. This is the size of the relevant cloud market, not AI revenue. The previous quarter recorded $143.0bn, with the three largest providers taking 63%; their latest combined share is 61%. A 2 percentage-point decline can coexist with rapid absolute growth at each provider and does not, by itself, demonstrate weaker pricing power. Synergy, Q2 2026.

Figure 1 shows AWS with 26%, Microsoft with 19%, Google with 16% and all other providers with 39%. The residual comprises many suppliers, not a fourth company. The top three contribute $26^2+19^2+16^2 = 1293$ to the Herfindahl–Hirschman Index (HHI). The full index lies between that lower bound and 2814, the upper bound if a single supplier accounted for the entire residual. The corresponding Q2 bounds are 1409–2778. Figure 2 compares these intervals on the same market definition. Their proximity and overlap mean that incomplete share data cannot establish that concentration has fallen. An index for chips, HBM or APIs cannot replace the cloud-market index.

The structure explains the apparent paradox. The three large cloud vendors are also major component buyers and developers of their own chips. Concentration downstream can support cloud-service margins while increasing pressure on upstream suppliers. These are separate contracts with different competitors. Paid AI services are still in a growth phase, but individual component markets may undergo a shake-out earlier: expanding supply and greater efficiency can erode scarcity rents well before end-use demand matures. Today's 55% cloud growth therefore does not determine the companies' terminal growth rates.

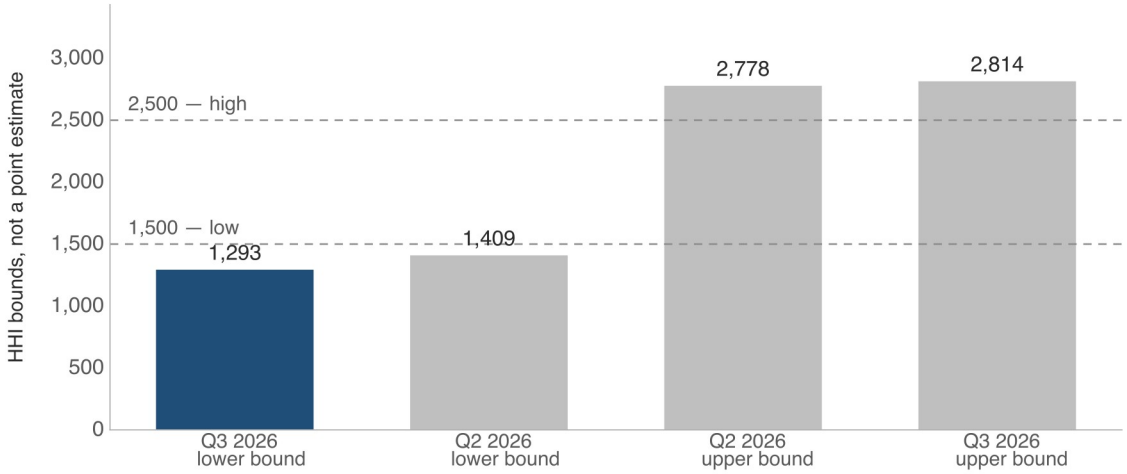
For shareholders, the relevant question is whether a company gains profitable share in its own market. In Alphabet's current conditional valuation, Cloud growth 10 percentage points below the central path reduces V0 from $220.68 to $176.28; a 5 percentage-point margin reduction produces $198.21; the combined change produces $164.39. These are separate inputs to one company's valuation, not a direct conversion of Synergy's cloud-growth estimate into share prices. The combined result recognises that the lower margin applies to a smaller revenue base. The sector thesis requires paid growth that earns a positive return on incremental capital, rather than a single high industry growth rate. Alphabet, Q3 2026 Form 10-Q

Figure 1: The three largest providers hold 61% of the cloud market. This measures their combined share; it does not establish an independent causal threshold for bargaining power.



Source: Synergy, Q3 2026, published 29 October 2026. Shares are rounded; other providers comprise multiple companies.

Figure 2: Published shares cannot establish high concentration across the whole cloud market. The Q3 HHI lies between 1,293 and 2,814, spanning the concentration thresholds.

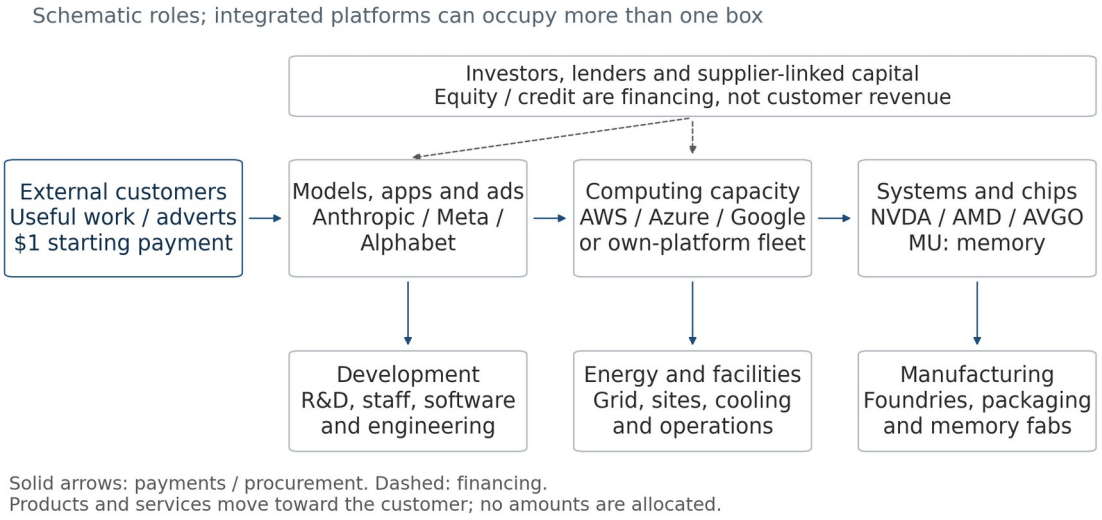


Source: Synergy, Q3 2026, published 29 October 2026. Shares are rounded; 'other providers' comprises multiple companies. Synergy, Q2 2026. Both intervals cover the same market; the upper bound assumes one supplier accounts for the entire residual.

2. One AI dollar passes through several companies' accounts

The value chain starts with an end customer paying for useful work or advertising. The model developer spends part of its revenue on cloud services and development. The cloud provider buys systems, energy, facilities and services; each system contains accelerators, networking and memory. Suppliers pay for manufacturing and development.

Figure 3: One external customer payment can appear at several stages; financing is a separate cash source.



Source: relationships described in the issuer filings and this section. Arrows show payments or procurement, not allocated amounts or profit shares. Integrated platforms may occupy more than one box; internal transfers do not create additional external demand.

Each company's profit is real in its own accounts, but adding their revenues overstates the final customer payment because the same dollar passes through several stages. Figure 4 shows the scale of the intermediate market: about $102.3bn of the $167.7bn spent on cloud services accrues to the top three providers. This allocates cloud-service revenue; it does not divide the value of a single AI task into profits at every stage. The cash-flow analysis below separates financing, procurement and final demand.

Our new hypothesis is that supplier financing and contracts make demand more interconnected than a basket of different tickers suggests. Note 3 of Amazon's Q3 2026 Form 10-Q sets out up to $20.0bn of additional funding for Anthropic, available as computing-capacity milestones are met. After $5.0bn invested through Series H, the remaining commitment at 30 September was $15.0bn. Anthropic did not receive the full $20.0bn immediately. Its $65.0bn Series H, announced on 28 May, includes $15.0bn of previously committed hyperscaler investment. Adding that $15.0bn again would overstate new capital by $15.0bn, or 23.1% of the round.

Likewise, Anthropic's commitment to purchase more than $100.0bn of AWS services over ten years is neither $100.0bn of current AWS revenue nor an automatic $10.0bn payment in each calendar year. Capacity delivery dates, minimum purchases, gross versus net revenue recognition and funding conditions require a separate cash-flow schedule. Anthropic–Amazon agreement, 20 April 2026. Computing sold to a model developer can ultimately be paid for by an external customer and help build a profitable product. Supplier-linked capital does not, by itself, make revenue artificial. It means that a funding round, an order and cloud growth are not three independent pieces of evidence for demand.

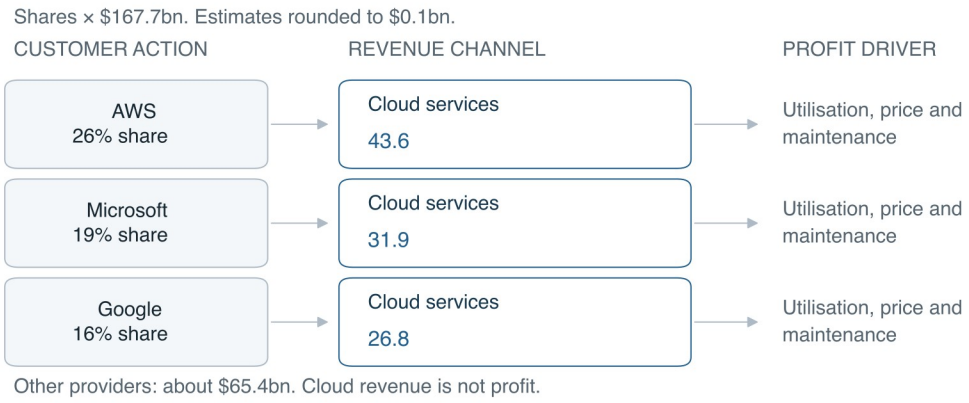
Anthropic's disclosed computing and infrastructure commitments total $895.4bn, including $447.5bn through the end of 2030. These are future services and leases, not current debt. Payments of $69.8bn fall due over the next twelve months: $4.3bn belongs to a category with termination rights or conditions before commencement; $65.5bn falls outside it. The full total cannot be treated as unconditionally payable, and the entire conditional category cannot be treated as freely cancellable. What matters is the gap between the speed at which computing prices fall and the ability to change a particular payment obligation. Form S-1/A, infrastructure commitments

Testing this relationship requires four separate cash-flow lines: receipts from external customers, payments between stages of the chain, new equity and credit, and assets brought into service. The liquidity test is straightforward: opening cash, external receipts and unconditionally available financing must cover cash expenses and mandatory investment until the next confirmed source of funds. A balance below zero creates a need for fresh capital or revised purchases. The strongest alternative explanation is that supplier capital merely accelerates delivery against demand already paid for by external customers. The dependence hypothesis weakens when cash gross profit from those customers covers commitments without further supplier support.

