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Credit Outlook For Hyperscalers: A Temperature Check

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(Editor's Note: *This report references slides and discussion presented at a webinar on Aug. 18, 2026, titled "S&P Ratings' Views on Artificial Intelligence & Hyperscalers " . View slides from the event [here](#) , and a video replay [here](#) .)*

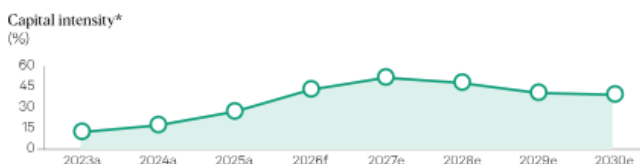
This report does not constitute a rating action.

<https://www.spglobal.com/ratings/en/regulatory/article/credit-outlook-for-hyperscalers-a-temperature-check-s101702073>

Key Takeaways

- Capital expenditure (capex) by Alphabet, Amazon, Microsoft, Meta, Oracle, and SpaceX will reach \$1.3 trillion in 2027, we estimate, a near tripling from two years ago.
- AI ecosystem participants are engaging in circular funding, where the full range of entities involved in AI have dealings with one another; this arrangement is highly constructive as the sector grows, but it could go sharply into reverse if one or more key entity fails.
- While we make analytical adjustments to capture off-balance-sheet financial commitments when assessing ratings on the six biggest hyperscalers, the trajectory of debt-financed AI investments and the still unclear return on these investments adds to the credit risks of AI participants.
- The strong credit ratings on the six hyperscalers reflect our views that they retain highly profitable core businesses with very predictable revenue and cash flow, offering them capacity to take bets on emerging technologies. As capex rises, this balance sheet capacity is rapidly shrinking.

Escalating capex among hyperscalers will test credit ratings



The top six hyperscalers are Microsoft, Amazon, Alphabet, Oracle, SpaceX, and Meta. All years are calendar years.

*Capex/revenue (%) of the top six hyperscalers. capex=Capital expenditure. a=Actual, f=Forecast, e=Estimate.

†Includes debt and equity.

Sources: Company disclosures, S&P Global Ratings.

The credit quality of hyperscalers is gradually weakening. Every time we take a deep dive into this sector, we find that capex is rising faster than we anticipated, financings are becoming more complicated and less transparent, and that returns on investment will take years to realize.

The stakes are high. We assume the top six U.S. hyperscalers will spend more than \$7 trillion on data centers and AI-related capex from 2025 through to 2030.

The spending has been an increasingly important component of the U.S. economy and markets. Over the past year about half the growth in GDP from the U.S. private sector was for high-tech/AI-centric activity, by our estimate. The top six hyperscalers have raised more than \$400 billion of debt and equity in the year to date, largely to fund AI.

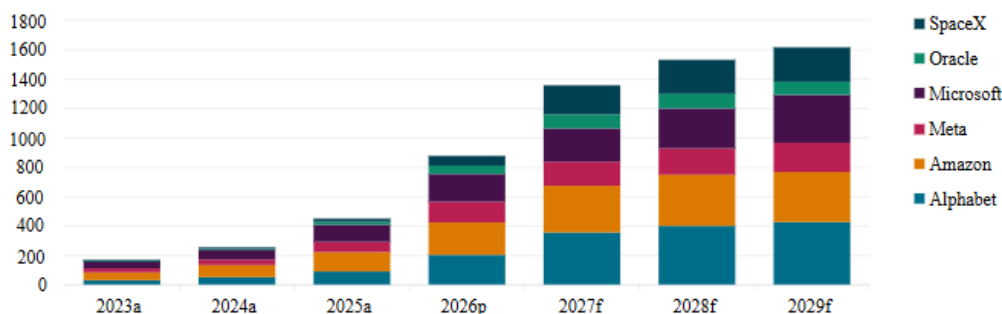
Suffice to say, the ability of entities to convert their investment in AI to profits will say much about the health of the U.S. economy and markets.

The scale of investment requires an increasingly diverse and resourceful approach to funding. These span internally generated funds (all six hyperscalers), U.S. and foreign bond issuance (Alphabet Inc. and Amazon.com Inc.), equity issuance (Alphabet, Oracle Corp. and Space Exploration Technologies Corp. [SpaceX]), private credit and private equity (Meta Platforms Inc. through joint ventures, plus others through guarantees).

An emerging web of interconnected financings is supporting demand, and not just raw end-market economics. It also increases the chances that the failure of an unrated entity could dent the credit standing of a highly rated firm.

AI is propelling heavy capex among the top six hyperscalers

Capex (bil. \$)



capex--Capital expenditure. a--Actual. p--Projected. f--Forecast. Sources: Company filings, S&P Global Ratings. Source: S&P Global Ratings.

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Hyperscaler Risk No. 1: The Scale Of Investment

Quantity can have a quality all its own. The particular issue that gets our attention is hyperscalers' path to monetization; as entities spend more, the route to offsetting this expenditure with cash inflow gets pushed out.

While we recognize the massive growth potential, we also recognize higher debt leverage in the AI ecosystem adds to risks. If AI monetization lags, credit metrics and ratings may be pressured. Given the rapidly evolving AI industry dynamics, the question isn't just whether AI creates value, it's whether that value arrives fast enough, and in sufficient quantity, to justify the current pace of investment.

The big six hyperscalers don't quantify their returns on investment on AI. This could be because it's difficult to isolate and quantify --some investments are being integrated into existing products, while others are research and development for large language models and aren't yet monetizable. Or simply, entities just choose not to share that data.

