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The AI Debt Boom and the Rising Cost of Sovereign Borrowing

By

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Executive Summary

Rising Sovereign Bond Yields and Fiscal Pressures

- Government bond yields have reached multidecade highs across major advanced economies, with the US 10-year Treasury yield rising to 5.342%, its highest level in 24 years.
- Persistent fiscal deficits, elevated public debt, inflationary pressures and higher interest rate expectations are driving up sovereign borrowing costs.
- The IMF projects average government financing costs to rise from 2.3% in 2021 to 3.7% by 2031, while US interest payments could reach 5.7% of GDP.

The AI Investment Boom Enters Debt Markets

- Hyperscaler capital expenditure is projected to increase from $156bn in 2022 to over $1tn by 2027, accelerating the shift from internally funded investment towards debt financing.
- Hyperscalers issued $220bn in debt by August 10, 2026, compared with $12.5bn during the same period in 2025.
- Goldman Sachs expects hyperscaler debt issuance to reach $420bn in 2027, intensifying competition for financing alongside growing corporate and sovereign borrowing requirements.

Growing Competition for Global Capital

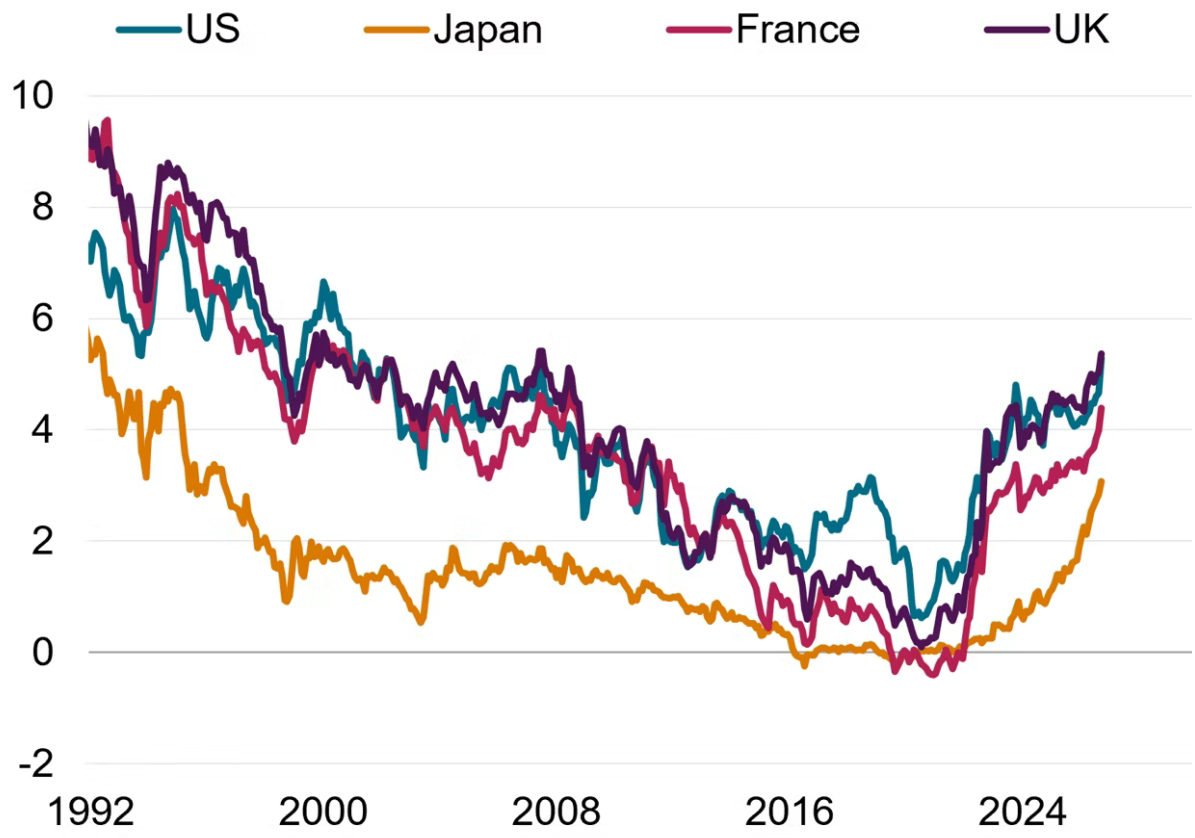
- AI-related bond spreads widened to approximately 115 basis points above US Treasuries by September, compared with 78 basis points for the broader investment-grade market, indicating increasing investor selectivity.
- Hyperscalers' growing issuance of long-dated bonds could compete with government securities for institutional investors, potentially putting upward pressure on sovereign yields.
- Governments are increasingly diversifying into non-dollar debt markets amid financing pressures, although PIMCO finds limited evidence that hyperscaler bond issuance is directly pushing up Treasury yields.

