THE CREDIT LINE

Tracking credit-funded AI datacenter builds



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Datacenter construction credit: differentiation in terms, but not in pricing (yet)

The debt financing markets have been significantly impacted by the artificial intelligence (AI) investment cycle – both in terms of the magnitude and structure of financing. We estimate more than $600 billion of AI-related debt has been issued since 2024 across the hyperscaler ecosystem and related industries tied to datacenter construction. Of special note is the estimated $90 billion of USD IG and HY datacenter construction joint-venture (JV) issuance, over that period. This has effectively represented a new category for corporate credit investors, requiring a different approach of credit analysis that is more closely aligned to the project finance market.

While we expect the market size of such issuance to grow meaningfully, unique deal terms have not translated to dispersed performance. Market pricing has instead coalesced in a tight range of yields and spreads for these bonds have behaved more similarly than those for the broader IG and HY market. We suspect, however, that performance will become more dispersed over time, as deal-specific factors—like construction timelines—grow in importance.

Tracking datacenter builds

Using a dataset tracking datacenter construction, we map projects to construction progress, scope, and potential additional compute capacity. We find datacenter projects tied to syndicated debt appear broadly on schedule, with aggregate construction progress largely tracking expected timelines and little evidence (so far) of persistent delays. We also find datacenter operators participating in such JV debt issues have been better at tracking expected timelines, perhaps reflecting a quality bias accompanying their debt issuance. However, even if variations in construction risk do not become the key differentiator, we see scope for dispersion to increase from refinancing risk and coverage provisions.

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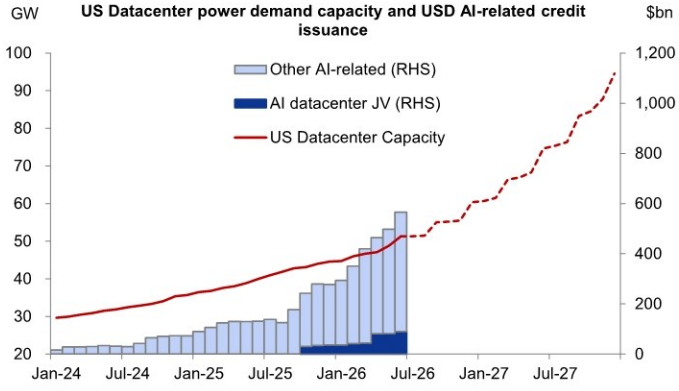
Tracking credit-funded AI datacenter builds

The increased use of debt funding has turned the AI-related buildout into one of the most important themes for credit investors. Public, private, and foreign currency credit markets have all played a role, given the scale and scope of the estimated buildout. And more recently, a new asset class has emerged within the corporate credit market: bankruptcy remote joint-venture (JV) structures, which resemble project finance deals.

Such deals would have typically been serviced in the project finance market. But the depth of the AI-related financing—and the size required for these deals—has pushed this type of financing into the syndicated corporate credit market, where larger deal sizes can be accommodated. In the HY market, these datacenter financings are eligible for index inclusion in widely-tracked indices. In the IG market, however, they are not eligible for index inclusion.

The growth in this debt footprint has followed the increase in total compute needs. More recently, it has also tracked the sharper acceleration in forecasted power demand capacity (in terms of global wattage to come online), as measured by our commodities colleagues (Exhibit 1). That said, players in the AI ecosystem have not typically disclosed the specific use of proceeds for most syndicated debt issued in the buildout. More broadly, private infrastructure and project finance type deals are opaque, by design.

Exhibit 1: Our commodity research colleagues estimate 95 GW of power demand capacity to come online by 2027
Datacenter capacity is a discounted forecast of capacity. More information on the methodology in the note "Power Analyst: US Data Center Power Demand Likely to Surge". AI-related debt is cumulative net debt from AI datacenter joint-venture bonds and other AI-related debt.