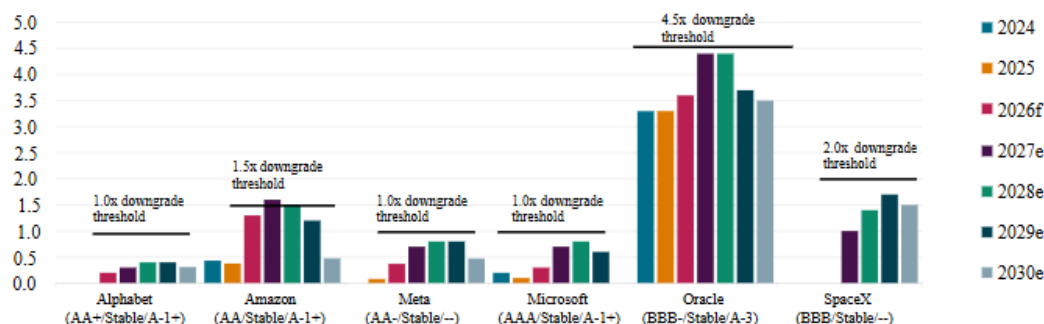
Amazon chief executive Andy Jassy stated on the most recent earnings call that the company is not investing huge sums "on a hunch." He said the payback period for AI data center hardware is less than three years, while their lifespans are about five to six years, and AI contracts typically last at least five years--implying a positive return on investment.

The gap has been growing between the growth rate of AI capex and hyperscalers' revenue gains. We expect hyperscalers' investment rationale to be based on long-term sustainable growth. However, at least in this current phase, AI participants are constantly evaluating where their sustainable returns on investment will come from across business models. It remains hard to predict sustainable growth and profitability with high confidence.

The firms that don't manage this transition and let their credit metrics weaken beyond what's appropriate at their current ratings may face rating downgrades.

Leverage to peak in 2028 as monetization grows and capex flattens

S&P-adjusted leverage (x)*



*Debt to EBITDA. Microsoft's fiscal year is to end-June, Oracle's is to end-May. SpaceX doesn't show pre-IPO leverage (2024 and 2025). Lines show downgrade thresholds. f--Forecast. e--Estimate. Sources: Company filings, S&P Global Ratings

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From a credit rating standpoint, we don't believe companies have to win the AI wars, so long as they don't blow up their balance sheets in this competition and their existing core businesses remain competitive and profitable.

For now, hyperscalers view the risk of underbuilding to be greater than the risk of overbuilding. Aggressive buildout could lead to overcapacity if demand weakens. This risk can be difficult to manage because data center capacity contracts with customers, (e.g. AI labs) are often short-term--typically three to five years--while the useful life of a data center is typically greater than 25 years.

This mismatch between lease terms and asset life can create re-leasing risk for data center owners in transactions where debt doesn't fully amortize during the lease tenor. A reliance on lease renewals would raise credit risks if market conditions change.

Hyperscalers are already seeking to farm out some of their excess capacity. SpaceX is leasing capacity to Anthropic and Google; and Meta has suggested it could do the same.

Additionally, OpenAI and Anthropic have huge computing needs; both are important customers for the hyperscalers. Both also aim to IPO over the next year or two, and the capital raising will continue from there. The capital intensity required to satisfy their growth ambitions will likely require continuous fundraising in the foreseeable future.

Commoditization is a threat. We are seeing open-weight models, from both the U.S. and China, rapidly closing the performance gap with the most expensive frontier models. For many enterprise customers, a "good enough" model at a much lower cost is often the better business decision. The emergence of open-weight Chinese models is already inducing OpenAI and Anthropic to cut token prices.

We recognize that enterprise adoption will take time, and the current gap between AI capex and enterprise spending does not necessarily indicate that investments in frontier models are poor investments. The monetization timeline for the cloud computing giants—that is, Amazon, Microsoft and Alphabet—in the late 2000s provides a good example.

That said, we acknowledge that the increasing adoption of open-weight models could prompt frontier model providers to lower prices to remain competitive. This could result in higher usage and, consequently, greater inference computing needs, but potentially lower training computing spending.

OpenAI said at the end of July that it was cutting token prices on its benchmark GPT5.6 Luna model **by 80%**. About one week earlier Anthropic launched Claude Opus 5 as an alternative to its most powerful model, Claude Fable 5, but at the **half the price** of Fable. Both labs could have cut prices partly in response to the arrival of capable, low-cost Chinese models such as Moonshot's Kimi K3 and DeepSeek's V4 Flash.

We assume the U.S. AI labs are improving profit margins on their AI services. However, they could still be operating at a loss if fully loading noncash compensation and other adjustments required to conform with GAAP reporting. We anticipate competitive strains will intensify, monetization potential could shrink, and returns on investment for these model developers will likely continue to come under pressure.

Hyperscaler Risk No. 2: Counterparty Risk And A Lack Of Transparency

The scale of investment hangs over this segment. Moreover, few understand the extent to which hyperscalers may be overinvesting. Players are engaging in complex financial arrangements, many of them off-balance sheet without sufficient transparency. Our view is that such arrangements are, at least partially, akin to debt and add another layer of risk on top of the significant capex.

These off-balance-sheet transactions by highly rated hyperscalers and chipmakers typically involve providing capital or financial support to speculative-grade or unrated entities, such as the AI labs or "neocloud" entities (specialist firms that rent out data center capacity).

Indeed, the intention typically appears to be to "lend" the investment-grade rating of a hyperscaler or AI chipmaker to a speculative-grade or unrated entity, but without adding debt to their balance sheets. This approach bridges the funding gap until the unrated entities achieve the scale and standing to access capital on their own merits, at a low cost.

Our job is to break down each of the dealings and understand the credit implication for the rated entities. The transactions are complicated; each typically must be disassembled, often through a scrutiny of available information or disclosures and calls to management.

