

# Crowding out: AI borrowing and Treasury yields

AI borrowing is affecting hyperscaler credit pricing, while its contribution to higher Treasury yields remains limited. Expected short-term rates explain much of the modelled 2026 rise in the 10-year yield, and federal financing needs remain an important longer-term pressure.

AS OF  
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SCOPE  
Bond borrowing by the six hyperscalers and other American AI issuers, and the amount of long-term interest-rate risk this financing adds to US markets

## KEY POINTS

- **AI borrowing is affecting hyperscaler credit pricing.** J.P. Morgan reports spread widening of 30bp for its five-company group through 20 August, compared with 2bp for the broader dollar investment-grade index. Demand for other sectors remains resilient.
- **Our base case projects \$409bn of dollar bond sales by tracked American AI issuers in 2027, or about 13.6% of the market.** The six hyperscalers account for \$338bn. Their individual spending shortfalls total \$178bn in 2030, rising to \$335bn if each company's OCF is 10% below forecast and spending is unchanged.
- **The evidence does not establish AI borrowing as a major driver of higher Treasury yields.** Expected short-term rates explain most of the modelled 10-year yield increase in 2026. Federal financing needs remain an important structural pressure in our assessment, although the evidence does not quantify their contribution to the 30-year yield move.

## How big is the corporate debt market

The relevant market for this note is annual US dollar corporate bond issuance, including financial companies. We project \$2.85tn of sales in 2026, compared with \$2.22tn in 2025. The Securities Industry and Financial Markets Association (SIFMA) puts corporate bonds outstanding at \$11.70tn in March 2026. Annual sales measure what investors are asked to buy; the outstanding stock describes the market they already hold.

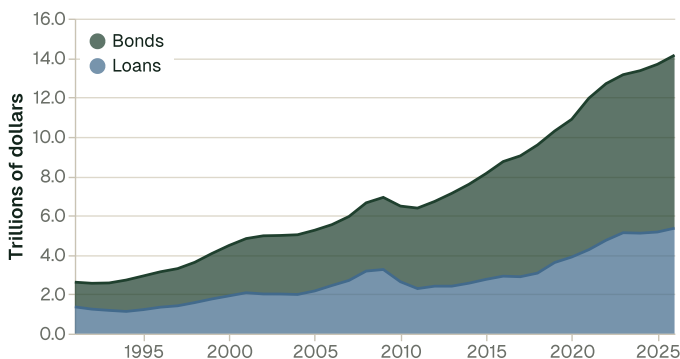
Investment-grade bonds accounted for 77% of 2025 issuance. Refinancing is a substantial part of gross sales and returns cash to investors as existing

bonds mature. Barclays began the year forecasting \$945bn of net issuance from \$2.46tn of gross sales. Our \$3.02tn estimate for 2027 combines the historical trend in non-AI borrowing with projected dollar AI issuance.

For context, US non-financial companies owed \$14.14tn at end-2025, including \$8.79tn in bonds and other debt securities. Our broader model estimates \$2.40tn of additional AI debt over 2026–2030, including project loans, or about 4.0% of the \$59.50tn global corporate debt stock at end-2025. This is solely a scale reference; annual dollar issuance and its maturity profile are more relevant to Treasury demand.

## Non-financial US companies owe \$14.14tn, mostly bonds

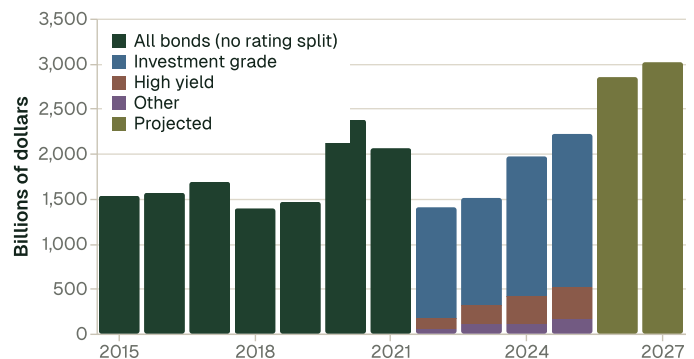
Non-financial corporate debt outstanding at year end, Fed Z.1, 1990 to 2025



US non-financial debt, Fed Z.1. Historical context only; the global AI debt comparison uses the separate global corporate debt stock.