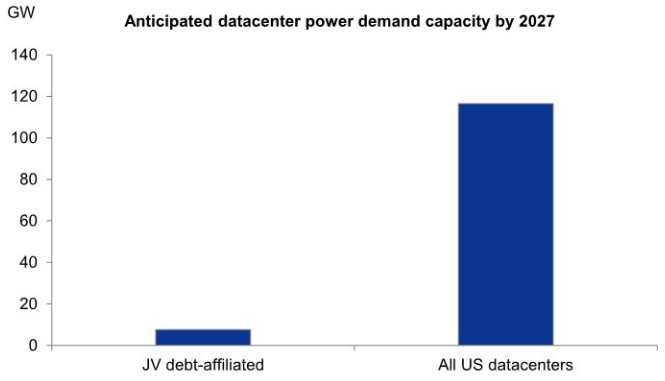


Source: Aterio, Bloomberg, Goldman Sachs Global Investment Research

Against that backdrop, the amount of debt that can be *directly* mapped to the AI buildout remains small. Since 2H25, there have been roughly $90 billion of JV debt funding agreements in the USD IG and HY markets tied to datacenter development. These transactions offer an especially useful window into the financing trend because, unlike traditional corporate bond issuance (where the 'use of proceeds' classification is often broad), these structures typically rely on lockbox arrangements backed by lease cash flows from specific data halls or contracted capacity. In addition, the offering materials associated with these deals often provide enough project-level detail to allow investors to connect debt raised to identifiable compute capacity.

Even though these agreements are more transparent, it is only a fraction of public debt market funding related to AI (again, Exhibit 1). Indeed, the gap between anticipated datacenter compute funded by these agreements and all US datacenter power demand capacity by 2027 remains very large (Exhibit 2). Taken together, we think the sample represented by these JVs are, on their own, a small fraction of the broader buildout, and not necessarily representative. That said, the line of sight from funding costs to project outcomes remains an important thread as investors grapple with the sheer scale of the current, and projected, buildout.

Exhibit 2: Joint-venture deals are only a fraction of current compute, but we believe they contain some important signals

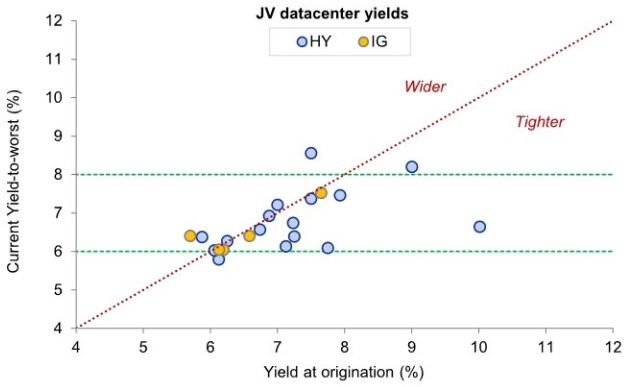


Source: Aterio, Goldman Sachs Global Investment Research

JV documentation varies, but market pricing has largely coalesced

As we have discussed previously, the deal terms across these structures vary meaningfully. Yet, despite these idiosyncrasies, investors have largely traded them as a homogeneous cohort. Yields have generally clustered in a range (Exhibit 3) and spread moves across structures have been more correlated than the broader USD IG and HY markets (Exhibit 4). In our view, that pattern likely reflects the fact that investors have been underwriting a common thematic exposure first, and specific structural differences second. These are not credits levered to the operating performance of an ultimate guarantor in the conventional sense, but they are levered to the same underlying theme: sustained demand for more compute and continued AI investment. We suspect, however, that performance will become more dispersed over time, as deal-specific factors grow in importance. This includes, for example, construction timelines, call protections, leverage restrictions and amortization schedules.

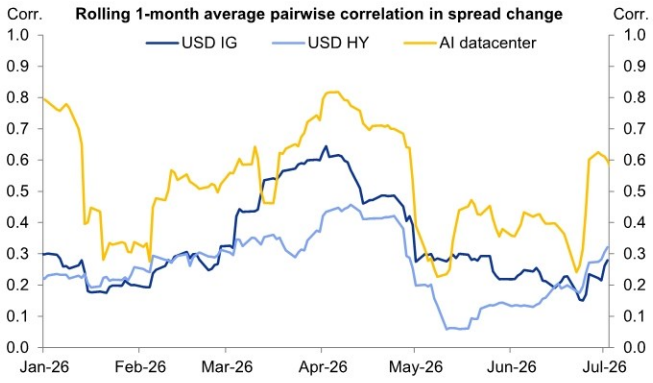
Exhibit 3: Datacenter JV bond yields have clustered between 6-8%



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 4: ...and they have traded in greater lockstep than the broader USD IG and HY markets

Rolling 1-month average pairwise correlation in 3-day spread change across AI datacenter bonds, USD IG and HY.



