

Credit FAQ:

How Could AI Risks Weaken Ratings?

March 11, 2026

This report does not constitute a rating action.

S&P Global Ratings has received questions about the credit risks of AI-driven market movements in North America. In this FAQ, we answer the most frequently asked questions, emphasizing rating implications, sector vulnerabilities, and potential triggers of credit deterioration.

Frequently Asked Questions

What would signal that AI substitution is beginning to weaken credit fundamentals in the software sector?

For software and services issuers exposed to AI substitution, key downgrade triggers will likely center multiple forward-looking signals that competitive position has weakened and revenue durability has eroded. Triggers could include declining net revenue retention, weaker new-logo wins, rising price concessions, and shorter contract durations, all of which indicate customer insourcing or displacement by lower-cost AI-native alternatives well before financials weaken.

These early signs, when paired with margin compression, delayed monetization of AI investments, and persistent free cash flow pressure, heighten the likelihood of business deterioration and ratings pressure, particularly for highly leveraged issuers. Although market-based indicators--such as falling loan prices, widening spreads, or refinancing stress--are not a direct factor within our credit rating methodology, they could further reinforce downgrade risk for certain speculative-grade issuers.

We believe less-differentiated, rule-based, point-solutions software providers may face higher margin pressure and displacement than established platform leaders with deep domain expertise and proprietary data. Leaders are better positioned to navigate disruption from AI-native competitors.

For additional information, please see the following articles on RatingsDirect:

- [AI Impact On Business And Technology Services: Disruption Without Dislocation ... Yet](#), Feb. 26, 2026
- [How Will AI Disrupt Software Sectors, Private Markets, And U.S. Credit Conditions?](#), Feb. 13, 2026

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- [Recalibrating The Competitive Moat: Assessing Durability In An AI-Infused Software Landscape](#), Feb. 10, 2026

When do off-balance-sheet liabilities contribute to rating pressure or downgrades?

We typically incorporate off-balance-sheet liabilities into our ratings by adjusting leverage to reflect obligations we view as debt-like in substance. For example, hyperscalers have disclosed substantial long-term future lease commitments. Consistent with our lease methodology, we discount these commitments and include the debt-like obligation in our credit measures. Accordingly, heavy reliance on such off-balance-sheet arrangements can weaken key credit metrics and possibly increase downgrade risk.

Other structures, including joint ventures or special-purpose vehicles, vendor financing, backstop agreements, and residual value guarantees, can similarly increase debt-like exposure, obscure risk, and create financial interdependencies. For example, direct investments or strategic partnerships may generate circular flows of financing. Accordingly, where investments are strategically integral, we may consolidate them in our analysis. In other cases, we may apply the proportionate or equity method in these investments or treat them as capital expenditure (capex) in our free operating cash flow (FOCF) calculations.

Finally, the recent surge in data center buildouts has also increased the use of contingent guarantees, such as lease backstops and residual value guarantees, to facilitate third-party financing. These arrangements can create future cash calls. When support extends to weaker counterparties, we typically include the guaranteed amount (often net of tax) in adjusted debt, while considering the potential recovery value of the underlying assets and the issuer's strategic influence or commitment.

For additional information, please see "[How Contingent Guarantees And Circular Investments Are Considered In S&P Global Ratings' Ratio Analysis](#)", published Dec. 18, 2025, on RatingsDirect.

What could cause AI-driven business obsolescence concerns to deteriorate credit in the private credit market?

Spillover risk into private credit as a real but uneven concern, given software's outsized presence in the asset class and the rising possibility that AI-driven substitution could disrupt the business value proposition of some borrowers.

Software accounts for a significant share of borrowers in the private credit market. It is the most represented sector among our credit estimates (around 13% of our universe), but when including affiliated sectors such as health care tech and IT services, this rises to 20%.

The credit quality of these companies has largely remained resilient over the past year. We looked at 325 companies for which we had a credit estimate in both 2024 and 2025, and 80% showed year-over-year revenue growth and 70% EBITDA growth. Software led all sectors in credit estimate upgrades last year, with 42, and accounted for 18% of the total upgrades last year. For recurring revenue loans specifically, we saw 15 upgrades and 7 downgrades.

While this is all positive, our credit estimates, which are used within middle-market collateralized loan obligations (CLOs), are a point-in-time analysis that do not bake in a forward-looking analysis. The impact of AI disruption will be differentiated and vary based on the type of software offering. Our data is based on deals reviewed last year, and given how fast the AI landscape is evolving, this year's trends could look different.