## Bond sales: \$2.22tn in 2025, on course for \$2.85tn

All US corporate issuers, banks included, billions of dollars, 2026–27 projected



SIFMA: \$1,900bn sold through August 2026. Rating splits available from 2022. Forecasts combine non-AI trend and dollar AI issuance.

## Record supply in 2026, and who is buying it

The market has already absorbed a large increase in supply. SIFMA records \$1,900bn of bond sales through August, 29.80% more than a year earlier. By mid-July, hyperscalers accounted for seven of the year's nine deals above \$20bn. Amazon's \$53.8bn dollar and euro sale in March surpassed the \$49bn record Verizon set in 2013.

The Fed's March accounts show foreign investors holding \$4.91tn, life insurers \$3.93tn, mutual funds \$2.58tn, pension funds \$1.61tn and ETFs \$1.41tn. The \$17.17tn total includes foreign bonds held by US investors and private asset-backed bonds, giving it broader coverage than SIFMA's measure.

Foreign investors have helped absorb the additional bonds. PIMCO reports net purchases of \$216bn in the first five months of 2026, 32% more than in the same period of any year since the financial crisis. These purchases could come from new savings or reallocations, including sales of Treasuries. The flow data alone cannot establish whether Treasury demand was displaced.

Repricing is more apparent within hyperscaler credit. Spreads for J.P. Morgan's five-company group, which excludes SpaceX, widened about 30bp

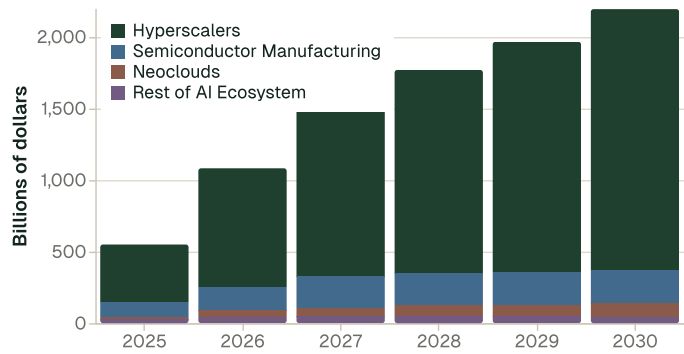
through 20 August, compared with 2bp for the dollar investment-grade index. Demand for other sectors remained resilient, suggesting that much of the adjustment has been concentrated in hyperscaler borrowing costs. Evidence of broader market disruption remains limited.

The growing concentration of hyperscaler debt helps explain the wider spreads. Breckinridge reports that Meta, Alphabet, Amazon and Oracle's combined weight in the Bloomberg US Corporate investment-grade index rose from 2.20% to 4.10% in the year to April 2026. An investor can remain comfortable with each company's ability to repay while becoming reluctant to increase exposure to the same group. More supply can therefore require wider spreads well before ratings deteriorate.

Goldman makes a similar distinction between companies' capacity to borrow and investors' willingness to absorb the bonds. Its credit desk reported weaker participation from large insurance buyers in long-dated deals as the year progressed, while shorter maturities were easier to place. This suggests that the adjustment depends on the term and concentration of exposure. Successful issuance shows that funding is available at the offered price.

19 AI companies spend \$8.61tn over 2026–2030

Cash capex by group, base case, billions of dollars



Company-wide cash capex. SpaceX is included from 2026; 2025 excludes it because only AI-segment capex is reported. Later years are modeled.

How big the AI buildout is

We track 19 companies across hyperscalers, neoclouds, semiconductor manufacturing and the rest of the AI infrastructure supply chain. Capital spending totals \$8.61tn over 2026–2030 in our base case, reaching \$2,193bn a year by 2030. For the same 18 companies covered in 2025, annual spending rises from \$550bn to \$1,946bn; SpaceX enters the total from 2026.