Cheaper computing does not reduce a mandatory payment by the same proportion. If external receipts grow more slowly than fixed costs, technology can improve the customer's product before it damages the economics of the party committed to the capacity. A funding round, a cloud contract and a chip order are not three independent confirmations of final demand. External customer cash flow sufficient to meet obligations without further supplier support is the strongest counter-evidence.

Shareholders must distinguish the size of an announcement from net cash exposure. In a standalone valuation sensitivity dated 30 October 2026, losing the entire remaining $15.0bn funding commitment reduced value by $1.38 per share. This is neither a loss probability nor a combined 6 November valuation of the Anthropic stake. Reimbursement, undrawn funding or additional commitments would change the exposure. Owning the cloud provider, accelerator supplier and model developer does not create three independent sources of end-customer cash.

Figure 4: Of $167.7bn spent on cloud services, about $102.3bn accrues to the top three providers. Adding model or chip revenue would count intermediate payments again.



Source: Synergy, Q3 2026, published 29 October 2026. Shares are rounded; other providers comprise multiple companies.

3. Cheaper tokens pay for equipment only at sufficient utilisation

Product economics operate at two levels. An API vendor charges per token or task; the customer buys an acceptable completed outcome. The cost of that outcome includes the API, tools, storage, retries, human review and expected losses from errors. A cheaper token can lengthen execution and increase failed attempts. For a computing provider, productive utilisation and tokens per equipment-hour matter; for a model developer, the relevant margin is after inference and development costs. Advertising, memory and software access therefore call

for separate product economics rather than a single commodity cost curve. The investment question remains the same: how much of the efficiency gain reaches shareholders?

The Ramp AI Index distinguishes usage from spending. Over the four weeks to 23 October 2026, token volume across its overall panel rose 37.1%, while spending increased 8.9%. The ratio 1.089/1.371 implies a 20.6% decline in average spending per token within that same panel. This combines mix, discounts, customer composition and pricing; it does not identify a causal demand elasticity at constant quality. A separate blended OpenAI+Anthropic price measure fell from $0.76 to $0.56 per million tokens, a 26.8% decline. It cannot be multiplied by the overall volume of tokens from all providers.

Total cost of ownership (TCO) includes equipment or rental, energy, software support and other necessary expenses; it extends beyond the token tariff. In our illustrative test, price halves and productivity triples. Demand elasticity, e, describes the volume response to lower prices. Revenue grows above e = 1; the equivalent operating fleet grows only above e = 1.585. Between those thresholds, the market expands in dollar terms while equipment requirements fall. At e = 1.2, usage rises 129.7% and revenue 14.9%, but equivalent equipment requirements decline 23.4%. This tests the internal consistency of the investment narrative; it is not a measured GPU forecast. Annual orders also depend on fleet age, inventories and commissioning schedules. Quality and workload mix are held constant in this test.

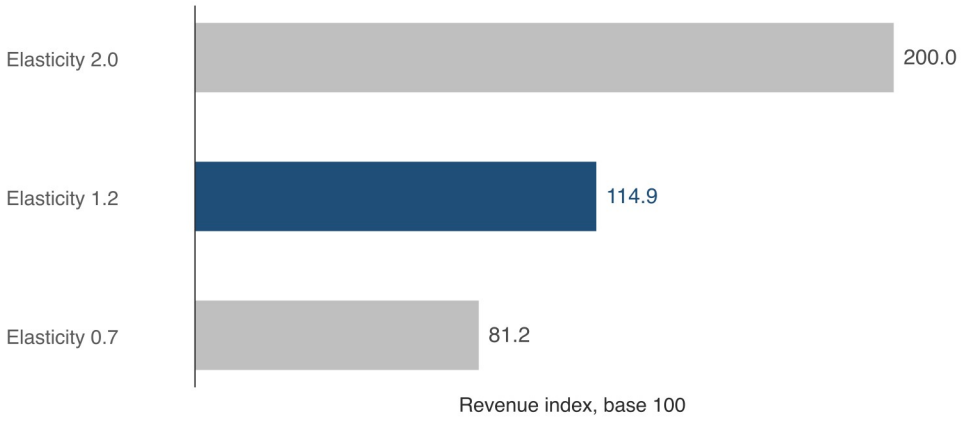
The calculation is as follows. With constant demand elasticity e, halving price multiplies usage by 2^e. Revenue becomes 2^e / 2 times its starting level, so it grows only above e = 1. If each equipment unit now delivers three times as much useful work, the equivalent fleet becomes 2^e / 3. It grows only when 2^e exceeds 3, or e > ln(3) / ln(2) = 1.585. At e = 1.2, these ratios are 2.297 for usage, 1.149 for revenue and 0.766 for equipment. This holds workload quality and the useful-work definition constant; it describes fleet requirements, not an immediate forecast of annual chip orders.

The profit threshold is more demanding than the revenue threshold. After a price cut, volume must rise by more than the ratio of the old contribution margin per comparable unit to the new one: $Q_1/Q_0 > (P_0-C_0)/(P_1-C_1)$. Lower costs can make that test easier to meet, but moving to a new generation requires capital and engineering. Establishing the customer's benefit is a separate exercise. Anthropic's study of 16 June 2026 uses session transcripts to estimate an approximately 25% increase in typical task cost; it does not observe employer profit. Nor does Anthropic's narrower randomised experiment of 29 January 2026, involving 52 developers, provide a universal estimate of production economics. Neither replaces a count of accepted tasks and their full cost.

Software improvements can raise output from a compatible installed fleet before another equipment purchase. A new architecture, by contrast, requires hardware, qualification, power and commissioning. A supplier can win the near-term sale even if the more efficient generation later reduces replacement demand. The next order and the durability of the hardware market are therefore separate questions. The full cost of an accepted task also includes verification, errors and migration.

A single efficiency gain can become a lower bill for the external customer, retained service margin, additional usage or fewer future equipment purchases. The full saving cannot be credited to every channel. Microsoft's current paired sensitivity changes only the central case: the delivery-cost response moves from 1.00 to 1.15, and the cost of equivalent future replacement from 0.85 to 1.05. With the outcome weights unchanged, expected V0 falls from $475.64 to $408.27. This is not a 15% deduction from all Azure costs or revenue. Shareholders benefit only when the savings retained after competition cover replacement and financing. Microsoft, Q1 FY2027 Form 10-Q; Microsoft FY2027 Q1 results; September 2026 reporting presentation

Figure 5: Revenue grows when elasticity exceeds 1. With price halved, elasticity below 1 means lower spending.



Source: illustrative sector-workbook calculation, 5 November 2026. Price, productivity and elasticity are assumptions, not measured industry forecasts.

4. Power and legal constraints separate deliverable demand from promises

PEST

External conditions determine how much contracted demand can actually be served and how much of the resulting earnings reaches shareholders. Political and legal conditions govern market access, export rules, contractual rights and taxes. Economic conditions determine financing and energy costs. Social factors influence customers' willingness to pay for outcomes and control errors. Technology determines system compatibility, memory qualification and the ability to deploy purchased equipment. For the US market at this valuation date, the main constraint lies where power, construction and rapid technological change meet. A globally traded chip does not make a completed data centre instantly portable.

In Key Questions on Energy and AI, published on 16 April 2026, the IEA forecasts electricity consumption by all data centres rising from 485 TWh in 2025 to 950 TWh in 2030, approximately 14.4% a year. This is a forecast for all data centres, not evidence of delivered AI capacity. The agency also expects HBM constraints to persist at least through the end of 2027. On-site gas generation does not automatically resolve the power problem: for reliability, the IEA discusses generating capacity 30–70% above the load served. Facility power, IT power and paid customer utilisation are different measures; Section 5 explains how they connect.

Three financial effects show why legal and accounting conditions cannot be reduced to a single country-risk premium. The first is cash tax, which can differ from the accounting expense. A Microsoft standalone sensitivity at 30 October 2026 inputs of a cash-tax rate rising from 15% to 18% cost $19.27 per share. It measures a specific tax assumption at that date, not a sector-wide tax forecast. The second is a claim on future value: AMD's conditional customer entitlement to up to 320 million shares is not dilution already incurred. The economic claim must be counted once; deducting its value and also adding the entire same maximum to the share denominator would double-count it. AMD, Q3 2026 Form 10-Q

The third is the obligation to pay, and when. Amazon's remaining $15.0bn funding commitment depends on delivery milestones (§2), while AVGO's guarantees require analysis of default and collateral. A customer free to defer the next phase can wait for better equipment. For a paid order, lease or contractual minimum, a technological improvement does not extinguish the payment. An operating sensitivity matrix alone does not value correlated losses from customer financing, falling orders and lower equipment resale values.

Investors should test whether paid capacity enters service on the contractual schedule, cash taxes stay within budget and customer and employee claims are reflected in value per share. A grid-connection delay can defer the buyer's earnings and cash flow before it removes the manufacturer's revenue from a system already accepted. A change in economic entitlements can crystallise the loss through a smaller share of future cash flow. These channels have different consequences and leave different parties bearing the risk. A single label, 'AI risk', says little about their economics.

5. Faster technology leaves less time to earn back capital

The technology cycle and competitive service prices can turn before construction, connection and payback are complete. A long-term commitment obliges its holder to pay for capacity while selling useful computing at prices that reset much faster. Late commissioning leaves fewer profitable years before the next upgrade. A supplier may recognise a sale before its customer has demonstrated a return on the investment. Strong near-term deliveries can therefore coexist with the risk of stranded capacity, even as the overall market grows.