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Upcoming maturities also appear largely manageable, with 20% of loans from software and affiliated sectors maturing in the next two years. This could be a problem for software entities at risk of immediate disruption. Furthermore, weaker players may face challenges in refinancing if conditions do not stabilize, considering close to 20% of entities in the software sector have a credit estimate score in the 'ccc' ratings category. Looking further out, around 40% of maturities fall in 2030 and beyond.

While software is the largest sector in both broadly syndicated loans (BSLs; about 14.7% of collateral) and middle market CLOs (about 19.2%), our scenario analysis indicates senior tranches remain broadly resilient. Even under stressed assumptions, we did not lower any notes in the 'AAA' and 'AA' ratings categories more than five notches. However, mezzanine and junior classes show wider downgrade dispersions.

For additional information, please see the following articles on RatingsDirect:

- [First Look At How AI Disruption Could Affect U.S. CLO Ratings](#), Feb. 20, 2026
- [How Will AI Disrupt Software Sectors, Private Markets, And U.S. Credit Conditions?](#), Feb. 13, 2026
- [AI Disruption Worries Spill Over To Private Credit Markets](#), Feb. 12, 2026

Could AI-driven workforce reductions and weaker demand deteriorate the broader economy despite positive GDP growth?

An extremely unlikely or outright impossible doomsday hypothetical end-state scenario has been batted around, in which AI produces a lot of the output that the current labor force can, causing a large-scale workforce reduction. Such a dystopian economic future features lots of production, but nobody has enough income to consume all the products (a stark distributional issue).

While this specific worry is unlikely, we are in a transitional stage in which certain segments are under stress due to underemployment. Furthermore, returns to AI-related productivity growth are becoming more concentrated among capital owners.

Our base-case forecasts do not assume widespread job losses or demand contraction due to AI adoption. Based on recent survey data from the Federal Reserve Bank of New York, 40% of service firms in New York and New Jersey reported using AI in 2025, up from 25% in 2024. Survey results indicate that firms intend to retrain their workforces to use AI to enhance productivity, but widespread layoffs will be limited. However, survey results also suggest that AI is leading firms to scale back hiring, which may contribute to lower job creation and higher unemployment in the U.S., especially among those 16-24 years old.

When we consider other tail risks, business investment related to AI is offsetting weakness in other investment areas and in the economy at large. We estimate that around 65% of growth in final private domestic demand in 2025 came from data centers and high-tech-related spending, and that this investment added about 0.8 percentage points to 2.2% U.S. GDP growth in 2025 after adjusting for imports. Based on these numbers, a slowdown in data center construction or demand would also affect economic growth.

For additional information, please see the following articles:

- [Essential Economics: 2025: Jobless Expansion In The U.S.; 2026: Humans In The Loop, You Say?](#), Dec. 18, 2025
- [Data Center Investments Are Increasingly Moving The Macro Needle](#), Nov. 4, 2025

How could AI substitution affect hyperscaler data center investment over time, particularly if performance deteriorates or the competitive landscape shifts?

Hyperscalers appear best positioned in this AI revolution, given their strong balance sheets and competitive positions within their core businesses. In addition, several also benefit from their cloud platforms, which allow them to monetize their own data centers to third parties. As these companies are interested in AI to further advance their core businesses, AI substitution is essentially what these companies are seeking. Competitors without AI capabilities face substitution risk.

That said, accelerating AI-related capex is pressuring near term FOCF, making their credit profiles somewhat riskier than before. Lower investment-grade issuers may be more exposed. [Oracle Corp.](#) (BBB/Negative/A-2), for instance, is at greater risk given the relative aggressiveness of its leverage strategy.

That said, as AI reshapes enterprise workloads, competitive positioning within the hyperscaler cohort could shift. Players with the strongest proprietary models, developer ecosystems, and semiconductor partnerships could capture disproportionate demand for inference-optimized capacity, while others may lag. A key long-term consideration is the risk of hyperscaler disintermediation, where AI-native model providers or vertically integrated ecosystems reduce reliance on third-party cloud platforms. However, given that hyperscaler spending continues to set the pace for the broader digital infrastructure cycle, we believe investment demand will remain robust, albeit with greater dispersion in growth trajectories as the AI competitive landscape evolves.