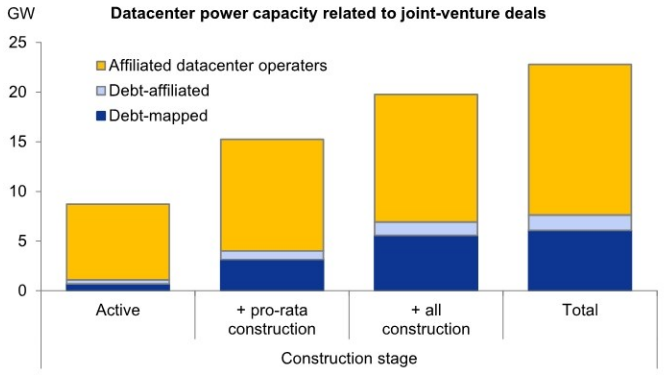
Source: Bloomberg, iBoxx, Goldman Sachs Global Investment Research

Tracking deal-level builds

Using data from Aterio on datacenter construction—and information on datacenter construction deals—we tag site builds to bonds, their project operators and ultimate hyperscaler offtake. One important nuance is that the debt attached to a project often covers only part of the total site. A development may include multiple data halls, for example, while lease cash flows securing a given bond may be tied to only a subset of them. For that reason, we distinguish between total project capacity (which we call "debt-affiliated") and the portion of capacity explicitly included in the debt structure ("debt-mapped"). This matters because many issuers retain the ability to raise additional pari passu debt at the project level, making the broader site build relevant even when the current bond only finances part of it. We also distinguish datacenter operators who have already participated in these syndicated JV debt deals as "affiliated datacenter operators" given existing investor familiarity.

At the aggregate level, we make three observations. First, only a small fraction of the capacity linked to public debt deals is currently online. Based on our estimates, roughly 560 MW are active today, while about 5.3 GW are either active or under construction and expected to be operational by 2027 (Exhibit 5). As a result, the emphasis on construction risk is rightfully salient for many of these structures. While many of the currently active datacenters were likely funded by a mixture of private debt or equity financing, the need to finance construction at scale has driven, we think, the growth of these project finance deals syndicated to a broader (public) credit investor base. As a result, as more deals come online, we expect syndicated debt financing will play a larger role.

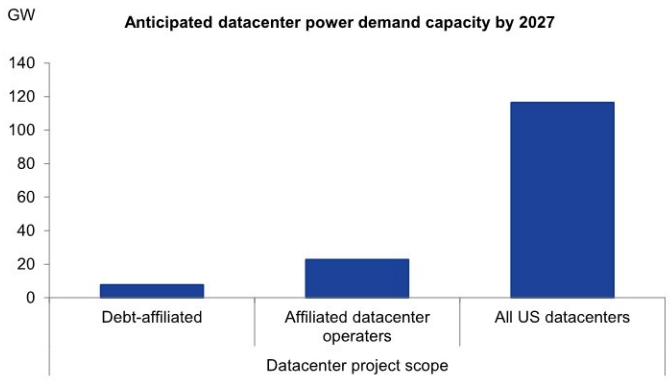
Exhibit 5: Most of the datacenters in debt deals are not yet active, but are being constructed
GW capacity across construction stage for debt-mapped, debt-affiliated (including non-mapped compute in debt deals) and affiliated datacenter operator deals. Active + pro-rata construction based on share of construction completed. Includes datacenters anticipated to be active by 2027.



Source: Aterio, Moody's, S&P Ratings Direct, Fitch Ratings, Goldman Sachs Global Investment Research

Second, these syndicated JV debt deals cover only a fraction of the total datacenter capacity that is expected to be online by 2027 (Exhibit 6). Even under a conservative assumption that only the aforementioned "affiliated datacenter operators" return for additional funding, the implied increase in datacenter power capacity financed through those markets would still be a substantial three-fold increase. The quantum of compute yet to come, we think, underpins the patient approach by many investors who will underwrite each deal and allocate only if comfortable on all important criteria needed for comfort financing the project.

Exhibit 6: Datacenters in debt deals represent a fraction of anticipated power demand capacity
GW capacity anticipated by 2027 for debt-affiliated (including non-mapped compute in debt deals), affiliated datacenter operator deals and all datacenters in the US and globally.