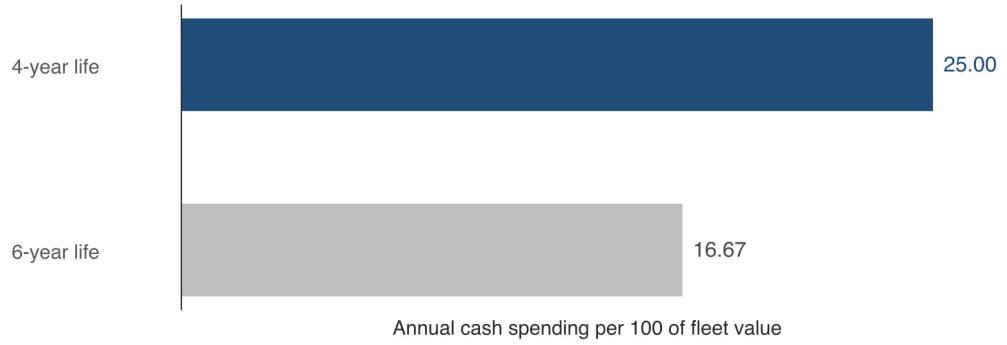
Announced capacity must be separated from operating capacity. Once expressed in common units, commissioning is limited by whichever is most constrained: complete systems, secured IT power, qualified memory and packaging, or ready facilities and networking. A simple unit check: 1 GW at 90% utilisation consumes 7.884 TWh over a year. If that 1 GW refers to the entire facility and power usage effectiveness (PUE) is 1.2, IT consumption is 6.57 TWh. This is arithmetic, not a measurement of a particular company. The Microsoft–NVIDIA–Anthropic partnership announced on 18 November 2025 describes Azure and NVIDIA's roles within the same capacity of up to 1 GW. Adding the two roles to claim 2 GW would double-count it.

Our new, testable capital-cycle hypothesis is that a dollar of capacity commissioned late must earn more within a shorter remaining economic life, even if the total market keeps growing. Figure 6 isolates the arithmetic for an unchanged fleet costing 100: replacement every six years requires 16.67 a year; every four years requires 25. Recurring cash outflow rises by 8.33, or 50%. This is neither a forecast of every GPU's life nor a proposal to deduct 8.33% from market capitalisation. The replacement-cost thesis weakens if the fleet continues generating positive cash contribution beyond the assumed life, or if cheaper replacement offsets the more frequent renewal. This identifies what to test; a measured industry-wide threshold has not yet been established.

Physical longevity and economic flexibility are different assets. A connected site, power access, cooling and networking may serve several equipment generations if retrofitting pays. An uncommitted next phase lets its owner choose timing and architecture; a fixed fleet or inflexible contract may lose earning power before the accounting life ends. We have not added a separate flexibility premium to the DCF. That would require evidence of the next user, conversion costs and cash contribution. Its absence also does not justify an arbitrary deduction from every asset.

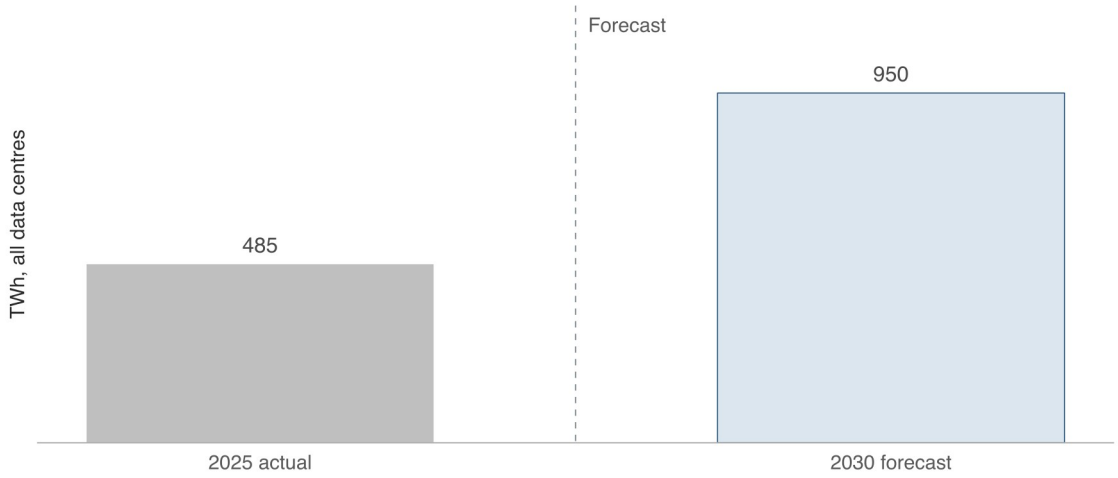
Scarcity need not give way to an automatic capex collapse. Existing commitments continue to generate deliveries; higher utilisation and more workloads can absorb efficiency gains; a new architecture requires an initial purchase. The investment decision concerns, above all, the next discretionary dollar of construction. New capacity must generate enough discounted cash flow to cover its creation, operation, financing and replacement. For Amazon, AWS growth 5 percentage points below the central path together with a property, plant and equipment (PP&E)/revenue ratio 0.25× higher reduces conditional V0 from $194.60 to $155.28. This tests duration and capital intensity; it does not forecast a general cancellation of orders.

Figure 6: Shortening economic life from 6 years to 4 raises annual replacement spending by 50%. The difference is 8.33 per 100 of fleet value, with an unchanged fleet and zero residual value.



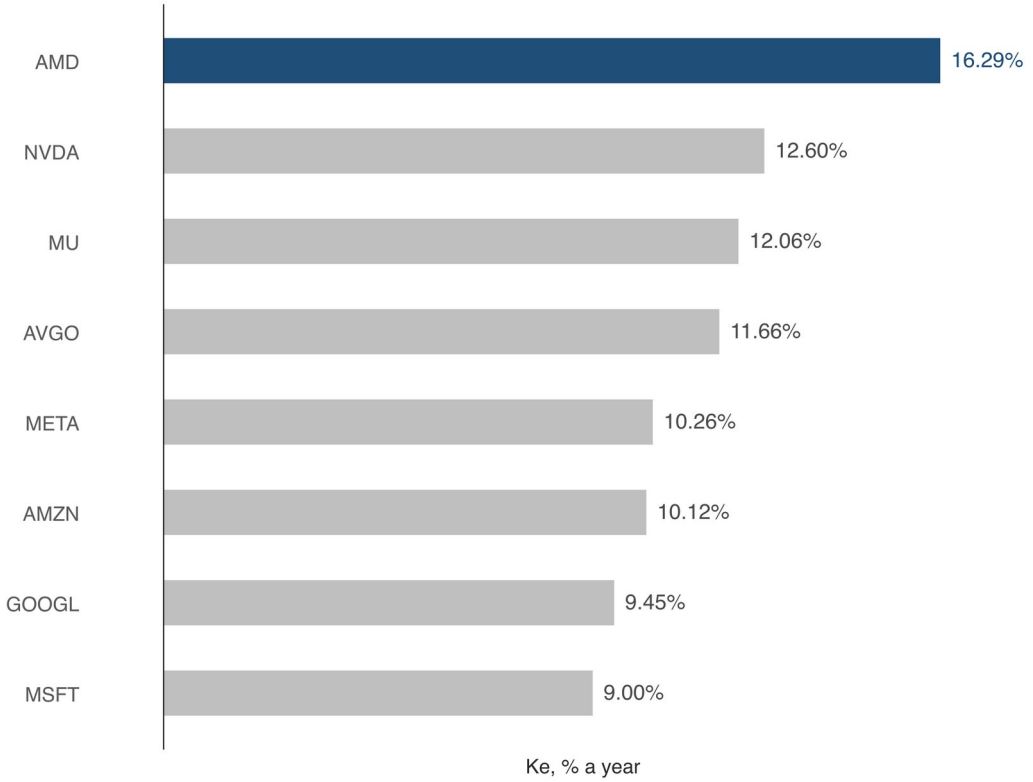
Source: illustrative steady-state fleet, sector workbook, 5 November 2026. This is a maintenance requirement, not a forecast of one-off capex.

Figure 7: The IEA expects data-centre electricity use to rise from 485 to 950 TWh. Its forecast does not establish that specific projects have permits, connections or financing.



Source: IEA, Key Questions on Energy and AI, 2026. All data centres, not only AI.

Figure 8: With common market inputs, Ke ranges from 9.0% to 16.3%. Different betas are retained; AMD separately tests a 5.0% equity risk premium (ERP) against the common 4.5%.



Source: current full valuations for the eight public issuers, 6 November 2026. The risk-free rate (Rf) of 4.86% is an input to Ke; ERP of 4.5% is the base assumption and 5.0% a separate sensitivity. Ke is not the cost of new corporate debt. A comparable series of sector issuance and credit spreads has not been compiled.

Market assessment. Five forces

Large buyers' bargaining power is the dominant force across the chain, strengthened by their ability to allocate workloads across architectures. It does not eliminate scarcity rents in constrained components; it makes their duration subject to negotiation and technological change. A test of a 10% price increase needs more than one horizon. Replacing a qualified stack tomorrow is difficult. At the next major purchasing cycle, however, the buyer can compare an in-house ASIC, a competing GPU and workload migration. The same observation cannot establish both instant substitutability and permanent indispensability.

Table 2: A combined cloud share of 61% and one large customer's use of several architectures strengthen buyer power in the next procurement cycle.

Force	Evidence	Assessment	Discussion
Rivalry	AWS 26%, Microsoft 19%, Google 16%; HHI range 1293–2814; lower token spending per unit in a comparable panel	High; site and capacity commitments create exit barriers	§1, §3, §5
New entrants	Proprietary architectures require capital, engineers, qualification and ready capacity; the three large cloud platforms already have scale	Moderate threat from a new cloud provider; intense competition for individual workloads	§1, §5, §6
Substitutes	Anthropic uses or orders NVIDIA, Trainium, TPU and AMD; comparable TCO across all tasks is unavailable	High over a procurement cycle; limited immediate substitution	§6

Force	Evidence	Assessment	Discussion
Supplier power	The IEA expects HBM to constrain systems at least through end-2027; savings from a new generation need not stay with the seller	High at a constrained stage of the chain	§3, §5
Buyer power	Three cloud providers hold 61%; a counterparty's financing and purchases are linked; in-house chips create alternatives	High; the dominant force in the long-run allocation of rents	§1, §2, §6

Source: Synergy, Q3 2026; IEA, April 2026; primary partnership disclosures in §6. Assessments of the competitive forces are analytical judgments based on the stated measurements, not results of a causal experiment.

Long-run returns can exceed the cost of capital where a company controls a scarce resource or retains part of the savings from reducing the cost of a useful outcome. Growth in aggregate usage is insufficient on its own. The valuations express that distinction through separate assumptions for retained efficiency, realised prices and useful life, rather than raising every company's terminal growth rate. The shareholder implications are concrete: at an illustrative e = 1.2, revenue rises 14.9% while equipment requirements fall 23.4%. Each stock's cash-flow result still requires its own complete valuation, as shown in §§8–9.