Broader Financial and Fiscal Implications

- Higher sovereign yields are increasing refinancing costs, with Fitch reporting an average 81-basis-point rise in benchmark yields across the ten largest developed economies in 2026.
- The IMF warns that interconnected AI financing arrangements, involving $300bn in equity, $650bn in debt and $1.4tn in future revenue commitments, could amplify financial instability if expected AI revenues disappoint.
- Growing hedge fund exposure to US Treasuries, rising from 4% of holdings in 2022 to 9% in 2025, creates additional vulnerabilities that could intensify bond market volatility and sovereign financing pressures.

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Key Picture: 10-Year Sovereign Bond Yields (Monthly, %)



Source: S&P Global

What's Happening in Bond Markets?

Government bond yields have climbed to multi-decade highs across major advanced economies. Yields on US 10-year Treasuries, UK 30-year gilts, French 10-year bonds and Japanese 10-year government bonds have all reached levels not seen in more than two decades. Earlier this month, the US 10-year Treasury yield rose to 5.342%, its highest level in 24 years, surpassing its previous peak in 2007.

Government bond yields serve as a key benchmark for borrowing costs across the economy. For governments, rising yields increase the cost of servicing public debt, placing additional pressure on public finances and potentially crowding out spending on essential services such as education and healthcare, as a growing share of government revenues is diverted towards interest payments.

Rising government bond yields reflect a combination of factors, including higher interest rate expectations amid inflationary pressures and increased term premia associated with persistent fiscal deficits and elevated public debt. Yet fiscal imbalances alone cannot fully explain the recent surge in yields. After all, neither the US nor the UK has recorded a budget surplus since 2001, raising the question of why financial markets are reacting so sharply now.

What, then, has changed?

One emerging factor is the global artificial intelligence (AI) investment boom, which is reshaping debt markets and intensifying competition for capital at a time when governments already face substantial borrowing requirements. Historically, major technology companies have largely financed their investments through internal cash flows. However, the scale of AI infrastructure spending is increasingly pushing them towards bond

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markets. This shift coincides with rising sovereign borrowing costs across advanced economies, driven by fiscal imbalances, inflationary pressures and tighter monetary conditions. Although AI-related borrowing is not the principal cause of rising government bond yields, its rapid growth could exacerbate existing pressures by increasing competition for financing in global debt markets.

The AI Investment Boom Enters Debt Markets

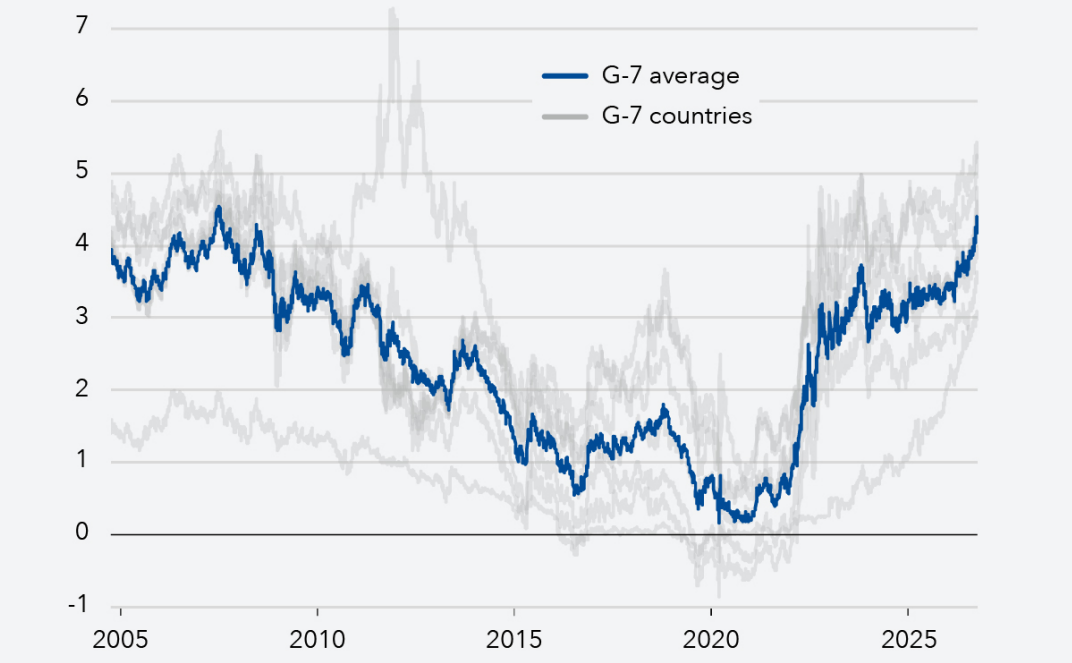
The AI investment boom is transforming the traditionally capital-light business models of US technology giants. Driven by soaring computing demand and infrastructure costs, hyperscaler capital expenditure is projected to surge from $156bn in 2022 to over $1tn by 2027. Despite robust operating cash flows, mounting investment requirements are squeezing free cash flow and increasing reliance on external financing. According to the Bank of England, this shift gained momentum in 2025 and accelerated through the first half of 2026, with the five largest hyperscalers accounting for more than 15% of US investment-grade bond issuance in early 2026, despite representing just 3% of outstanding debt at the end of 2025.