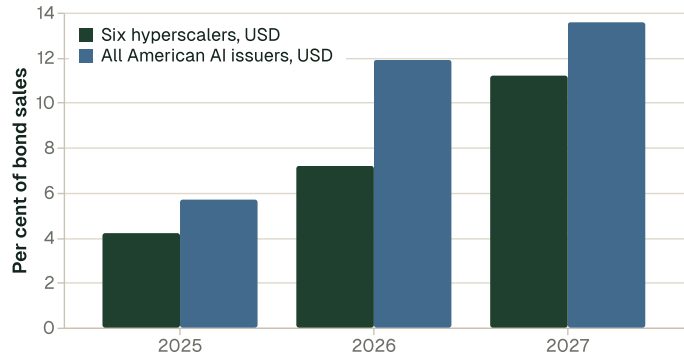
The analysis includes company-wide spending because all uses of cash affect financing needs. Amazon's logistics investment and SpaceX's launch programme draw on resources also available for data centres, making the estimate an upper bound for AI spending within this cohort. The six hyperscalers—Alphabet, Amazon, Meta, Microsoft, Oracle and SpaceX—account for most of the total.

How much cash flow can fund

The six hyperscalers' company forecasts imply \$7.25tn of capital spending and incremental fixed payments through 2030. OCF equals about 84% of that total, but companies cannot use each other's surplus cash. Calculating shortfalls separately gives \$431bn in 2027 and \$178bn in 2030, before cash balances, dividends and debt repayments. Across five years, these shortfalls total \$1,291bn.

Dollar AI issuance reaches 13.6% of 2027 bond sales

Share of the US dollar corporate bond market, per cent; 2026–27 projected



The 2025 bars use observed issuance. The 2026–27 bars apply the observed currency mix to the debt forecast and divide it by the matching projected dollar bond market.

How much dollar debt the market must absorb

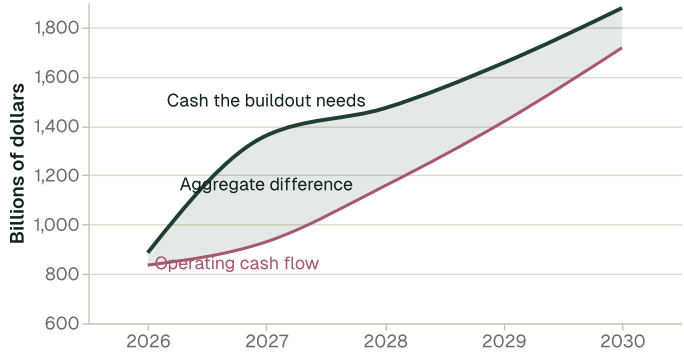
The six hyperscalers sold \$353bn of bonds from January 2025 to 19 August 2026, including \$275bn in dollars. Dollar bonds made up 78% of the total, and \$113bn had maturities of at least 15 years.

The currency and maturity mix is shifting. Dollar bonds accounted for 74% of issuance in 2026 through August, down from 86% in 2025. The share of dollar issuance with maturities of at least 15 years also declined, from 46% to 39%. Growth in total borrowing nevertheless increased the amount from \$43bn to \$70bn. Alphabet and Amazon account for all non-dollar issuance in the filing sample.

For bond supply, we retain Goldman's \$400bn forecast for the five cloud parents. Including SpaceX's issuer-level estimate brings the six-hyperscaler total to \$453bn in 2027. This is our market-supply assumption, not the output of the minimum-funding calculation above. The cash model assumes no buybacks.

Cash flow closes most of the gap by 2030

Six hyperscalers, company forecasts, \$bn; aggregate cash difference



The shaded difference nets company surpluses against deficits and is still \$161bn in 2030. Individual 2030 shortfalls total \$178bn.

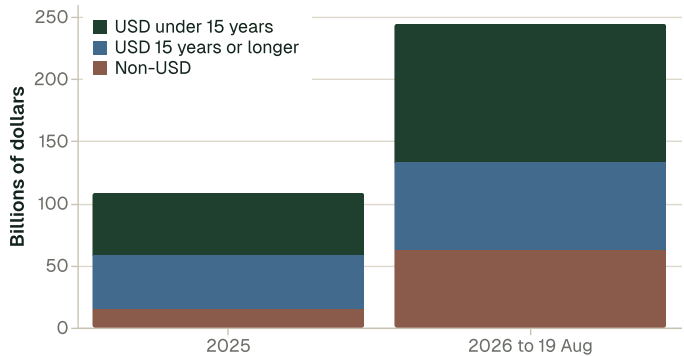
Completed fiscal years use reported capex and cash flow, including Microsoft and Oracle's FY2026 results. Forecasts use analysts' OCF estimates where available, or consensus EBITDA converted using historical cash conversion. Annual OCF rises from \$836bn to \$1,717bn between 2026 and 2030, an increase of 105%. This requires sustained AI adoption and usage; analyst coverage is thinner in the later years.