Part III. The companies

6. Different advantages serve different buyers

Competitive advantage depends on what a counterparty would lose by switching, rather than a company's position in a fashionable value chain. NVDA sells an integrated system and software stack; AMD offers an alternative with its own qualification and execution costs; AVGO helps develop custom solutions and networking; MU supplies memory. Cloud providers compete through customer relationships, software services, workload allocation and available capacity. Anthropic sells model quality and task execution while seeking to reduce dependence on any single architecture. At Meta, the benefit must appear in advertising effectiveness and product economics, since there is no separate external bill for every token.

Table 3: The eight public companies serve different buyers and retain value in different ways. The same growth in usage does not produce the same margin.

Issuer	What it sells and to whom	What it buys	What protects returns	Shareholder risk
NVDA	Accelerated systems and a platform for cloud providers and enterprises	Manufacturing, memory and packaging	Software, system-level performance and ecosystem	Workload migration, the ability to sustain prices and the upgrade cycle
AVGO	ASICs and networking for large customers; infrastructure software for organisations	Manufacturing and engineering resources	Design, qualification and the networking/software combination	Customer concentration, contract margins and employee claims
AMD	GPUs, CPUs and embedded solutions	Manufacturing, memory and packaging	An alternative platform and value for a qualified workload	Commissioning, migration costs and customer entitlements
MU	DRAM, NAND and HBM for system manufacturers	Equipment, materials and energy	Memory qualification and manufacturing execution	The capital cycle, yields and mix
MSFT	Azure and software services for organisations	Systems, sites, power and models	Distribution, workflows and integration	The price of useful computing, infrastructure and maintenance
AMZN	AWS, retail and advertising services	Systems, sites, merchandise and logistics	Scale, services and proprietary architectures	Capital committed before utilisation, retail/AI mix and related investments
GOOGL	Advertising, Cloud and other services	Systems, sites, traffic and labour	Audience, data, distribution and TPUs	Search cannibalisation, Cloud monetisation and capex
META	Advertising outcomes and audience access for advertisers	Systems, sites, power and labour	App scale and recommendations	Linking AI spending to advertising returns and distributions
Anthropic	Model access and task execution	Computing across several architectures and development	Quality, integration and customer trust	Full task cost, commitments and dilution

Source: company filings and disclosures in §12. Product statements describe commercial functions; they do not establish comparative total cost of ownership (TCO).

Table 4: AWS earned $48.6bn and Reality Labs lost $12.8bn over nine months. Other companies' reporting periods are identified separately.

Revenue and operating result in USD bn; revenue growth is against the comparable prior-year period. Periods and profit definitions differ; company rows must not be added together. Ratios use unrounded source amounts; totals can differ from the sum of displayed rounded cells.

Issuer	Segment / reconciliation	Period	Revenue	Growth YoY	Operating result[1]	Margin[1]
NVDA	Compute and Networking	Q2 FY2027	88.3	113.6%	62.7	71.0%
NVDA	Graphics	Q2 FY2027	7.9	46.4%	3.9	49.2%
NVDA	Corporate reconciliation	Q2 FY2027	—	—	−2.9	—
NVDA	**Consolidated NVIDIA**	**Q2 FY2027**	**96.2**	**105.9%**	**63.7**	**66.2%**
AVGO	Semiconductor solutions	Q3 FY2026	20.8	127.4%	12.8	61.3%
AVGO	Infrastructure software	Q3 FY2026	8.8	29.0%	7.3	83.7%
AVGO	Unallocated expenses	Q3 FY2026	—	—	−4.1	—
AVGO	**Consolidated Broadcom**	**Q3 FY2026**	**29.6**	**85.5%**	**16.0**	**53.9%**
MSFT	Agents and Infra	Q1 FY2027	76.8	24.5%	40.6	52.8%
MSFT	Devices and Consumer	Q1 FY2027	15.5	−3.2%	5.4	34.6%
MSFT	**Consolidated Microsoft**	**Q1 FY2027**	**92.3**	**18.8%**	**45.9**	**49.8%**
GOOGL	Google Services	9M 2026	280.5	13.6%	119.3	42.5%
GOOGL	Google Cloud	9M 2026	75.5	84.0%	26.5	35.1%
GOOGL	Other Bets	9M 2026	1.2	−0.2%	−5.9	−510.4%
GOOGL	Hedging and central reconciliation	9M 2026	0.1	—	−18.8	—
GOOGL	**Consolidated Alphabet**	**9M 2026**	**357.3**	**23.6%**	**121.0**	**33.9%**
AMZN	North America	9M 2026	333.2	11.3%	26.1	7.8%
AMZN	International	9M 2026	125.1	12.5%	4.7	3.8%
AMZN	AWS	9M 2026	125.8	35.1%	48.6	38.6%
AMZN	**Consolidated Amazon**	**9M 2026**	**584.1**	**16.0%**	**79.4**	**13.6%**
META	Family of Apps	9M 2026	180.4	29.0%	67.4	37.4%
META	Reality Labs	9M 2026	1.3	1.9%	−12.8	−1001.2%
META	**Consolidated Meta**	**9M 2026**	**181.7**	**28.8%**	**54.6**	**30.1%**
AMD	Data Center	Q3 2026	8.5	96.9%	2.9	33.7%
AMD	Client and Gaming	Q3 2026	3.7	−8.1%	0.6	15.4%
AMD	Embedded	Q3 2026	1.1	29.4%	0.5	40.8%
AMD	All other and unallocated	Q3 2026	—	—	−1.1	—
AMD	**Consolidated AMD**	**Q3 2026**	**13.4**	**44.7%**	**2.8**	**21.2%**
MU	Cloud Memory	FY2026	43.1	218.6%	31.2	72.5%
MU	Core Data Center	FY2026	37.6	420.0%	29.5	78.6%
MU	Mobile and Client	FY2026	36.6	208.6%	29.2	79.8%
MU	Automotive and Embedded	FY2026	15.9	234.2%	11.2	70.6%
MU	All Other	FY2026	<0.1	84.6%	<0.1	8.3%
MU	Unallocated	FY2026	—	—	−1.9	—
MU	**Consolidated Micron**	**FY2026**	**133.2**	**256.3%**	**99.3**	**74.6%**

Issuer	Segment / reconciliation	Period	Revenue	Growth YoY	Operating result[1]	Margin[1]
Anthropic	Consumption-based revenue	9M 2026	26.3	1137.9%	n.d.	n.d.
Anthropic	Subscriptions	9M 2026	6.9	1551.4%	n.d.	n.d.
Anthropic	**Consolidated Anthropic**	**9M 2026**	**33.2**	**1206.2%**	**−1.3**	**−3.8%**

[1] Segment results follow each issuer's disclosures, including the expenses excluded by Broadcom, AMD and Micron. Reconciliation lines bring segment results to consolidated operating profit. Microsoft reports two recast segments, rather than the former product breakdown. Alphabet's central costs and currency adjustment are not a fourth business. Anthropic has one reportable segment: revenue is shown by channel, but channel profit is not disclosed; the total is the consolidated operating result, not the chief operating decision maker's (CODM) measure of net loss. n.d. = not disclosed; a dash = not applicable. Micron's All Other revenue was $24m and operating profit $2m; <0.1 does not mean zero.

Sources: official annual and interim filings. Comparable periods and the full financial history are set out in the individual issuer notes. NVDA · AVGO · MSFT · GOOGL · AMZN · META · AMD · MU · ANTHROPIC

A shift to ASICs redistributes the savings; it does not automatically divide the market into winners and losers. The Anthropic–Google–Broadcom agreement of 6 April 2026 provides for TPU expansion from 2027. The AMD–Anthropic agreement of 22 July 2026 covers up to 2 GW of MI450/Helios capacity, with deployment of the first GW beginning in the first half of 2027, and up to $5.0bn of future AMD equity investment. These agreements demonstrate a large customer's interest in several stacks. They do not establish that the capacity is already operating or that any frontier workload can migrate immediately.

In its Q3 2026 disclosures, Amazon says inference accounts for significantly more than half of AWS AI revenue and that its own chips saved customers more than $2.0bn during the quarter. Those are customer savings, not $2.0bn of additional AWS profit. AWS claims Trn2 offers a 30–40% price-performance advantage over specified AWS GPU instances; NVIDIA claims Rubin can cut inference-token costs by a factor of up to 10 relative to Blackwell. The generations, workloads and assumptions differ. Multiplying these claims does not produce a common industry tariff or establish a durable competitive moat.

There are three possible stages in China's hardware catch-up. Hardware sufficient for domestic workloads can reduce imports without reaching international parity. An external API or service can lower the price of useful computing outside China even when customers never buy the equipment. An internationally reproducible system of chips, software, networking and support would compete for a wider infrastructure budget. Each stage requires evidence of reliability, output, power consumption and qualification. We assign no timing, probability or market share. Model quality alone does not demonstrate chip parity.

Switching architecture makes economic sense when the discounted saving in the full cost of an accepted task is positive after migration, support, latency, quality and underutilisation. Retaining the rent is a stricter test: the cost reduction must exceed the discount passed to the customer. At Broadcom, a higher ASIC share need not bring more revenue dollars if the customer’s budget shrinks. At 6 November 2026 valuation inputs, halving FY2029-onward AI growth and raising own capex from 1.5% to 2.0% of revenue reduces V0 from $413.76 to $302.08. It retains the selected guarantee haircut and is not a credit-loss scenario. At AMD, Data Center sales at 0.80× and margin 5 percentage points lower produce $118.91 versus $183.60, with customer entitlements retained. Broadcom, Q3 FY2026 Form 10-Q

7. Shareholders receive cash after replacement and dilution

Cash belongs to shareholders only after the spending needed to preserve the business's existing earning power. Operating cash flow still contains money needed for future equipment replacement. Stock-based compensation (SBC) is not free: shareholders either suffer dilution or fund the buybacks that offset it. Leasing shifts payment timing but leaves an economic obligation. The same reported free cash flow (FCF) line can therefore conceal

different burdens across issuers. A chip designer's low capital expenditure on its own assets does not eliminate development costs or the spending needed to sustain its advantage. At a cloud provider, accounting depreciation need not equal the economic replacement cost of a rapidly changing fleet. Value per share rises only after these costs and competing claims on cash have been reconciled.