The scale of borrowing has expanded rapidly. According to BNP Paribas, hyperscalers issued $220bn in debt by August 10, 2026, compared with just $12.5bn over the same period in 2025. Financing is also extending beyond conventional US dollar bonds into foreign-currency debt, project finance and private credit, broadening AI's footprint across global capital markets.

Goldman Sachs projects gross hyperscaler debt issuance to reach a record $420bn in 2027, up 60% from 2026 estimates. Meanwhile, overall US corporate bond issuance rose 30% year-on-year to $1.9tn through August 2026, according to the Securities Industry and Financial Markets Association (SIFMA). The accelerating financing needs of AI companies, alongside elevated corporate and sovereign issuance, are increasing the volume of debt that investors must absorb.

The fiscal implications are substantial. The IMF projects that the average effective interest cost of government financing will rise from 2.3% in 2021 to 3.7% by 2031. In the US alone, interest payments are expected to reach 5.7% of GDP by 2031, nearly double their pre-pandemic share, further constraining fiscal space for public investment and social spending (**Figure 1**).

Figure 1: Cost of Debt (10-Year Government Bond Yields, %)



Source: IMF

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The Competition For Capital

The growing supply of AI-related bonds is beginning to alter investor behaviour. By September, spreads on AI-related debt had widened to around 115 basis points over US Treasuries, compared with 78 basis points for the broader investment-grade market. Amazon's recent $25bn long-dated bond offering, for instance, priced at approximately 120 basis points above Treasuries, roughly double the premium estimated a year earlier. Meanwhile, demand for non-AI corporate bonds remained robust, with insurance broker Aon's $13.5bn offering attracting $65bn in orders. This divergence suggests that investors are becoming increasingly selective, demanding higher premiums for AI-related debt despite the strong credit profiles of major technology companies.

The implications could extend to sovereign debt markets. As hyperscalers issue more long-dated bonds, they increasingly compete with governments for institutional investors seeking long-term fixed-income assets. According to George Cole, head of European Rates Strategy at Goldman Sachs, governments financing fiscal deficits and defence spending are drawing on the same pool of global savings as AI companies. As competition intensifies, sovereign borrowers may face pressure to offer higher yields to maintain investor demand, potentially adding to existing fiscal pressures.

Competition may be particularly pronounced at the long end of the yield curve, where hyperscalers increasingly issue bonds with maturities of 20 to 30 years. These securities appeal to pension funds and insurers seeking long-duration assets, traditionally supplied in part by sovereign borrowers. As high-quality corporate bonds offer increasingly attractive returns, governments could face pressure to raise yields to retain investor demand, although the extent of such portfolio substitution remains uncertain.

Competition for capital is also influencing sovereign financing strategies. According to Citi's Stephanie von Friedeburg, governments and public-sector issuers are increasingly turning to non-dollar debt markets, including the Chinese renminbi and Australian dollar, to diversify funding sources amid rising borrowing costs. She warned that growing sovereign financing needs, alongside private investment in AI infrastructure, are intensifying competition for global capital, with developing economies particularly vulnerable to being crowded out.

However, the extent to which AI-related borrowing is directly pushing up sovereign yields remains contested. PIMCO's Lotfi Karoui found little evidence of unusual Treasury price movements following major hyperscaler bond announcements, suggesting that the crowding-out effect may be overstated. Moreover, corporate and government bonds are not perfect substitutes, given differences in liquidity, credit risk and regulatory treatment. Rather than directly displacing sovereign debt, the AI investment boom may instead contribute to higher borrowing costs through broader competition for global savings.