How circular financing works--some prime examples

Select financial arrangements among AI ecosystem participants

Parties involved	Financial arrangements	Analytical treatment	Date announced
NVIDIA, SB Energy, OpenAI	NVIDIA will provide a residual value guarantee to SB Energy to help fund a data center campus in Portsmouth, Ohio. Capacity will likely come online between 2028 and 2030 and NVIDIA will provide a guaranteed minimum value of \$105 billion. Separate from this financing structure, we anticipate NVIDIA will sell GPU and systems to OpenAI, the tenant of this campus.	We view the residual value guarantee as debt-like for NVIDIA. The debt adjustment is \$4.2 billion in 2028 (fiscal year ending 2029) rising to about \$37.7 billion in 2031 before declining based on the GMV schedule. The debt adjustments we make represent the difference between the GMV and our assessed value of each of building.	August 2026
NVIDIA, various financial institutions	NVIDIA forms partnerships with Apollo, Blackrock, Blackstone, Brookfield, Goldman Sachs and KKR to provide \$500 billion to support the buildout of AI infrastructure. NVIDIA will provide a backstop--possibly in the form of residual value guarantees--of up to \$125 billion. The platforms aim to offer attractive financing rates for NVIDIA customers, many likely to be speculative-grade or unrated.	We view the backstop to such entities as debt-like for NVIDIA. We analyze the potential maximum exposure by assessing the quality of the assets and their likely market value relative to outstanding debt.	August 2026

NVIDIA, CoreWeave	NVIDIA entered capacity purchase commitments with CoreWeave worth an initial \$6.3 billion under which NVIDIA gains access to cloud capacity. This provides a form of demand backstop for infrastructure that CoreWeave builds. CoreWeave has funded much of its expansion through debt secured by NVIDIA GPUs and customer contracts. NVIDIA is a supplier and an investor in CoreWeave. CoreWeave's ability to buy NVIDIA GPUs depends on access to financing.	We view the \$6.3 billion cloud capacity guarantee as debt-like for NVIDIA.	September 2025
Microsoft, OpenAI	Microsoft has invested heavily in OpenAI while serving as OpenAI's primary cloud infrastructure provider for years. Microsoft owns 27% of OpenAI. Microsoft and OpenAI operate under a strategic partnership in which Microsoft provides capital, cloud infrastructure, and commercialization channels, while OpenAI supplies frontier AI technology.	Microsoft supports OpenAI, which is also a major consumer of Microsoft's Azure cloud computing services (via Azure). However, we view the relationship as more vertically integrated than circular financing. Both entities' agreements align incentives through equity ownership, intellectual-property licensing, and shared participation in AI-related revenue.	Since 2019
Amazon, Anthropic	Amazon is an investor in Anthropic with a stake worth about \$190 billion (as at mid-2026). Anthropic has committed to spend more than \$100 billion on Amazon Web Services over the next decade, and to use a large volume of Amazon's AI chips.	We view Amazon as an investor, infrastructure provider, AI chip supplier, and distribution partner (through Amazon Bedrock) and thus a beneficiary of Anthropic's infrastructure spending.	Since 2023

Alphabet, Anthropic	Alphabet is an investor in Anthropic with a stake worth about \$124 billion (as at mid-2026). Anthropic is a major Google Cloud customer and a heavy user of Alphabet's proprietary TPU infrastructure, in addition to Amazon AI accelerators and NVIDIA GPUs. Their cloud agreement, which provides access to Alphabet TPUs and compute capacity, is worth tens of billions of dollars.	We view Alphabet as an investor, infrastructure provider, AI chip supplier, and distribution partner and thus a beneficiary of Anthropic's infrastructure spending.	Since 2023
Alphabet, Fluidstack, TeraWulf	TeraWulf builds and operates AI data center capacity. Fluidstack leases that capacity to serve large AI customers and Alphabet provides a backstop for part of Fluidstack's lease obligations and receives equity investment in TeraWulf. TeraWulf signed 10-year hosting agreements with Fluidstack for more than 200 MW of AI infrastructure. The contract represents about \$3.7 billion of contracted revenue, potentially rising to \$8.7 billion with extensions. Alphabet agreed to backstop \$1.8 billion of Fluidstack's obligations to support project financing. In exchange, Alphabet receives warrants representing about 14% ownership of TeraWulf. Alphabet later also provided a \$1.3 billion lease backstop for a Texas expansion project between Fluidstack and TeraWulf.	We view Alphabet's financial backstop as critical to the viability of the project. We view Alphabet's guarantee as debt.	August 2025

GPU--Graphic processing unit. TPU--Tensor processing unit. MW--Megawatts. Sources: Company disclosures, S&P Global Ratings.

So long as the AI sector continues to grow, such circular financing can be highly constructive. The arrangements provide hundreds of billions of dollars to high-growth entities that would otherwise be largely locked out of conventional funding or would face significantly higher financing costs.

If conditions push an AI lab or prominent neocloud to fail, circular funding arrangements could drop steep liabilities or unpaid debt with the rated entity.

Our analysis goes beyond reported debt. We examine long-term contractual commitments, lease obligations, take-or-pay agreements, use of special purpose vehicles, guarantees, and residual value support. Such dealings may create debt-like risk even when they do not appear as traditional debt on the balance sheet.

The message for credit investors is that these arrangements are potential liabilities that must be reflected in our assessment of creditworthiness, quantitatively or qualitatively.

These are main types of circular financings used in the AI sector:

Residual-value guarantees: These are obligations in which a hyperscaler provides a guarantee to an unrated entity that data center infrastructure will meet a valuation threshold over a period, typically coinciding with the maturity of a debt financing. If the asset falls below that level, the hyperscaler pledges to make up lost value. This helps the data center operator borrow against the assets (see graphic below). We apply a debt-like adjustment if the guaranteed value exceeds the S&P stressed valuation of the underlying assets.

Chip financing: Unrated entities often receive financial support to buy AI chips, typically in the form of residual value guarantee provided by investment-grade chipmakers. We calculate the chipmaker's exposure under such guarantees by comparing the amortized loan value to the carrying value of the AI chips. Our depreciation methodology will likely be more conservative than chipmakers'.

Lease guarantees for third-party leases: We include these in our debt measure if the ultimate beneficiary of the guarantee is not investment grade, and don't include them if it is investment grade.

Power purchase agreements: This is a contract between a power producer and a data center owner or operator to buy electricity at agreed terms over a fixed period. Under certain circumstances, we may make a debt adjustment for the fixed and minimum component of these agreements by accounting for likely data center capacity, utilization rates, energy prices, etc., or based on more specific information from management.