Amazon illustrates why segment profit and shareholder cash differ. For the first nine months of 2026, cash flow from operations (CFO) was $113.8bn, net cash purchases of property and equipment were $172.2bn, and economic additions including leases and supplier settlements were $196.9bn in the reconstructed cash-flow analysis. AWS reported Q3 revenue of $46.0bn and operating profit of $17.8bn. A strong franchise can coexist with negative cash remaining after construction. The task is to establish the return on productive capacity, rather than label the business poor because of its current cash outflow. Amazon, Q3 2026 Form 10-Q

Recurring replacement and one-off construction are not equivalent. Microsoft's valuation separates accounting depreciation from cash replacement, but the allocation of cash taxes and supplier-financing costs remains a material limitation. Settlement in components is valuable only when those components replace a necessary purchase. Higher accounting depreciation does not itself prove higher cash maintenance spending, and a fixed tax budget does not make replacement free. The current paired sensitivity to weaker delivery economics and more expensive future replacement costs $67.38 per share; the full conditions are set out in the appendix.

Alphabet provides a counterexample to mechanical pessimism. Shortening server replacement from 6 years to 4 produces no incremental valuation loss in the retained workbook because planned capex already exceeds the corresponding maintenance floor. That does not make equipment renewal free; it prevents the same cost being deducted twice. The zero effect changes when the maintenance floor becomes binding, which requires a fresh, complete valuation on that spending path. Because the floor is nonlinear, a local zero cannot be extrapolated to a shock of any size.

Meta's financing helps fund construction while adding claims on future cash flow. Completed issuances provide $29.3bn of net proceeds alongside new entitlements. With capital policy unchanged, V0 rises by $2.80 to $409.55; conditional TP is $449.47 and total return −25.99%. Cash, debt, preferred claims and forwards are valued together. A pro rata Class C distribution does not itself dilute ownership: the investment unit is the current Class A share plus its right to a future Class C share. Annual advertising-price growth 1 percentage point higher produces V0 of $491.66; an extra $10.0bn of maintenance spending each year produces $364.31; together, they produce $446.42. The favourable advertising assumption offsets the cash burden; it is not a fall in advertising prices.

The financing terms remain material. The $14.2bn preferred claim is valued as one market amount already incorporating future dividends and conversion; deducting them again would double-count the cost. METAM uses Nasdaq's official closing reference of $49.365 on 6 November. The 46 million forward units currently contribute neither cash nor issued shares. The valuation uses an initial price of $622.92, a final settlement date of 19 November 2027 and assumed A/C parity. The full daily adjustments are not disclosed. Before its expected 12 November closing, the euro issuance creates no current cash or debt; related expenses are included. These are explicit valuation assumptions, not an unconditional new price target. 29 October 8-K; 27 October pricing; 6 November final prospectus; METAM price source

Capital allocation must be assessed separately from the share price. Our four tests require returns above the cost of capital through a full cycle, adequate maintenance spending, an advantage that survives the worst year, and distributions to minority shareholders of at least one-third of earnings. NVIDIA's gross distributions in FY2022–2026 were 40.69% of earnings; the estimate after offsetting new share issuance was 22.31%, below one-third. Micron's upper bound for gross distributions in FY2021–2026 was 7.40%, before deducting new shares. A lower stock price does not improve these measures.

For Micron, including forecast cash accumulation since the September balance sheet adds a conditional $22.4bn, or $19.45 per share. This is forecast cash flow, not an observed cash balance on 6 November. At the same 6 November date and risk inputs, freezing opening cash and claims gives V0 $603.63; including forecast cash accumulation gives $623.08. Opening debt, deposits and tax claims are fixed in both cases. This is a cash-treatment sensitivity. We assign no top pick until business quality and a route to realising value are established.

8. Higher usage can help cloud providers while hurting suppliers

A common sector scenario must describe the same state of the world for every part of the chain. In our sector experiment, price halves, productivity triples and e takes three illustrative values; workload mix, quality and utilisation are held constant. The equivalent operating fleet is not the annual order flow. No probabilities are assigned. Figure 9 and Table 5 test whether the assumptions are mutually consistent. The new pairs of issuer-specific inputs are separate conditional tests: their magnitudes and directions differ, so they do not represent one uniform sector-wide shock.

Table 5: At elasticity of 1.2, the market grows to 114.9 in revenue terms, while equivalent hardware requirements fall to 76.6% of the starting level.

Scenario	e	Tokens / base	Revenue, base 100	Equipment / base	Economic implication
Customer savings	0.7	1.62	81.2	0.54	Usage rises, but spending and equipment equivalents decline
Broader access	1.2	2.30	114.9	0.77	Revenue grows while equipment requirements fall
More workloads	2.0	4.00	200.0	1.33	Both measures rise; new capital must still earn back its cost

Source: the new illustrative sector calculation, with formulas retained in sector_calculations.json. Price of 0.5 and productivity of 3 are explicit analyst assumptions, not observed market parameters.

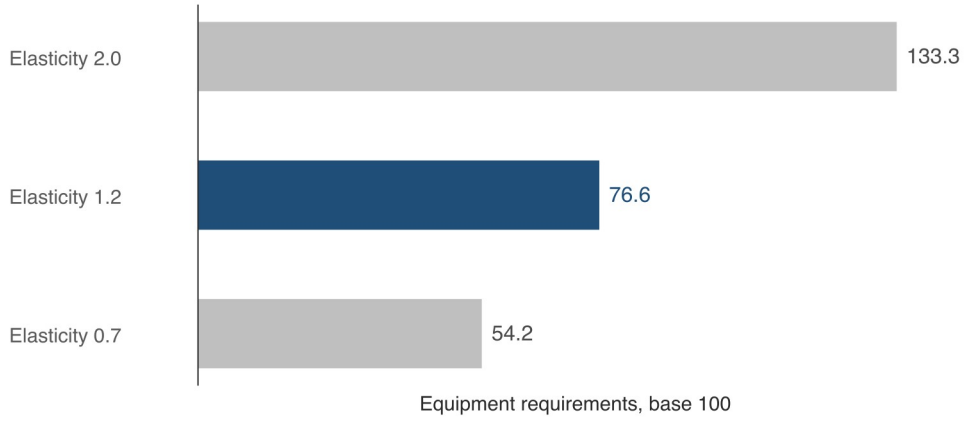
In the middle case, NVDA and AMD can increase the usefulness of their systems to customers without a proportionate rise in equipment equivalents shipped. Revenue dollars also depend on mix and system prices. AVGO can gain share in ASICs and networking, but lower total hardware requirements may outweigh that gain. MU depends on memory per system, bandwidth and qualification; there is no universal, fixed 'tokens to HBM' conversion. For MSFT, AMZN and GOOGL, cheaper useful computing expands demand, but profit depends on retained efficiency gains and fleet costs. Meta may benefit through better advertising outcomes without external API revenue. Anthropic gains cheaper execution and more usage, but must preserve margin after development costs and meet its capacity commitments.

The next stress is common to every company: secured capacity enters service late while payments continue. Suppliers are affected through acceptance dates, inventories and financing; cloud providers carry capital before revenue; model developers face unused minimum commitments and service-availability constraints. A third stress is more frequent fleet replacement. A manufacturer can win repeat sales while its customer loses cash flow; cheaper next-generation equipment can soften both effects. The proposition that scarcity benefits everyone breaks down when purchased systems outpace paid commissioning and subsequent cash returns fail to cover the cost of capital.

The NVDA tests change demand retention and maintenance spending; AVGO changes later-period AI growth and its own capex; AMD changes sales and margin; MU changes average selling prices (ASPs) and later-period replacement. MSFT changes delivery economics and future service costs; Alphabet changes Cloud growth and

margin; Amazon changes AWS growth and capital intensity. At Meta, higher advertising prices offset maintenance spending. These pairs cannot all be called the same disaster, nor can their dollar effects be added. Alphabet's combined loss of $56.30 is smaller than the $66.88 sum of the individual losses because the lower margin applies to a smaller revenue base. Each combination is calculated directly.

Figure 9: Revenue growth of 14.9% can coexist with a 23.4% fall in equipment requirements. At price 0.5 and productivity 3, equipment demand grows only above elasticity of 1.585.



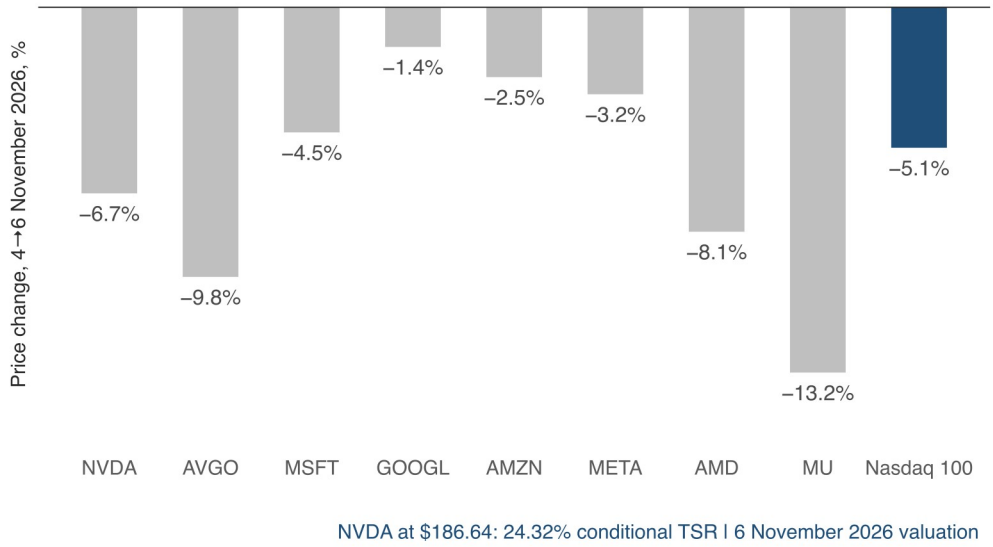
Source: illustrative sector-workbook calculation, 5 November 2026. Price, productivity and elasticity are assumptions, not measured industry forecasts.

Part IV. Valuation and investment action

9. Lower prices do not remove the need for cash returns

Table 1 compares dated calculations at the 6 November close. Its Signal column applies the same issuer-specific required-return rule throughout; it does not constitute an active issuer-note rating. A negative signal favours reduced exposure or no new purchases on the stated path; a positive signal identifies a case for further underwriting. Forecast cash, economic claims and the valuation clock are retained as disclosed. Table 9 separates scenario expectations from central cases and prints each company's return bands.

Figure 10: Over 4–6 November, Micron fell 13.2% and the Nasdaq 100 fell 5.1%. Zero means no price change; the causes of the moves have not been established.



Sources: Nasdaq regular-session closes on 4, 5 and 6 November 2026; official Nasdaq GIW end-of-day data for NDX. Price returns exclude dividends and after-hours trading.