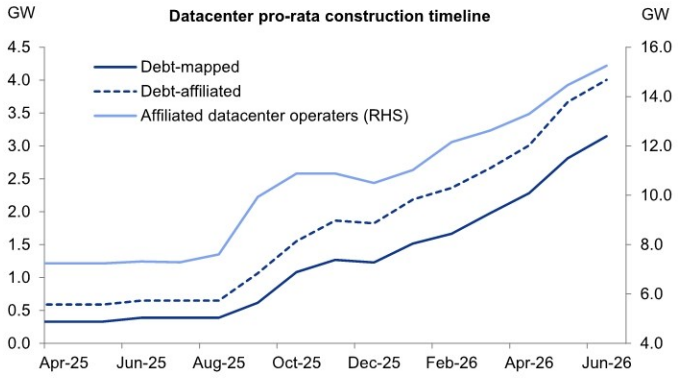


Source: Aterio, Moody's, S&P Ratings Direct, Fitch Ratings, Goldman Sachs Global Investment Research

Third, the relative pace of construction has been stable over the past 12 months. Exhibit 7 shows the pace of compute construction has increased roughly linearly on a pro-rata basis based on estimates from Aterio. In aggregate, this shows that visible construction

has thus far been on schedule. In theory this could motivate the tight, relatively uniform pricing observed so far, but the below masks any heterogeneity under the surface and does not hold the construction to an anticipated schedule.

Exhibit 7: The aggregate pace of construction has been relatively linear, so far
GW of compute for debt-mapped, debt-affiliated (including non-mapped compute in debt deals) and affiliated datacenter operator deals. Timeseries built on monthly assessments of construction progress or activation.



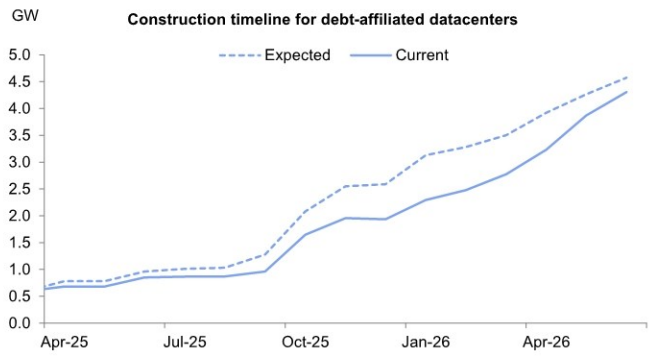
Source: Aterio, Moody's, S&P Ratings Direct, Fitch Ratings, Goldman Sachs Global Investment Research

Deal-level construction timelines

Using the same dataset, we compare measured construction progress with a simple expected timeline. The former is tracked by Aterio using satellite imagery of construction. The latter linearly interpolates progress between the listed activation date when the datacenter first began construction and the project construction date. While we do not expect actual construction to proceed linearly (due to procurement lead times, equipment delivery, site preparation, and power interconnection timelines), we believe a hypothetical linear benchmark is still helpful for assessing project pacing.

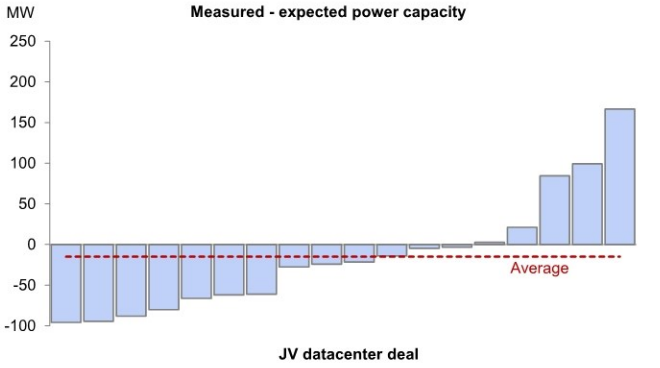
In aggregate, we find that construction appears to be roughly on track, but slightly lagging the linear expected benchmark by 275 MW (Exhibit 8). The gap varies across the datacenter projects affiliated with the JV structures, but is only 15MW on average and does not exceed 100MW for any given project (Exhibit 9).