Lease liabilities: We include lease liabilities in our debt metrics, recognizing their substantial long-term financial implications.

Backstop guarantees: We treat arrangements such as guarantees for unpurchased cloud capacity similarly to lease guarantees; we include these in our debt-like adjustments.

Equity investments: We view equity investments between supplier and customer as another aspect of the circular financing that could amplify risks.

How residual value guarantees bolster AI financing

The problem

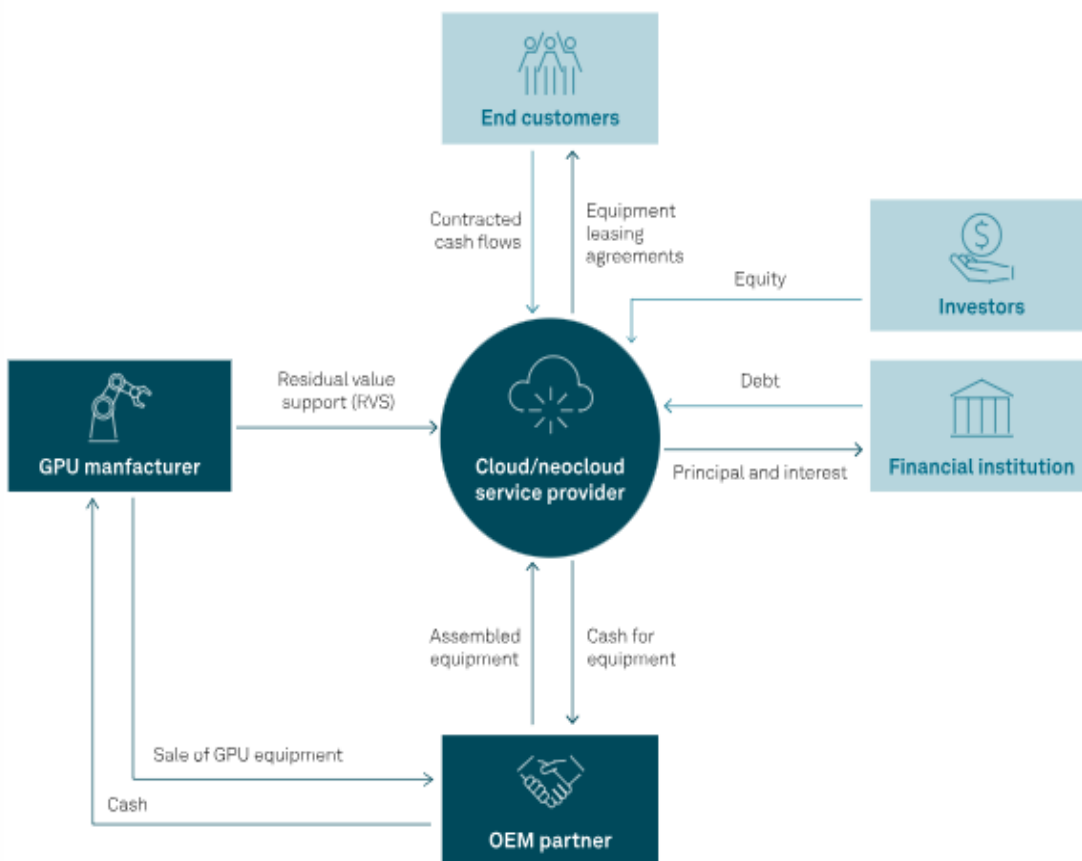
AI hardware (GPUs) depreciates rapidly. If a cloud service provider defaults on its debt, the financial institution might find that the hardware it seizes is worth much less than the remaining loan balance.

The solution

The GPU Manufacturer provides Residual Value Support directly to the cloud service provider.

The result

This support acts as a financial guarantee or "floor" on the value of the equipment. It ensures that even if the hardware's market value drops significantly, there is a mechanism in place to cover the gap, thereby reducing the risk for the financial institution providing the debt.



GPU--Graphics processing unit, OEM--Original equipment manufacturer. Source: S&P Global Ratings. Source: S&P Global Ratings.
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How A Collapse Of One AI Entity Could Expose Circular Financing Risks

Interconnected financing structures could amplify volatility if demand weakens unexpectedly. The failure of one entity would have implications for entities that have lent it money, have guaranteed the value of its assets, or are just expecting payment for goods delivered.

The broader question is whether circular financing is creating leverage collectively that is individually manageable but could become highly correlated should demand fall sharply.

If demand disappoints, chip values fall, or data center utilization declines, do the losses sit with the operator, the sponsor, or the guarantor? Also, how would the support mechanisms and their related mitigants effectively materialize?

Our analysis considers the sheer interconnectedness of this segment. Players are invested in each other, guaranteeing their borrowing, and buying each other's goods and services—they will also increasingly be competing with each other.

NVIDIA Corp., in just one example, is building AI models and data centers. Hyperscalers and OpenAI are also designing their own chips to reduce their reliance on merchant AI chip vendors such as NVIDIA and Advanced Micro Devices Inc. Competitive pressure resulting in failed investments could create ripple effects throughout the increasingly interconnected AI ecosystem.

The scale of overlap and interconnectedness is vast. In a downturn, even the best capitalized and most profitable firms may incur substantial pain.

Breakdown of AI sector risks--a Rumsfeldian quadrant

“ There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know. ”

DONALD RUMSFELD
Former U.S. Secretary of Defense

Known knowns • Steep capex that is outpacing returns on investment. • Steep depreciation of data center equipment. • Mismatch between data center leases with customers (3-5 years) and the useful life of the data center (20+ years)	Known unknowns • Potential for cheap, open-source models to undercut the economics of frontier AI labs. • When returns on investment on AI will sustainably exceed ongoing capex. • Degree to which circular financing pushes up the revenues of chipmakers and hyperscalers.
Unknown knowns • Possibility that a prominent failure in the sector could sink investors' current large appetite to fund everything AI. • Emergence of losers in the AI race could create ripple effects, magnified by circular financing, undermining confidence needed to sustain the sector's hefty capex.	Unknown unknowns • Risks we are not yet aware of and can't specifically identify.