Figure 10 uses the same closing-price window, 4→6 November, for every series. Some shares rebounded on 6 November after sharp falls on 5 November; that does not erase the negative two-day return. Percentage returns for shares and the index are comparable over the same window, although their starting levels are in USD and index points. This pattern cannot establish that a new research paper or the election caused the trading moves.

NVIDIA gives an arithmetic BUY signal on the selected operating path: V0 is $206.07, the twelve-month value $231.04 and full TSR 24.32%, against Ke of 12.60%. The BUY boundary is 22.60%, leaving only 1.72 percentage points of headroom. Combining the demand-retention and maintenance stresses lowers TSR to 18.40%, inside HOLD. This is an addition candidate requiring operating confirmation, rather than an unconditional top pick or a completed quality qualification. NVIDIA, Q2 FY2027 Form 10-Q

Micron illustrates a different target-price trap. Its conditional $697.60 TP is 1.10% above the $690.00 price, but full TSR of 1.19% is below its own 2.06% lower threshold. A target above the market is therefore insufficient to imply HOLD. For AMD, using the common 4.5% ERP rather than the 5.0% alternative adds $23.32 to V0 with operations unchanged. That is the value of a risk assumption, not a business improvement. AMD's current TSR remains −52.45%. Conditional total returns for MSFT, GOOGL and AMZN also fall below their own lower thresholds. Micron, FY2026 Form 10-K

Broadcom gives an arithmetic BUY signal only on the higher, explicitly unverified operating path. The valuation gives V0 of $413.76 at 6 November 2026, a twelve-month value of $459.13 and $2.86 of forecast dividends, for

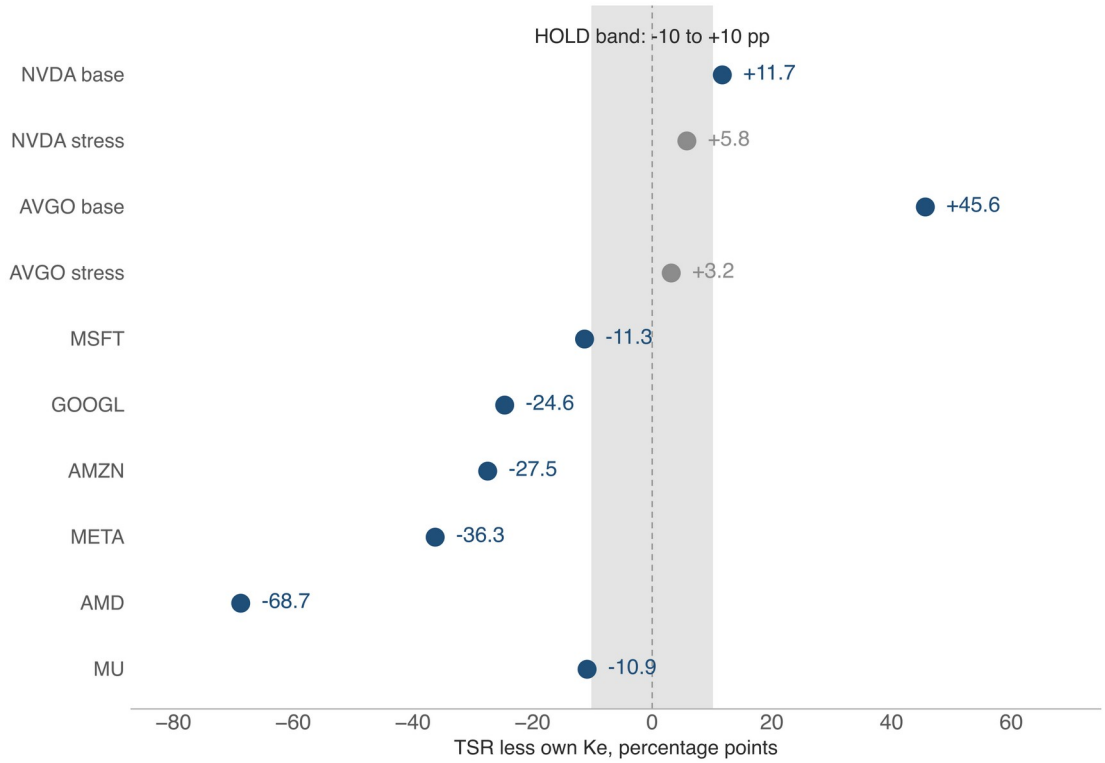
57.30% TSR against Ke of 11.655%. The $115.0bn/$230.0bn AI revenue anchors remain secondary-attributed. The $100.0bn/$132.0bn alternative gives only 1.02% TSR, below the SELL boundary, while halving FY2029-onward growth gives 16.29%, inside HOLD. Higher capex together with that slower growth gives V0 of $302.08. Primary-source confirmation, paid repeat programmes and retained margins decide whether an addition is warranted; a larger ASIC share alone is insufficient.

Anthropic remains private, with no exchange quotation. The historical $965.0bn Series H valuation is not a currently available market price. At a required return of 15%, a 20% loss of ownership, 25× FCF and a 25% FCF margin, the reverse valuation requires annual revenue of $388.2bn in five years. Combining a 20% margin with a 30% loss of ownership raises the requirement to $554.6bn. This tests the entry valuation; it is not a forecast, fair value or IPO target. Audited annual accounts for 2023–2025 and unaudited 9M 2026 accounts are available in the S-1/A. Cash remaining after commitments is the central issue. Anthropic, Form S-1/A of 2 November 2026; financial statements

Four investment actions follow. Do not mistake several tickers funded by the same end-customer dollar for independent demand exposure. Separate growth in useful work from equipment orders. Test each new construction phase against cash flow after replacement and financing. Prefer demonstrable flexibility over the next phase to announced capacity with no freedom to defer: flexibility preserves the option to wait for a better architecture, although no separate premium for it is included in these valuations.

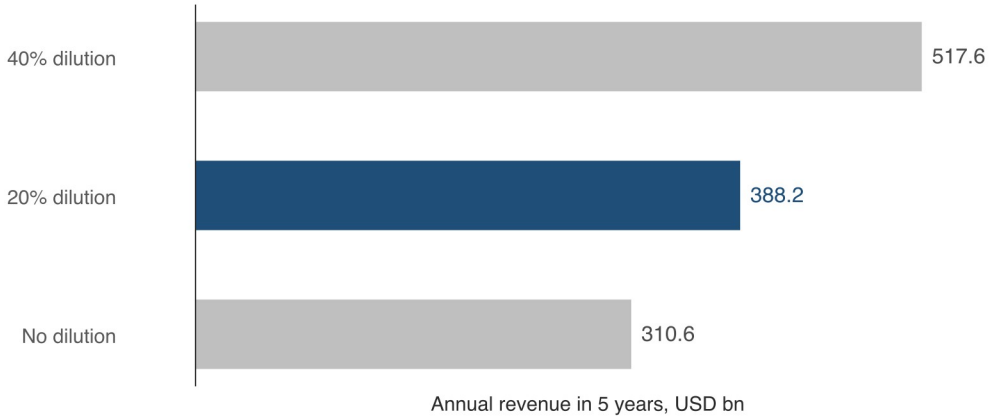
The appendix sensitivities retain each company’s own base, cash-flow perimeter and economic units. The common Rf is 4.86%; ERP 4.50% is the selected assumption and 5.00% a separate test. Different betas, maintenance requirements and shareholder entitlements are preserved. These arithmetic signals distinguish two cases for further underwriting from six reduce/avoid cases on the stated paths; they do not constitute eight active recommendations. Publication authority and the unresolved quality tests remain separate; no portfolio weights or quality-qualified top pick are inferred from the numerical ranking.

Figure 11: NVIDIA and Broadcom clear the BUY band on the selected paths, but the operating stresses move both inside HOLD.



Source: current conditional valuations at 6 November 2026, including Broadcom's 6 November 2026 valuation. META values Class A with its entitlement to Class C under the financing assumptions in §7. Base and operating-stress outcomes are alternatives, not probabilities. NDX is a price index; its price return is not treated as a total-return benchmark for modelled TSR.

Figure 12: A 20% loss of ownership raises Anthropic's required revenue from $310.6bn to $388.2bn. With other assumptions fixed, avoiding dilution removes that increase.



Source: Anthropic reverse valuation using the historical Series H of 28 May 2026. Entry valuation $965.0bn; required return 15%; five-year horizon; 25× FCF. The figure presents a standalone sensitivity; the combined case is discussed in the text. This is not a current quotation, probability or forecast. Series H, 28 May 2026

10. What to watch next

Table 6: The next evidence must connect paid demand to cash returns. Share-price moves do not confirm the thesis.

Investment question	Early evidence	Independent confirmation	Reported outcome	Timing and invalidation condition
Does growth in useful work outweigh the price discount?	Comparable paid tasks accepted by customers	Retention and spending in a constant cohort	Gross profit and cash flow after maintenance	Next monthly Ramp release after 5 November and Q4 2026 results; a volume multiple below 1/(1−discount) invalidates the revenue-growth thesis, other things equal
Does supplier capital accelerate independent demand?	The model developer's external cash receipts	Commitments covered without new supplier capital	Less funding needed; purchases fulfilled	Next S-1 amendment or public financial report; liquidity below zero before confirmed funding changes the scenario
Do announced GW become productive capacity?	Energisation, complete racks and HBM	Paid IT utilisation and stable service	Revenue and cash return on capital	Quarterly; the first AMD GW is scheduled for H1 2027. No commissioning by 30 June 2027 would prompt a delay review; it is not an established fact today
Do ASICs retain the savings?	Qualification on the same task	TCO after migration and support	Contract price, margin and FCF	Next results and TPU/MI450 launches in 2027; TCO savings ≤0 invalidate the stronger migration thesis
Do HBM scarcity rents persist?	Qualification and shipments	Complete systems and paid utilisation	Margin after new memory capacity enters service	Through end-2027, the IEA horizon; excess qualified supply changes the regime
Does capital pay back before the next replacement?	Commissioning dates and the share of the fleet in use	Cash margin on new capacity	Cash flow per share after maintenance	Every quarterly disclosure; incremental returns ≤ the cost of capital require a review of construction
Is the valuation gap realised?	Profitable commissioning and external cash demand	Cash flow per share after maintenance	Distributions or reinvestment above Ke	Next quarterly disclosures; returns on new capacity ≤ the cost of capital invalidate the stronger thesis

Sources: primary partnership timelines in §6, the IEA and our thresholds in §§2–5. Exact publication dates for future company results have not been verified. 'Q4' identifies the next reporting period, not a promised publication date.