Exhibit 8: In aggregate, datacenter capacity has generally followed, but slightly lagged, the expected timeline



Source: Aterio, Moody's, S&P Ratings Direct, Fitch Ratings, Goldman Sachs Global Investment Research

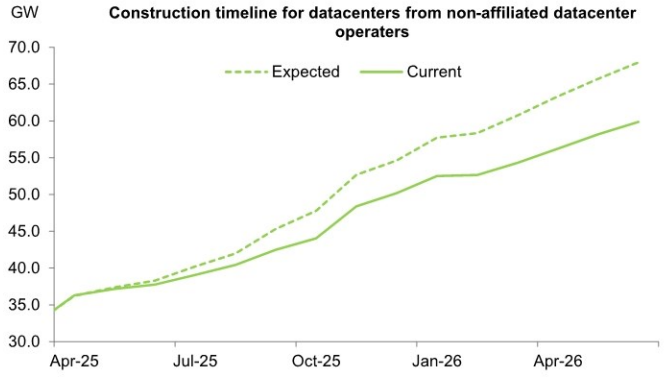
Exhibit 9: While there is meaningful variation across mapped debt, no debt-funded project lags the expected timeline by more than 100 MW



Source: Aterio, Moody's, S&P Ratings Direct, Fitch Ratings, Goldman Sachs Global Investment Research

While our commodities colleagues have noted construction delays in datacenter builds, the lack of persistent, significant construction delays in the sample is relatively encouraging for bondholders. Part of this, we think, could be reflected in the datacenter operators which choose to, and are able to, come to market. If we look, instead, at the datacenter operators that have *not* used this datacenter funding, we find a growing, persistent delay relative to the linear baseline (Exhibit 10). Taken together, this could mean that those operators which have been able to fund datacenter projects in the syndicated debt market are better positioned to deliver on construction. It is also worth keeping note of this quality differential as the market expands, if more operators elect to choose these structures to fund projects.

Exhibit 10: Datacenter operators which have not been a part of JV debt funded datacenter deals are lagging expected build timelines



Source: Aterio, Moody's, S&P Ratings Direct, Fitch Ratings, Goldman Sachs Global Investment Research

Reasons for dispersion beyond construction risk

Despite the absence of persistent construction delays, at least based on evidence, we believe investors should still pay close attention to construction think it remains central, particularly given the importance of completion contingency reserves, and insurance against cost overruns. That said, if

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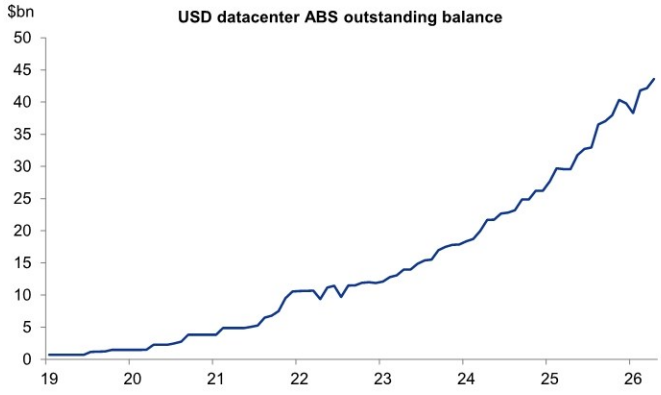
construction slippage is not yet sufficient to drive major differentiation, investors should increasingly focus on what comes next.

In our view, the next source of dispersion is likely to be refinancing risk and, relatedly, amortization structure. As we noted, debt syndicated in the market reflects only a fraction of total compute expected to be online in the near future. We expect a range of markets will be utilized to finance these assets. Against that backdrop, the ability of current structures to cover both interest and principal and to refinance efficiently will become increasingly important.

Part of our attention here comes from the lack of consensus around the ultimate refinancing channel. While some market participants may be viewing the public ABS market in particular as a likely contender for refinancing cash-flowing datacenters, the discrepancy in size between ABS markets and datacenter funding needs likely means a wider array of markets and investors are needed (Exhibit 11). Some HY structures could also benefit as construction risk rolls-off, potentially pushing ratings higher.

Even in that scenario, however, the outcome would not argue for uniform spread compression. If anything, it would likely intensify differentiation between projects with strong lease coverage, manageable refinancing needs, and conservative structural protections vs. those with heavier back-end risk.

Exhibit 11: The US datacenter ABS market is currently $44 billion



Source: Intex, Goldman Sachs Global Investment Research

We thank Patricia Pacheco for her contribution to this report.

Disclosure Appendix

Reg AC

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