In 2030 the six still spend \$161bn more than they generate in aggregate, and the shortfalls above sit with individual borrowers. If each company's OCF is 10% below forecast, their shortfalls rise to \$335bn. Cash reserves or delayed projects could reduce borrowing, although signed contracts restrict flexibility. Ordinary operating payments are assumed embedded in OCF and are not deducted again.

The five cloud parents' operating cash flow covers about 72% of their 2027 spending. The shortfall is \$340bn before distributions and \$417bn once \$49bn of dividends and \$29bn of maturing bonds are added. Running cash balances down to our minimum reserve would reduce the outside funding need to \$317bn, so the cash cushion is worth about \$101bn. Goldman's \$400bn bond forecast therefore covers almost the whole gap with cash held flat; the companies can issue less only by spending down their cash.

Hyperscalers issued \$275bn in dollar bonds

Six hyperscalers, January 2025 to 19 August 2026, \$bn



Long-dollar issuance rose from \$43bn in 2025 to \$70bn through 19 August. Foreign-currency borrowing taps other markets.

How the funding mix could change

Using the 2026 currency mix gives \$338bn of hyperscaler dollar issuance in 2027. Adding the other American AI issuers we track brings this to \$409bn, or 13.6% of a projected \$3.02tn dollar corporate bond market.

A dollar share of 70% to 80% gives a range of \$317bn to \$363bn. If 35% to 40% of those bonds mature in at least 15 years, long-dollar issuance would be \$111bn to \$145bn, with \$130bn in our base case.

Further foreign-currency borrowing is likely as hyperscalers broaden their investor base, consistent with J.P. Morgan's expectation of continued funding diversification. The observed currency mix implies \$116bn of non-dollar issuance in 2027. The actual share will depend on borrowing costs after hedging, investor demand and which companies issue the debt.

The 70–80% dollar range is a scenario assumption. Later estimates are funding floors where refinancing schedules are unavailable.

What moved long-term Treasury yields

From 2 January 2025 to 4 September 2026, the 30-year Treasury yield increased from 4.79% to 5.24%, with +48bp coming through real yields and -3bp through inflation compensation. Investors are asking for a higher return after inflation. The inflation measure also contains risk and liquidity effects, which complicates reading it as a forecast of future prices.

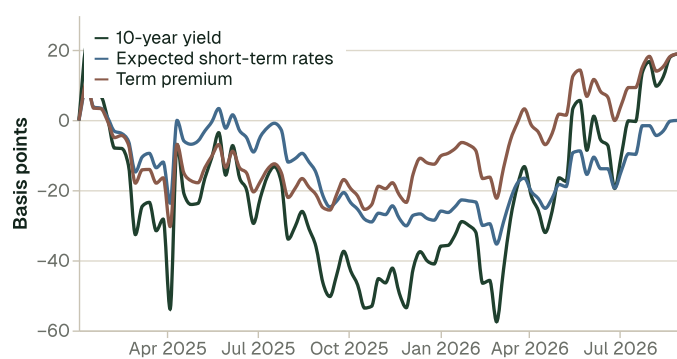
The attribution depends on the observation period. Expectations of Fed cuts lowered yields in 2025, a move that reversed in 2026 as the expected rate path increased. Through 2 September, the New York Fed's ACM model attributes +62bp of the year's change in the 10-year yield to expected short-term rates and -3bp to the term premium, the additional return for holding long bonds. This decomposition assigns most of the 2026 rise to Fed expectations.

Starting in January 2025 captures both the fall and recovery in rate expectations, which largely cancels out. Across that period, the ACM and Kim-Wright models show term-premium increases of +25bp and +19bp, ending on 2 September and 28 August respectively. The prospect of more government debt is one reason investors might require this extra compensation.

The 30-year real yield rose +28bp more than the 10-year over the Treasury comparison period, indicating additional pressure at longer maturities. The

Components of the 10-year Treasury yield

Change in the 10-year Treasury yield since 2 January 2025, basis points



Fed Board model. Term premium +19bp by 28 August; expected-rate path unchanged.