11. Putting numbers on the limitations

Variation in economic outcomes differs from an error in construction. Maintenance, demand and retained efficiency are separate inputs; changing them produces conditional values. Errors in ownership claims, dates or double-counting instead undermine the comparison. Broadcom uses an explicit 6 November valuation calendar, opening-balance bridge and normalised terminal year. Meta includes new financing on the stated contractual assumptions. Forecast cash roll-forwards are not daily observations of reported cash.

Microsoft's central forecast assumes an eight-year blended accounting life for new owned and leased assets. It is not a disclosed useful life for the six categories used to estimate economic replacement. The cash-tax budget is separate: 15% of profit before book depreciation and amortisation (D&A), after the economic cost of new share

issuance, with a separate 10% benefit on marginal capital spending relative to base capital intensity. These are assumptions, not a reconstruction of the assets' tax bases. Extending book lives does not itself create a cash-tax saving. Undisclosed asset-cost allocations and tax depreciation are not assigned a fictitious zero value. The combined $67.38 effect measures delivery economics and replacement, not the value of missing information.

Table 7: What can be valued limits the strength of the conclusion. An uncalculated risk is not a zero risk.

Issue	Quantified sensitivity	Practical limitation	Next step
Valuation date and forecast cash	MU: including retained forecast cash adds $19.45/share	Forecast cash since the reporting balance sheet; not an observed balance	Check the cash roll-forward against the next disclosure
Task economics	e = 1 and 1.585; at 1.2, fleet requirements fall 23.4%	Conditional thresholds; causal elasticity is unmeasured	Identical tasks and a constant cohort
Maintenance	MSFT: delivery and replacement together cost $67.38/share	Book D&A and cash taxes require separate verification	Reconcile cash replacement spending and the tax scope
Claims on cash flow	AMD: ERP 5→4.5% → +23.32 USD	Customer entitlements remain	Reconcile one cash-flow schedule and share denominator
META financing	Combined V0 of $409.55 versus $406.75 excluding the completed-financing package	METAM: $49.365 on 6 November; forward terms use explicit approximations	Verify actual forward settlements and expenses
Private entry into Anthropic	Reverse revenue requirement: $388.2bn → $554.6bn	A historical valuation, not a quotation	Margin, cash commitments and dilution
AVGO AI anchors	V0 $413.76 vs $265.71 on the stated alternative path	The $115.0bn/$230.0bn path is secondary-attributed; the difference is scenario exposure, not the price of missing proof	Coverage analyst: obtain a dated primary forecast and check paid repeat programmes at the next results review
Valuation basis and statistical construction	Eight public signals; each uses its stated valuation and return horizon	Reproduction requires the paired workbook and dated full-calculation graph; a workbook alone does not establish every input and cash-flow claim	Coverage analyst: use the report-to-model index and paired calculation files in the reading folder
META ownership basis	Economic unit is A plus its future C right	Current issued shares, historical weighted diluted shares and future awards are different measures; a difference is not itself duplicate SBC	Coverage analyst: reconcile each denominator and award vintage before changing the valuation

Sources: complete valuations and primary documents underlying the final issuer notes. The absence of comparable TCO, causal demand elasticity or secured commissioning does not mean zero risk. A new cash-flow result requires a complete economic valuation; adding isolated effects is not a substitute. Standalone sensitivities with different stated valuation dates are not combined estimates of current uncertainty.

The report covers eight public companies, with Anthropic analysed separately as a private participant in the chain. There are zero active sector recommendations. That does not negate the conditional calculations or the conclusion about where risk falls. The synthesis rests on three distinct foundations: product economics (§3), the link between financing and procurement (§2), and the duration of capital (§5). Market-implied values for all decisive inputs, and their differences from a representative consensus, have not been established. Conditional results are not evidence that the market already accepts or rejects these hypotheses.

12. Coverage universe and primary sources

7 November 2026 · methodology 10.8. The intended investor is an unrestricted global institutional investor; the benchmark is the Nasdaq 100. The eight share prices are regular-session closes on 6 November 2026 at 16:00 EST. Official NDX end-of-day value: 26,989.99. No intraday timestamp is assigned to that series. Anthropic is private and has no public quotation.

Table 1 uses dated issuer calculations. Return is full TSR for each valuation and its stated horizon; V0 and TP are different measures. H equals Ke from the same model; B is 10 percentage points. NVDA and MSFT use their stated outcome weights; the other valuations use their stated cases. The weights are analytical assumptions, not observed probabilities. Table 9 distinguishes scenario means from central paths and states each issuer's return boundaries.

The public coverage universe comprises NVDA, AVGO, MSFT, GOOGL, AMZN, META, MU and AMD, with the Nasdaq-100 as benchmark. Anthropic is included as a ninth economic participant following analysis of its IPO filings. The S-1/A of 2 November 2026 describes a proposed offering. The proposed ticker ANT does not establish that a listing has been completed. The report provides neither a public quotation nor generally available, freely executable access to its shares.

The eight-issuer universe permits comparison of the key public participants while retaining a consistent investment scope. TSMC, SK Hynix, Samsung, Oracle, energy companies and construction companies receive no recommendation in this report. That is a coverage boundary, not an adverse view of their quality. Non-US suppliers are essential to understanding constraints, but adding their market capitalisations to a 'US sector' total would change the scope. No quantitative screen by turnover, free float or market capitalisation has been performed. The coverage universe is a defined research scope rather than the result of such a quantitative screen.

Table 8: Nine specific filings define the financial scope. Anthropic's proposed ticker does not establish its listing status.

Company	Primary document	Period
Microsoft	Form 10-Q	Q1 FY2027, 30 September 2026
Amazon	Form 10-Q	Q3 2026, 30 September 2026
Alphabet	Form 10-Q	Q3 2026, 30 September 2026
Meta	Form 10-Q	Q3 2026, 30 September 2026
NVIDIA	Form 10-Q	Q2 FY2027, 26 July 2026
Broadcom	Form 10-Q	Q3 FY2026, 2 August 2026
AMD	Form 10-Q	Q3 2026, 26 September 2026; filed 4 November
Micron	Form 10-K	FY2026, ended 3 September 2026
Anthropic	Form S-1/A, Amendment 1	Filed 2 November 2026

Additional primary sources: Synergy, Q3 2026, published 29 October; Ramp AI Index, 25 September–23 October; IEA, 16 April 2026; Anthropic/Amazon announcement, 20 April; Anthropic/Microsoft/NVIDIA, 18 November 2025; Anthropic/Google/Broadcom, 6 April; AMD/Anthropic, 22 July; Series H, 28 May; AWS custom chips, 30 October; Trn2 specifications; NVIDIA Rubin, 5 January 2026; and the two Anthropic studies of 29 January and 16 June 2026. Direct links accompany their first substantive use. Manufacturers' TCO and performance statements remain claims and are not treated as independent benchmarks.

Company materials include specific financial filings, investor presentations and agreement announcements. Manufacturers' technical performance statements retain their status as claims for defined workloads. Common TCO for identical tasks, causal elasticity for the entire market and comparable operating IT capacity have not been established. A paper, product release or share-price move cannot replace cash-flow evidence. The calendar in §10 identifies the next observation and the condition that would require the thesis to change.

The next investment should be supported by the next step in the evidence: paid outcomes, then profit on commissioned capacity, then cash flow per share after replacement. Watch commissioning dates, the right to defer the next phase, paid utilisation and the payback period relative to the upgrade cycle. Flexibility preserves the choice of architecture; fixed capital must earn back its cost before its advantage disappears. The calendar in §10 turns that conclusion into observations for the next quarter and the first half of 2027.

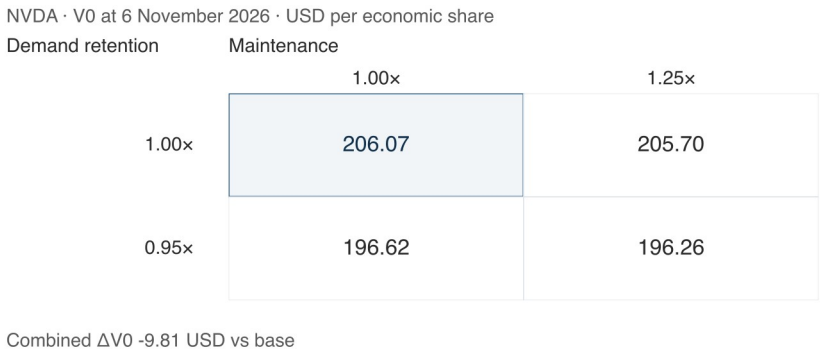
Appendix. Valuation sensitivities

Each pair retains the economic scope of its issuer note and the two stated operating boundaries, without interpolation or assigned probabilities. Blue outlines mark the selected input; individual-factor tests hold other inputs fixed. Values are V0 in USD per economic share at 6 November 2026. Broadcom uses its 6 November valuation; META includes the new financing described in §7. Twelve-month values and full TSR appear separately in Table 1. Return to valuation and investment action

NVDA. Operating sensitivities

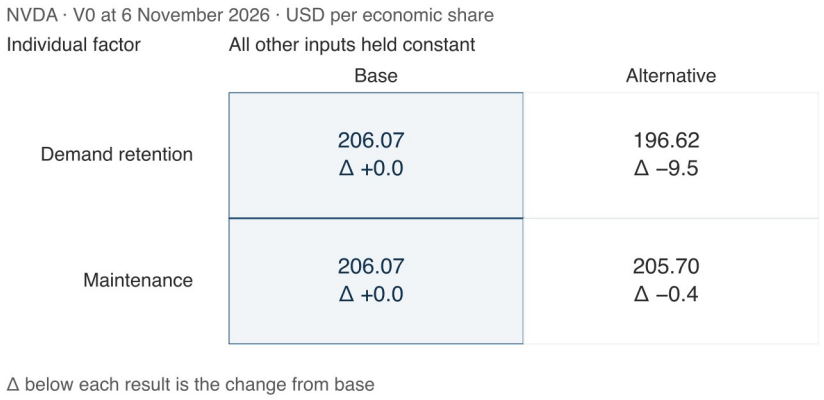
Demand retention 1.00 → 0.95; maintenance 1.00 → 1.25. Outcome weights are unchanged. This does not estimate the physical life of customers' fleets.

Figure 13: NVDA: the combined case gives $196.26, against a base of $206.07.



Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 14: NVDA: individual-factor tests retain the $206.07 base; Δ below each result shows the change.



Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

AVGO. Operating sensitivities

Later-period AI growth 1.00 → 0.50; own capital expenditure 1.5% → 2.0% of revenue. The selected guarantee haircut is retained. These are fully dated V0 sensitivities; the separate twelve-month values and total returns appear in Table 1 and the issuer note.

Figure 15: AVGO: the combined case gives $302.08, against a dated base of $413.76.

AVGO | 6 November 2026 | Close $293.69

AI growth FY29+ \ Own capex / sales	Capex 1.5%	Capex 2.0%
Selected later growth	$413.76	$408.59
Half later AI growth	$305.87	$302.08

Joint effect: $-111.68/share; no guarantee loss added

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 16: AVGO: individual-factor tests retain the $413.76 dated base; Δ shows each change.

AVGO | 6 November 2026 | Close $293.69

Separate factor \ Other inputs fixed	Selected input	Alternative input
Later AI growth	$413.76 Δ +0.0	$305.87 Δ −107.9
Own capex	$413.76 Δ +0.0	$408.59 Δ −5.2

Joint effect: $-111.68/share; no guarantee loss added

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

MSFT. Operating sensitivities

Central case only: delivery-cost response 1.00 → 1.15; cost of equivalent future replacement 0.85 → 1.05. The 25/50/25 weights are unchanged.

Figure 17: MSFT: the combined case gives $408.27, against a base of $475.64.

MSFT · V0 at 6 November 2026 · USD per economic share

Delivery-cost response \ Future replacement	0.85×	1.05×
1.00×	475.64	416.22
1.15×	467.69	408.27

Combined ΔV0 -67.38 USD vs base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 18: MSFT: individual-factor tests retain the $475.64 base; Δ below each result shows the change.

MSFT · V0 at 6 November 2026 · USD per economic share

Individual factor \ All other inputs held constant	Base	Alternative
Delivery-cost response	475.64 Δ +0.0	467.69 Δ –8.0
Future replacement	475.64 Δ +0.0	416.22 Δ –59.4

Δ below each result is the change from base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

GOOGL. Operating sensitivities

Each annual Cloud growth rate falls by 10 percentage points; every Cloud margin falls by 5 points. Capital spending and all other dependencies are recalculated.

Figure 19: GOOGL: the combined case gives $164.39, against a base of $220.68.

GOOGL · V0 at 6 November 2026 · USD per economic share

Cloud growth \ Cloud margin	Base	–5 pp
Base	220.68	198.21
–10 pp	176.28	164.39

Combined ΔV0 -56.30 USD vs base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 20: GOOGL: individual-factor tests retain the $220.68 base; Δ below each result shows the change.

GOOGL · V0 at 6 November 2026 · USD per economic share

Individual factor \ All other inputs held constant	Base	Alternative
Cloud growth	220.68 Δ +0.0	176.28 Δ –44.4
Cloud margin	220.68 Δ +0.0	198.21 Δ –22.5

Δ below each result is the change from base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

AMZN. Operating sensitivities

Annual AWS growth falls by 5 percentage points; PP&E/revenue rises by 0.25×. Retail and advertising are not valued twice.

Figure 21: AMZN: the combined case gives $155.28, against a base of $194.60.

AMZN · V0 at 6 November 2026 · USD per economic share

AWS growth \ PP&E / revenue	Base	+0.25×
Base	194.60	174.49
–5 pp	169.41	155.28

Combined ΔV0 -39.32 USD vs base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 22: AMZN: individual-factor tests retain the $194.60 base; Δ below each result shows the change.

AMZN · V0 at 6 November 2026 · USD per economic share

Individual factor \ All other inputs held constant	Base	Alternative
AWS growth	194.60 Δ +0.0	169.41 Δ –25.2
PP&E / revenue	194.60 Δ +0.0	174.49 Δ –20.1

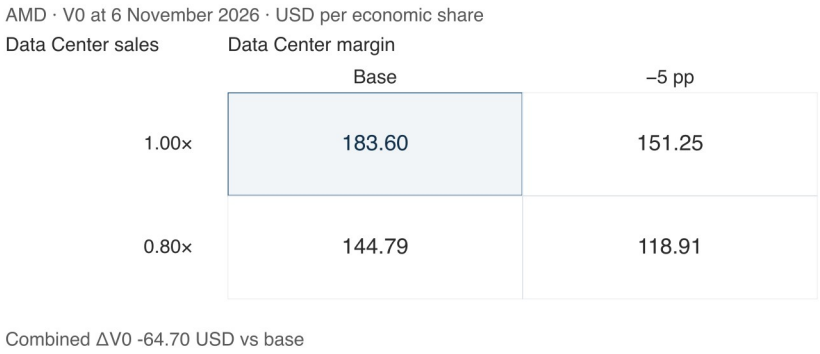
Δ below each result is the change from base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

AMD. Operating sensitivities

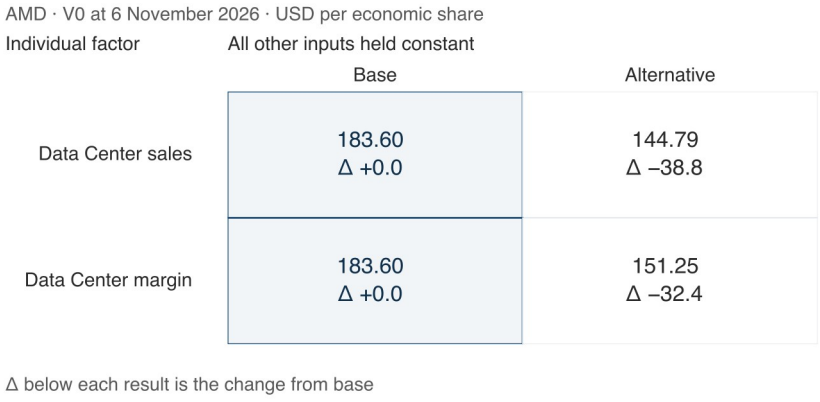
Data Center sales at 0.80×; margin 5 percentage points lower. Conditional customer claims and the share denominator are retained.

Figure 23: AMD: the combined case gives $118.91, against a base of $183.60.



Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 24: AMD: individual-factor tests retain the $183.60 base; Δ below each result shows the change.



Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

MU. Operating sensitivities

FY27 DRAM ASP growth +65% → +60%; later-period maintenance 1.00 → 1.25. Forecast cash accumulation is included; it is not an observed balance on 6 November.

Figure 25: MU: the combined case gives $568.95, against a base of $623.08.

MU · V0 at 6 November 2026 · USD per economic share

FY27 DRAM ASP	Later maintenance 1.00×	Later maintenance 1.25×
+65%	623.08	588.29
+60%	603.74	568.95

Combined ΔV0 -54.13 USD vs base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 26: MU: individual-factor tests retain the $623.08 base; Δ below each result shows the change.

MU · V0 at 6 November 2026 · USD per economic share

Individual factor	All other inputs held constant: Base	All other inputs held constant: Alternative
FY27 DRAM ASP	623.08 Δ +0.0	603.74 Δ −19.3
Later maintenance	623.08 Δ +0.0	588.29 Δ −34.8

Δ below each result is the change from base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

META. Operating sensitivities

Advertising-price growth +1 percentage point a year is an offset; maintenance spending +$10.0bn a year is a cost. New financing uses the stated pricing and contractual terms in §7; Class A includes its entitlement to Class C.

Figure 27: META: the combined case gives $446.42, against a base of $409.55.

META · new financing on stated terms · USD per economic share

Annual maintenance \ Annual ad-price growth	Base	+1 pp
Base	409.55	491.66
+$10.0bn	364.31	446.42

Combined ΔV0 36.87 USD vs base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Figure 28: META: individual-factor tests retain the $409.55 base; Δ below each result shows the change.

META · new financing on stated terms · USD per economic share

Individual factor \ All other inputs held constant	Base	Alternative
Annual ad-price growth	409.55 Δ +0.0	491.66 Δ +82.1
Annual maintenance	409.55 Δ +0.0	364.31 Δ –45.2

Δ below each result is the change from base

Source: complete recalculations of the original financial model, 6 November 2026; Rf 4.86%, ERP 4.50%. The action threshold compares full TSR with the issuer's own Ke ±10 percentage points; no new probabilities are assigned.

Appendix 2 Comparing the valuation signals

The eight rows share a quote date and a twelve-month return rule, but not the same statistical construction. NVIDIA retains base/bear/bull weights of 55/30/15; Microsoft retains 50/25/25. Other rows are values of the declared central path. A conditional central case is not a probability-weighted expectation. The excess return below compares the calculated TSR with that issuer's own Ke; it does not make the businesses or their cash-flow risks identical.

Table 9: Two positive arithmetic signals coexist with no active issuer recommendations.

Issuer	Value object	Ke	SELL if TSR below	BUY if TSR above	TSR less Ke	Signal
NVDA	Scenario mean	12.600%	2.600%	22.600%	+11.72 pp	BUY
AVGO	Central path	11.655%	1.655%	21.655%	+45.65 pp	BUY
MSFT	Scenario mean	9.000%	-1.000%	19.000%	-11.29 pp	SELL
GOOGL	Central path	9.450%	-0.550%	19.450%	-24.63 pp	SELL
AMZN	Central path	10.125%	0.125%	20.125%	-27.48 pp	SELL
META	Central path	10.260%	0.260%	20.260%	-36.25 pp	SELL
MU	Central path	12.057%	2.057%	22.057%	-10.87 pp	SELL
AMD	Central path	16.290%	6.290%	26.290%	-68.74 pp	SELL

Source: the same exact dated calculations as Table 1; no forecast or probability has changed. Strict inequalities apply; equality belongs to HOLD. Percentages are calculated before rounding. A signal is not business-quality qualification or an issuer-note recommendation. The calculation index identifies the source workbook, any dated full-calculation supplement and their status.

V0 means discounted equity value today; TP12 is the value carried to the stated twelve-month date after forecast dividends, so TP12 + D12 = V0 × (1 + Ke). TSR measures the total return from the dated quote. Company FCF is not a uniform owner-cash measure: capex, leases, SBC and other claims must be reconciled as in each note. A market capitalisation uses issued shares on its stated date; a historical per-share flow may use weighted-average diluted shares. Neither is automatically the forward valuation denominator. META's A-plus-future-C economic unit is retained; Anthropic's reverse entry test has no public per-share denominator.