Broader Financial and Fiscal Implications

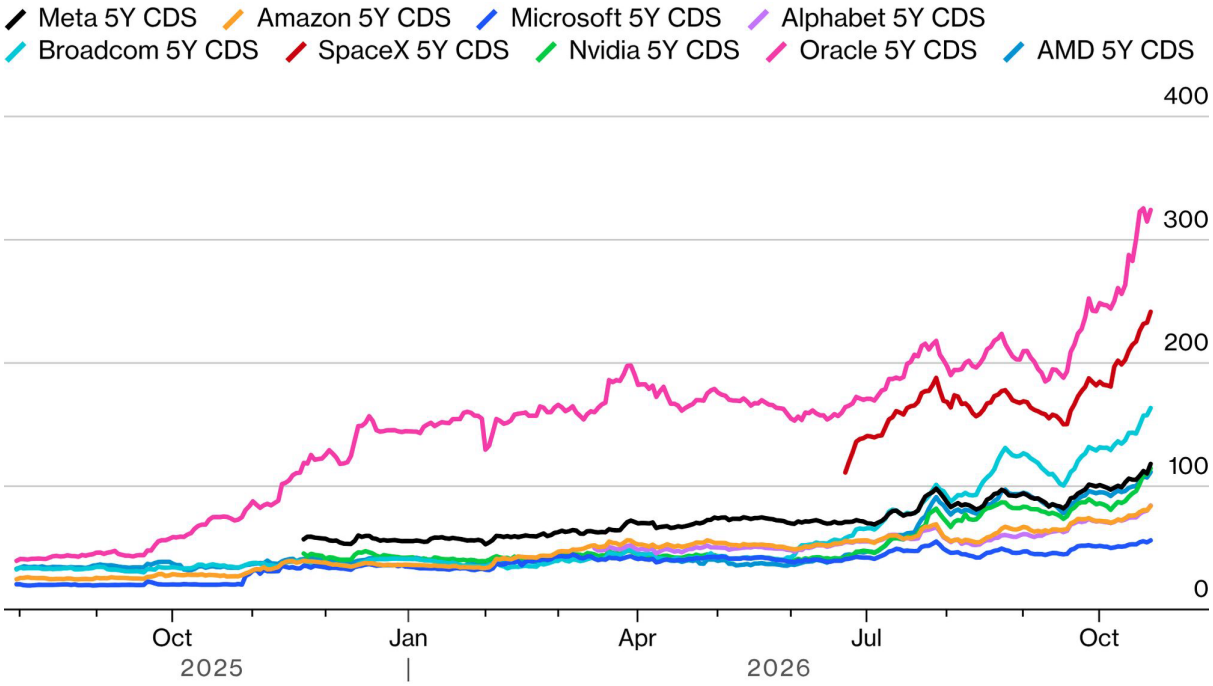
The fiscal consequences of higher sovereign yields are becoming increasingly significant. According to Fitch, benchmark 10-year yields across the ten largest developed economies rose by an average of 81 basis points in 2026, while the median yield now exceeds the average interest rate on outstanding government debt by 161 basis points. As existing obligations mature, refinancing at higher rates will progressively increase debt-servicing costs, placing additional pressure on already strained public finances.

Beyond competition for capital, the AI investment boom is also generating new financial stability risks. The IMF's October Global Financial Stability Report warned that elevated debt and refinancing risks have made sovereign bond markets more vulnerable to fiscal and inflation shocks. With global public debt approaching 100% of GDP, the Fund also identified AI-related borrowing as an additional source of strain, noting that hyperscalers' share of global investment-grade issuance had risen from less than 1% in 2024 to 10% in 2026. A disorderly increase in sovereign yields could further weaken public finances and depress asset valuations across financial markets.

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Rising financing costs are also weighing on the outlook for technology equities. Widening credit default swap (CDS) spreads, including Oracle's approaching 300 basis points, signal growing investor concern about whether future AI revenues will justify substantial infrastructure investments (**Figure 2**). Higher borrowing costs could weaken project profitability and equity valuations, while any slowdown in hyperscaler spending could transmit pressure to semiconductor manufacturers and infrastructure providers.

Figure 2: 5-Year Credit-Default Swaps on Hyperscalers and Chipmakers



Source: Bloomberg

Moreover, as discussed in our November 2025 analysis, circular financing arrangements among AI firms have raised concerns about growing financial interconnectedness. The IMF has since warned that such arrangements have involved $300bn in equity, $650bn in debt and $1.4tn in future revenue commitments since 2023. Should AI commercialisation fall short of expectations, these interconnected obligations could amplify losses across corporate credit markets, potentially spilling over into broader financial markets.

Meanwhile, vulnerabilities in sovereign bond markets could amplify the impact of financial shocks. The IMF has warned that hedge funds' share of US Treasury holdings rose from 4% in 2022 to 9% in 2025, raising concerns about highly leveraged and concentrated positions. A disorderly unwinding of these positions could disrupt Treasury market liquidity and exacerbate volatility, adding to the challenges facing governments already contending with elevated borrowing costs.

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