Sources: Donald Rumsfeld, U.S. Department of Defense briefing, Feb. 12, 2002; S&P Global Ratings.
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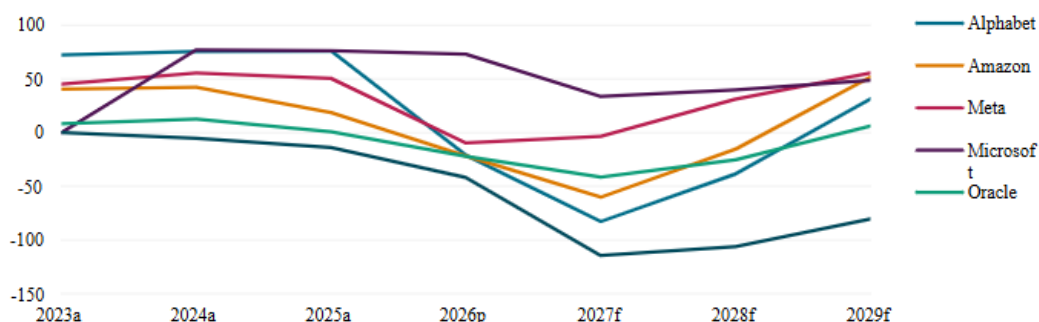
Why We Rate The Hyperscalers As Investment Grade

The above outlines substantial risks. We are describing entities taking trillion-dollar bets on fast-moving technology with an unproven business model. Why, then, are all these entities investment grade?

The essential answer is that they retain highly profitable core businesses with highly predictable revenue and cash flow. Alphabet for example generated about \$167 billion in operating cash flow in 2025. The entity has a lot of capacity to take large bets on emerging technology.

Hyperscalers' ample operating cash flow can fund a meaningful part of capex

Free cash flow (bil. \$)



capex--Capital expenditure. a--Actual. p--Projected. f--Forecast. Sources: Company filings, S&P Global Ratings. Source: S&P Global Ratings.

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Our ratings on all these firms account for their growing AI capex. Their credit metrics are weakening, the pace of which is highly dependent on the gap between the rate of their capex growth and overall revenue and profitability growth.

The outlier perhaps are Oracle and SpaceX, both rated in the 'BBB' rating category, predominantly a result of the relative size of their core businesses to their AI ambitions. Both would have more to lose from a downgrade given their financing requirements and higher borrowing costs.

Demand for AI, chips and compute capacity appears to stay strong through 2027. While we make predictions about the health of AI business models and forecast capex beyond 2027, we recognize the rapidly evolving AI landscape and our forecast could change materially.

Appendix

A breakdown of the credit standing of the top six hyperscalers

Microsoft Corp. (AAA/Stable/A-1+)

Microsoft's heavy investment in data centers and AI is driving leverage higher, rising from 0.2x in fiscal year 2026 to 0.9x by June 2028. Despite positive free cash flow, shareholder returns push discretionary cash flow modestly negative, reducing financial flexibility at its current rating. While leverage remains low and credit quality strong, execution risks and capital demands could pressure ratings if returns fall short. Microsoft's diversified revenue, strong market position, and prudent financial management help mitigate these risks. Microsoft is the only one of the six hyperscalers that has positive free cash flow throughout our forecast period but modestly negative discretionary cash flow after likely shareholder returns. Their plans to monetize all or a portion of their sizable investment stake in OpenAI post-IPO and investment lock-up period will be an important factor in our rating assessment.

Alphabet Inc. (AA+/Stable/A-1+)

Alphabet's credit risk related to data center and AI investments is mitigated by robust liquidity, further supported by its stakes in Anthropic and SpaceX (not yet reflected in our analysis). Strong demand for computing--driven by cloud services, search, and AI--supports revenue growth, with global data demand likely to rise over 20% annually. While heavy capex continues in the near term, it should level off by 2028, easing pressure on cash flow and leverage. Alphabet's strong market position, diversified revenue, and potential liquidity from strategic investments will help maintain its solid credit profile during this investment cycle.

Amazon.com Inc. (AA/Stable/A-1+)

Amazon's credit risk is heightened by rising leverage, projected at 1.3x this year and 1.6x next year--exceeding our 1.5x downgrade trigger. While revenue growth and EBITDA margins remain reasonable despite elevated capex, the outlook for capital spending beyond 2026 is uncertain. The company's guidance of \$220 billion in capex for 2026 contrasts with consensus estimates exceeding \$300 billion for 2027, creating uncertainty about cash flow and leverage. Sustained high investment in data centers and AI could further pressure credit metrics, making capex discipline and cash flow generation critical for maintaining our rating on Amazon. Besides their operating performance, their plans to monetize all or a portion of their sizable investment stake in Anthropic or OpenAI post-IPO and investment lock-up period will be an important factor in our rating assessment.

Meta Platforms Inc. (AA-/Stable/--)

Meta's credit risk is rising as leverage approaches our 1.0x downgrade threshold, with limited financial flexibility at the 'AA-' rating. We forecast two years of negative cash flow, largely due to aggressive investments in data centers and AI. The rise in leverage is driven by significant use of joint ventures and third-party leased capacity; by 2029, our estimate of lease obligations will match Meta's outstanding debt. While we do not expect leverage to exceed the threshold, negative cash flow and high lease commitments may weigh on our rating on the entity.

Space Exploration Technologies Corp. (BBB/Stable/--)

SpaceX is increasing capex in our updated forecast, reflecting accelerated investments and short-term data center lease deals with Google and Anthropic. While these short-term leases boost near-term revenue, they lack the stability of triple-net lease structures preferred for credit quality. As a result, we expect debt to EBITDA to rise to about 1.4x by 2028, still below our 2.0x downgrade threshold. Despite being free cash flow negative, SpaceX is rated higher than Oracle due to its lower leverage (<2.0x S&P-adjusted), consistent with its 2x-3x gross leverage financial policy.