Where AI matters

Our six-company sample records \$182bn of dollar bonds through 19 August, carrying about the same interest-rate risk as \$189bn of 10-year Treasuries, with 61% of that risk in bonds of 15 years and longer. The Dallas Fed's wider estimate is \$300bn of investment-grade AI issuance for the full year, or \$360bn in 10-year equivalents, about 12% of what Treasury adds in a year. At 1% of GDP, the Fed's rule of 10bp of term premium per 1% of GDP caps AI's effect on the 10-year yield at about 11bp; AI's share of the +19bp Kim-Wright premium rise since January 2025 is 2.4bp.

Corporate bonds and Treasuries have different investor bases, but at the long end they overlap. The extra borrowing has to be absorbed somewhere, and it asks a lot of global savings. Some of that money will move into hyperscaler debt from other assets, including Treasuries.

BNY reports weaker 30-year Treasury auctions since April 2026 and larger yield concessions on some hyperscaler deals, although Treasury demand remains within historical ranges. They do not isolate AI from fiscal expectations, monetary policy or other shifts in demand.

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10-year models cannot determine how much of this difference reflects deficits or AI borrowing.

The Fed, Treasury and federal borrowing

The Fed has held rates at 3.50–3.75% since December 2025, and inflation is still high enough for officials to discuss an increase. Governor Waller said in September that the next inflation report would guide his decision.

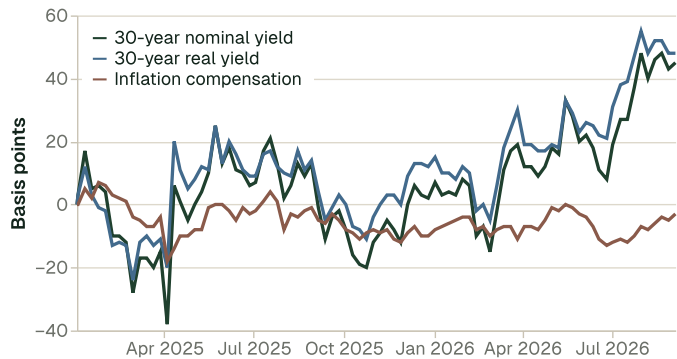
The deficit is the longer-term concern. Treasury has kept auction sizes unchanged, bringing projected net issuance excluding bills down from \$1,878bn in 2025 to \$1,511bn in 2026. Dealers nevertheless expect larger auctions in 2027 because their borrowing forecasts imply a \$1.45tn gap over fiscal 2027–28 at current auction sizes and bill supply. Investors can price that expected supply into yields well before the bonds are issued.

The effect on yields depends on how borrowing expectations change. An anticipated deficit can sustain financing pressure without explaining a particular month's sell-off. Revisions to the amount, maturity and timing of issuance are more informative than the deficit total alone.

Treasury Secretary Scott Bessent has responded by expanding buybacks, raising the maximum purchase per operation in the 10–30-year market to at least \$4bn from 9 September. Purchases of older bonds can improve liquidity and ease pricing pressure, although financing them through new issuance leaves the deficit's funding requirement unchanged. At this scale, this will have very limited impact on longer-term rates.

The 30-year yield rise came through real yields

Change since 2 January 2025, basis points



US Treasury through 4 September 2026. Nominal change is real change plus inflation compensation.

A long AI slowdown, or a ban or moratorium on new data centres, would hurt the hyperscalers badly. Much of the buildout is financed through leases with guaranteed rent, due whether or not the capacity is used; our base case adds \$707bn of new lease liabilities by 2030. Weaker cash flow with spending unchanged raises financing needs, as page two shows, so disappointing AI growth would not automatically lower borrowing.

AI could also lead to a fundamental repricing of long-term rates through productivity growth, as more profitable investment increases demand for capital and households expecting higher future incomes bring consumption forward. Uncertainty and precautionary saving could weaken that response. The next part of this series will examine what long-term bond prices imply about transformative AI.

AI borrowing is affecting hyperscaler credit pricing, while its contribution to Treasury yields remains limited. Expected short-term rates explain much of the modelled 2026 rise in the 10-year yield. Federal financing needs remain a longer-term pressure, and slower cash-flow growth could prolong AI borrowing and increase competition for capital.

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