For additional information, please see "[AI Infrastructure Buildout Weighs Credit Risks And Rewards](#)", published Jan. 21, 2026, on RatingsDirect.

What could put existing data center projects at risk despite long-term contracts?

It remains uncertain how AI ultimately reshapes the long-term supply-demand balance for data centers. We expect near-term fundamentals to remain solid for the next few years: supply remains tight, vacancy is low, and we expect leasing conditions to stay strong. Typical lease terms are 10-15 years with extension options, which supports earning visibility once a facility is up and running. In some cases, creditor protections also bolster cash flow certainty, such as contractual support from investment-grade tenants or lease backstops from investment-grade partners. For example, Google LLC, subsidiary of [Alphabet Inc.](#) (AA+/Stable/A-1+), has offered to backstop the lease of neocloud provider Fluidstack Ltd., which is an arrangement we view as meaningful creditor protection.

Our ratings are predicated on lease contracts being strong (triple net leases) and having unbreakable conditions. Still, this hypothesis has not been tested, and so we will watch closely to see if any lessors break leases and what the legal ramifications are.

For additional information, please see "[AI Training: The Search For Power Extends To Rural America](#)", published Feb. 19, 2026, on RatingsDirect.

What early-warning indicators would signal deterioration in the software sector or a potential data center investment bubble?

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To detect early signs of deterioration in the broader software sector or stress from a potential data center investment bubble, we monitor a set of signals focused on macro demand conditions, capital intensity trends, and ecosystem weakness.

Key indicators include hyperscaler capex trajectories, where a sharp slowdown or pullback from the current unprecedented investment cycle could signal overcapacity or weakening AI-driven demand. This would most hurt our semiconductor and hardware credits. We also track tightening financing conditions, such as rising spreads and declining secondary-market pricing for leveraged software and IT-services issuers, which often reflect investor concern about earnings durability and refinancing risks. Additional red flags include slowdowns in enterprise AI adoption, stalled bookings, or customer shifts toward insourcing that reduce demand for external solutions. We also evaluate signs of operational stress such as falling utilization rates, margin compression in service-based models, or delayed capacity absorption in data centers--all of which could indicate oversupply or weakening end-market fundamentals.

In software, metrics based on AI-derived annual recurring revenue (ARR), utilization, and returns are demonstrating that tangible results are emerging. Collectively, these indicators will likely help identify whether sector dynamics are transitioning from cyclical volatility to structural deterioration.

Do you expect a wave of downgrades given recent AI market concerns?

No, we do not expect an impending wave of downgrades. We anticipate that AI will fundamentally change software companies differently. As such, we assess the effects case by case, given that software players capture value in different areas of the tech stack. Some will have more defensible positions (data owners) while others could be commoditized (applications).

Many investors draw comparisons to the pace of rating actions during the COVID-19 pandemic; however, the current environment differs from that period. Today's environment reflects structural technological evolution rather than an abrupt macroeconomic shock. During the pandemic, revenues in several sectors declined sharply, and liquidity cushions narrowed rapidly, in some cases to only a few months of runway. By contrast, most issuers today continue to perform broadly in line with our base-case expectations. While AI introduces competitive disruption risk, we view its credit impact as more gradual and issuer-specific, requiring differentiated analysis rather than sectorwide rating changes.

Consistent with our forward-looking approach to credit analysis, we assess AI through the lens of competitive position, profitability, and financial risk. We believe credit outcomes will likely diverge based on factors such as access to proprietary data, embedded value chains, innovation capabilities, financial flexibility, and management execution.

At the same time, refinancing risk and liability management transactions remain important considerations in leveraged finance. If market volatility persists, issuers with 2027–2028 maturities--particularly those with free cash flow deficits, elevated leverage, or low debt trading levels--could face higher funding costs or constrained market access. We would typically expect issuers to address maturities 12–18 months ahead of scheduled repayment; failure to demonstrate a credible refinancing plan within that window could pressure a rating. Accordingly, while AI-driven disruption may reshape our ratings over time depending on the evolution of GenAI capabilities and speed of economic diffusion, near-term rating actions are more likely to reflect issuer-specific fundamentals, liquidity needs, and refinancing capacity.

Related Research

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- [First Look At How AI Disruption Could Affect U.S. CLO Ratings](#), Feb. 20, 2026
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- [Data Center Investments Are Increasingly Moving The Macro Needle](#), Nov. 4, 2025

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