Oracle Corp. (BBB-/Stable/A-3)

Oracle's credit risk has increased amid heavy investment in data centers and AI, reflected in our recent downgrade of the entity. The company's aggressive capex and acquisition strategy will likely drive a larger free cash flow deficit in fiscal 2027 and adjusted leverage near our downgrade trigger over the next two fiscal years. Unlike peers, Oracle's higher debt levels and less diversified revenue streams constrain its financial flexibility. Although high remaining purchase obligations portend strong revenue growth, rising leverage and ongoing negative free cash flow will continue to pressure its ratings. Nevertheless, we do expect Oracle's credit strains to moderate in fiscal 2029 as strong top line growth begins offsets stabilizing capex. We reflect this assumption in our stable outlook.

A selection of key slides from the hyperscaler slide deck

2Q26 Snapshot | Hyperscalers' Credit Metrics

\$ in billions	Alphabet	Amazon	Meta	Microsoft	Oracle	SpaceX
Rating	AA+/Stable/A-1+	AA/Stable/A-1+	AA-/Stable	AAA/Stable/A-1+	BBB-/Stable/A-3	BBB/Stable
LTM period ending	June 30, 2026	June 30, 2026	June 30, 2026	June 30, 2026	May 31, 2026	June 30, 2026
Revenue	445.9	775.7	228.2	331.8	67.4	23.1
EBITDA	205.1	180.5	137.8	213.6	37.5	9.8
Capex	131.5	173.5	88.7	115.9	55.7	43.1
Free operating cash flow	56.3	(0.3)	45.3	73.1	(22.1)	(34.2)
Cash & marketable securities	162.5	122.9	90.3	76.7	31.9	100.0
S&P Global adj. debt	4.6	190.2	28.7	52.2	136.4	0.0
S&P Global adj. leverage (x)	0.0	1.1	0.2	0.2	3.6	0.0
Debt capacity	200.6	80.7	109.2	161.5	32.4	78.5
Downside threshold (x)	1.0	1.5	1.0	1.0	4.5	2.0

Note: All figures and metrics are S&P Global Ratings adjusted except future lease obligations.
Debt capacity defined as excess debt needed to reach downside threshold as of today. Does not include impact from future lease obligations.
Sources: Company reports, S&P Global Ratings.

S&P Global
Ratings

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Hyperscaler | Alphabet Inc.

- Rating: AA+/Stable/A-1+
- Exposure to AI compute: Anthropic committed to up to 5GW of compute capacity.
- Leverage of 0.2x in 2026 and 0.3x in 2027 as heavy capex spending is somewhat tempered by strong cash flow from operations, solid cash balance (includes SpaceX stock), and 2026 equity raise. Discretionary cash flow is negative for the next few years as capex increases substantially.
- Search business was thought to be most at risk from AI labs. The success of Gemini has alleviated that concern, for now.
- Raised \$83 billion in debt since FY25 and committed to raising \$85 billion in equity (~\$50 billion already raised) to fund AI spending.
- Data center investments benefit Google Cloud, its cloud business.

Alphabet Credit Metrics Snapshot

(\$ in billions)	2025a	2026f	2027e	2028e	2029e
Revenue	402.8	498.0	616.3	773.3	950.6
Growth (%)	15%	24%	24%	25%	23%
EBITDA	178.5	232.1	308.4	406.2	508.4
Margin (%)	44%	47%	50%	53%	53%
Capex	91.0	203.7	357.0	401.7	427.3
Free cash flow	76.1	(21.1)	(82.7)	(38.5)	31.4
Dividends & Share repurchases	69.9	30.6	32.1	34.2	36.6
Discretionary cash flow	6.1	(51.6)	(114.8)	(72.7)	(5.1)
As reported debt	48.5	99.1	118.1	138.1	144.5
Adjustments					
PV of operating leases	18.5	19.1	19.9	20.6	21.4
Cash & marketable securities	(126.8)	(134.7)	(126.1)	(65.7)	(58.7)
Guarantees	0.0	34.6	34.6	34.6	34.6
PV of future lease obligations	N/A	11.6	22.3	32.2	41.2
Power purchase agreements	TBD	TBD	TBD	TBD	TBD
Other adjustments	12.3	13.7	13.7	13.7	13.7
Total S&P Global adj. debt	0.0	43.4	82.4	173.4	196.7
S&P Global adj. leverage (x)	0.0x	0.2x	0.3x	0.4x	0.4x
Downside threshold (x)	1.0x	1.0x	1.0x	1.0x	1.0x
Debt capacity	--	188.7	226.0	232.8	311.7

Year end Dec. 31. All figures are S&P Global adjusted. Share repurchases includes tax payments to cover exercise of share base compensation. Guarantees of third-party leases are tax adjusted. Other adjustments include tax adjusted litigation liabilities. Debt capacity defined as excess debt needed to reach downside threshold as of today.

a—Actual, f—Forecast, e—Estimated. Sources: Company Filings, S&P Global Ratings.

S&P Global
Ratings

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Hyperscaler | Amazon.com Inc.

- Rating: AA/Stable/A-1+
- Exposure to AI compute: Low-single-digit % of revenue (from OpenAI and Anthropic)
- Aggressive capex and lease commitments expected to increase leverage to 1.3x in FY26 and 1.6x in FY27, up from 0.4x in FY25.
- No dividends or shareholder returns but FOCF forecast to be negative in FY26-FY28, before turning positive in FY29.
- Significant data center lease (revenue) commitments from Anthropic (>\$100 billion over 10 years) and OpenAI (\$100 billion over eight years).
- Offsets: leading cloud computing platform that stands to benefit from increasing AI adoption; also, strategic investment in Anthropic (with carrying value of about \$190 billion) and OpenAI (\$40+ billion) not included in credit metrics.

Amazon Credit Metrics Snapshot

(\$ in billions)	2025a	2026f	2027e	2028e	2029e
Revenue	716.9	830.3	960.1	1,104.8	1,259.8
Growth (%)	12.4%	15.8%	15.6%	15.1%	14.0%
EBITDA	157.4	209.8	262.1	319.4	373.5
Margin (%)	22%	25%	27%	29%	30%
Capex	131.8	222.6	319.1	350.4	342.2
Free cash flow	18.6	(21.7)	(60.1)	(15.3)	51.7
Dividends & Share repurchases	-	-	-	-	-
Discretionary cash flow	18.6	(21.7)	(60.1)	(15.3)	51.7
As reported debt	68.4	157.2	237.2	269.7	260.5
Adjustments					
PV of operating leases	101.5	124.5	134.0	142.0	148.4
Cash & marketable securities	(116.9)	(96.7)	(87.0)	(85.3)	(107.7)
Guarantees	0.0	0.0	0.0	0.0	0.0
PV of future lease obligations	N/A	39.1	66.7	97.1	92.1
Power purchase agreements	N/A	47.1	50.7	53.1	55.8
Other adjustments	8.2	8.2	8.2	8.2	8.2
Total S&P Global adj. debt	61.2	280.5	409.7	484.9	457.3
S&P Global adj. leverage (x)	0.4x	1.3x	1.6x	1.5x	1.2x
Downside threshold (x)	1.5x	1.5x	1.5x	1.5x	1.5x
Debt capacity	--	34.2	0.0	0.0	102.9

Year end Dec. 31. All figures are S&P Global adjusted. Other adjustments include workers compensation liabilities. Debt capacity defined as excess debt needed to reach downside threshold as of today.

a—Actual, f—Forecast, e—Estimated. Sources: Company Filings, S&P Global Ratings.

S&P Global
Ratings

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Hyperscaler | Meta Platforms Inc.

- Rating: AA-/Stable/--
- Exposure to AI compute: All capacity is currently for internal usage, though the company may pursue third-party leasing
- Credit metrics weakening as the company signs lease commitments and pursues off-balance-sheet data center projects. Leverage is increasing to 0.4x in FY26 and 0.7x in FY2027.
- Has aggressively pursued off-balance-sheet data center projects (Beignet (\$27.3 billion), Sopaipilla (\$12.3 billion)).
- Discretionary cash flow remains negative until 2028 with capex spending of \$140 billion in FY26.
- Offramp for AI investment no longer clear as Meta's AI ambitions and spending exceed the needs of its base advertising business.
- Offset: Advertising revenue growth is accelerating, which the company attributes to AI investments.

Meta Platforms Credit Metrics Snapshot

(\$ in billions)	2025a	2026f	2027e	2028e	2029e
Revenue	201.0	257.0	322.5	388.3	451.5
Growth (%)	22%	28%	25%	20%	16%
EBITDA	125.4	150.1	183.0	240.0	291.2
Margin (%)	62%	58%	57%	62%	64%
Capex	69.2	140.8	164.0	178.1	198.1
Free cash flow	50.5	(9.7)	(3.5)	31.1	55.5
Dividends & Share repurchases	50.0	25.0	25.0	25.0	25.0
Discretionary cash flow	0.5	(34.7)	(28.5)	6.1	30.5
As reported debt	58.7	83.7	111.0	139.5	168.5
Adjustments					
PV of operating leases	26.3	27.4	28.5	29.7	30.9
Cash & marketable securities	(81.6)	(67.0)	(60.8)	(89.2)	(139.9)
Guarantees	0.0	0.0	0.0	0.0	0.0
PV of future lease obligations	N/A	12.5	42.9	104.3	162.2
Power purchase agreements	TBD	TBD	TBD	TBD	TBD
Other adjustments	6.9	6.9	6.9	6.9	6.9
Total S&P Global adj. debt	10.4	63.5	126.5	191.1	228.4
S&P Global adj. leverage (x)	0.1x	0.4x	0.7x	0.8x	0.8x
Downside threshold (x)	1.0x	1.0x	1.0x	1.0x	1.0x
Debt capacity	--	86.6	54.5	48.9	62.8

Year end Dec. 31. All figures are S&P Global adjusted. Other adjustments include litigation liabilities. Debt capacity defined as excess debt needed to reach downside threshold as of today.
a--Actual, f--Forecast, e--Estimated. Sources: Company Filings, S&P Global Ratings.

S&P Global Ratings

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Hyperscaler | Microsoft Corp.

- Rating: AAA/Stable/A-1+
- Exposure to AI compute: ~10% of revenue (from OpenAI and Anthropic)
- Aggressive capex and lease commitments to increase leverage to 0.7x in FY27 (ending June 2027) and 0.9x in FY28, with potential upside risk, up from 0.2x in FY26.
- Significant data center lease (revenue) commitments from OpenAI (\$250 billion over eight years) and Anthropic (\$30 billion over five years).
- Relies more heavily on leases vs. other hyperscalers, and FOCF to remain positive despite aggressive capex spending.
- Has meaningful stake in OpenAI (27% ownership) not included in credit metrics.

Microsoft Credit Metrics Snapshot

(\$ in billions)	2025a	2026f	2027e	2028e	2029e
Revenue	281.7	331.9	392.8	468.1	563.6
Growth (%)	15%	18%	18%	19%	20%
EBITDA	174.0	213.6	251.9	303.1	376.0
Margin (%)	62%	64%	64%	65%	67%
Capex	64.6	115.9	189.0	226.8	272.2
Free cash flow	76.4	73.1	33.6	39.7	48.5
Dividends & Share repurchases	42.5	48.7	48.6	50.8	53.3
Discretionary cash flow	33.9	24.4	(15.0)	(11.1)	(4.8)
As reported debt	43.2	40.3	50.3	61.0	81.0
Adjustments					
PV of operating leases	69.0	88.5	109.0	133.0	161.5
Cash & marketable securities	(94.6)	(76.7)	(61.2)	(50.6)	(53.8)
Guarantees	0.0	0.0	0.0	0.0	0.0
PV of future lease obligations	N/A	N/A	66.6	127.1	182.2
Power purchase agreements	TBD	TBD	TBD	TBD	TBD
Other adjustments	4.0	0.0	0.0	0.0	0.0
Total S&P Global adj. debt	21.6	52.2	166.8	264.0	317.1
S&P Global adj. leverage (x)	0.1x	0.2x	0.7x	0.9x	0.8x
Downside threshold (x)	1.0x	1.0x	1.0x	1.0x	1.0x
Debt capacity	--	--	85.1	39.1	58.9

Year end June 30. 2025 and 2026 are actuals. All figures are S&P Global adjusted. Debt capacity defined as excess debt needed to reach downside threshold as of today.
a--Actual, f--Forecast, e--Estimated. Sources: Company Filings, S&P Global Ratings.

S&P Global Ratings

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Hyperscaler | Oracle Corp.

- Rating: BBB-/Stable/A-3
- Exposure to AI compute: ~28% of revenue, growing to ~60% in two years
- Downgraded on 7/9/26, due to weaker business risk (higher AI mix), AI industry concerns, higher capex, worse FOCF in FY27.
- Risks: OpenAI concentration (+\$300 billion of backlog), massive long-term lease commitments; likely to fare worse in industry downturn due to mix of workload and customer base.
- Credit metrics weak for IG (mid-4x leverage, -\$42 billion FOCF in FY27) but slowly improving in FY28/29 as projected AI revenue scales.
- Offsets: Strong legacy software business, commitment to IG (will issue equity), customer prepayments to offset capex.

Oracle Credit Metrics Snapshot

(\$ in billions)	2025a	2026f	2027e	2028e	2029e
Revenue	57.4	67.4	91.2	129.3	169.4
Growth (%)	8%	17%	35%	42%	31%
EBITDA	30.2	37.5	56.7	88.7	122.7
Margin (%)	53%	56%	62%	69%	72%
Capex	21.2	55.7	95.0	100.0	90.0
Free cash flow	0.8	(22.1)	(41.6)	(25.2)	6.2
Dividends & Share repurchases	6.2	6.0	6.6	6.8	6.8
Discretionary cash flow	(5.5)	(28.1)	(48.1)	(32.0)	(0.6)
As reported debt	92.6	129.5	149.7	191.0	211.4
Adjustments					
PV of operating leases	15.4	37.9	42.4	47.6	53.6
Cash & marketable securities	(11.2)	(31.9)	(20.0)	(20.0)	(29.9)
Guarantees	0.0	0.0	0.0	0.0	0.0
PV of future lease obligations	N/A	N/A	72.2	180.6	210.5
Power purchase agreements	N/A	N/A	6.0	8.4	9.7
Other adjustments	2.0	0.9	0.9	0.9	0.9
Total S&P Global adj. debt	99.7	136.4	251.3	388.5	456.2
S&P Global adj. leverage (x)	3.3x	3.6x	4.4x	4.4x	3.7x
Downside threshold (x)	3.5x	4.5x	4.5x	4.5x	4.5x
Debt capacity	--	--	4.0	10.7	95.9

Year end May 31. All figures are S&P Global adjusted. PPA adjustment based on company filing. Other adjustments include pension and OPEB liabilities. Debt capacity defined as excess debt needed to reach downside threshold as of today.
a=Actual, f=Forecast, e=Estimated. Sources: Company filings, S&P Global Ratings.

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Hyperscaler | Space Exploration Technologies Corp. (SpaceX)

- Rating: BBB-/Stable/--
- Exposure to AI compute: 24% of revenue, growing to 68% by 2028
- Rating initiated at BBB-/Stable despite negative FCF through 2028, due to expectations for low leverage (less than 2.0x through 2028), discretionary capex, commitment to issue equity if leverage increases toward 3x gross.
- AI leasing data center capacity to Anthropic and Google at spot rates well above market prices supports our expectation that near-term forecasted revenues and EBITDA growth are achievable, and potentially beatable.
- Of \$495 billion in capex spending over 2026-2028, half is discretionary, which gives the company flexibility to reach FCF earlier than projected.

SpaceX Credit Metrics Snapshot

(\$ in billions)	2025a	2026f	2027e	2028e	2029e
Revenue	18.7	47.8	117.4	154.1	327.8
Growth (%)	33%	156%	146%	57%	29%
EBITDA	6.9	27.2	85.9	135.0	164.9
Margin (%)	37%	57%	73%	73%	69%
Capex	20.7	67.4	197.2	230.7	233.2
Free cash flow	(13.9)	(41.9)	(114.4)	(106.1)	(80.3)
Dividends & Share repurchases	1.6	1.7	2.4	2.5	2.6
Discretionary cash flow	(15.5)	(43.6)	(116.8)	(108.7)	(82.9)
As reported debt	17.2	27.7	87.3	194.7	294.7
Adjustments					
PV of operating leases	7.3	21.2	21.8	22.5	23.3
Cash & marketable securities	0.0	(81.0)	(25.0)	(25.0)	(43.5)
Guarantees	0.0	0.0	0.0	0.0	0.0
PV of future lease obligations	N/A	0.0	0.0	0.0	0.0
Power purchase agreements	TBD	TBD	TBD	TBD	TBD
Other adjustments	0.4	0.4	0.4	0.4	0.4
Total S&P Global adj. debt	24.9	0.0	84.6	192.6	274.8
S&P Global adj. leverage (x)	3.6x	0.0x	1.0x	1.4x	1.7x
Downside threshold (x)	2.0x	2.0x	2.0x	2.0x	2.0x
Debt capacity	(11.1)	54.3	87.2	77.4	55.0

Year end Dec 31. All figures are S&P Global adjusted. Other adjustments include litigation liabilities. Debt capacity defined as excess debt needed to reach downside threshold as of today.
a=Actual, f=Forecast, e=Estimated. Sources: Company filings, S&P Global Ratings.

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Writing: Jasper Moiseiwitsch; Digital design: Victoria Schumacher