

Rating Criteria for Data Centers

Executive summary

The Indian data center market is undergoing a structural transformation, driven by sustained growth in data consumption, rapid adoption of cloud computing, expansion of artificial intelligence (AI) workloads, and the government's emphasis on data localization. The total data center power capacity in India is growing, with demand concentrated in Mumbai and Chennai, the country's primary data center hub and expanding across key markets such as Delhi-NCR, Chennai, Hyderabad, Bangalore and Pune.¹

A data center is a physical facility that houses the IT infrastructure required for the creation, processing, storage, and delivery of digital applications and services. These facilities are designed to provide a secure, reliable and scalable environment for managing large volumes of digital data, and supporting use cases such as cloud computing and artificial intelligence (AI) applications.

For credit rating purposes, data centers are classified as specialized forms of real estate assets. Their risk profile and rating assessment are largely determined by the underlying operational model namely, On Premises, Colocation and Cloud.

With on-premises data centers, this model hosts all IT infrastructure and data on-premises. Many companies choose on-premises data centers because they offer greater control over information security.

Colocation data centers is an income generating property that are large, third-party facilities where organizations rent space to house their servers, racks density adaptability, and other computing hardware. These centers generally provide essential infrastructure such as physical security, cooling, power, and network connectivity.

Cloud data centers allow users to rent not just infrastructure but computing resources also from service providers operating large-scale facilities with built-in security and compliance. The cloud services are more flexible and scalable, with pricing based on actual usage. The rating will reflect the fact that they typically operate at a high rate of utilization, have scalable demand, and typically operate with a high degree of operating efficiency.

Government initiatives and policy support

Government initiatives have emerged as a key structural driver in strengthening India's data centers and AI infrastructure ecosystem, materially influencing long-term sector risk and scalability. Programs such as the India AI Mission and the National Supercomputing Mission enhance demand visibility for high density compute, improve access to subsidized Graphic Processing Units (GPUs) and support the creation of domestic

¹ Arundhati Bakshi Dighe, "India's Data Centre capacity to Reach 1.8 GW by 2027", *JLL*, 09-apr-2025, <https://www.jll.com/en-in/newsroom/indias-data-centre-capacity-to-reach-18-gw-by-2027>

AI workloads, thereby reducing market adoption risk for data center operators. The Draft National Data Center Policy further mitigates regulatory and execution risks by granting infrastructure status, enabling single-window approvals, facilitating long-term financing, and proposing Data Center Economic Zones to improve power, land, and network availability. Parallel investments in data platforms, startup funding, and responsible AI frameworks strengthen data availability and governance standards, while state-level AI policies improve regional execution certainty. Collectively, these measures enhance infrastructure readiness, policy predictability, and utilization prospects key positive factors in assessing the credit profile, scalability, and long-term sustainability of data center assets in India.

Scope of the criteria

This document outlines the key risks considered by Brickwork Ratings when determining the credit ratings of data center companies.

BWR factors in various quantitative and qualitative risks that data centers are exposed to while assessing their creditworthiness. The primary risks considered in the assessment of the data centers are industry risk, business risks, financial risks and management risks. The approach to incorporating these risks into the rating framework for data centers is discussed in detail in the section that follows.

Framework for risk assessment

A. Industry risks

The data center sector is undergoing a rapid transformation, supported by strong structural growth alongside increasing operational and technological complexity. Demand for data center services is underpinned by the expanding use of cloud computing, AI, digital platforms and data intensive applications. However, this growth is accompanied by rising risks related to power reliability and tariffs, supply chain constraints, regulatory compliance, land acquisition, hyperscale-led demand growth, fiber network density and execution challenges. These factors can materially affect project timelines, cost structures, and operational reliability, thereby influencing the overall credit risk profile of data center operators.

Accordingly, BWR evaluates industry risks by examining factors that affect the long-term stability, scalability, and operational reliability of the sector.

a) Demand drivers and growth

BWR assesses the industry risk of data centers by examining factors that influence long-term stability, operational efficiency and scalability. The measurement of risk is based on structural drivers that affect the market's structural stability, such as the growing trend of digitalization, adoption of cloud computing, AI workloads, and growth of data. This determines the growing and consistent need for data center services, particularly for the hyperscale or sovereign cloud market segment. This reduces the volatility of revenues for the industry. A favorable market environment, fueled by drivers such as government-driven localization and digital payments, improves the credit profile owing to high revenues.

b) Technological obsolescence

BWR evaluates the risk of technological obsolescence as a critical industry risk factor for data centers. The assessment examines the pace of technological changes in servers, GPUs, storage, Rack density adaptability

and cooling systems/technology (such as liquid or air). It also considers the industry's ability to upgrade facilities such as AI/high-density readiness in a cost-effective manner to meet evolving requirements for higher power density, improved energy efficiency and enhanced computing performance. Quick shifts in technology that make existing capacity less competitive or require major investments can impact utilization, profit margins and cash flow. Accordingly, the risk of obsolescence is a key consideration in evaluating the industry's long-term stability.

c) Power reliability and power sourcing costs

Energy is a major operational expense for data centers, particularly those supporting AI and GPU intensive workloads. BWR evaluates the grid reliability and adequacy of power supply, prevailing energy tariffs, captive power arrangements, or renewable sourcing commitments and operational efficiency metrics such as Power Usage Effectiveness (PUE). Constraints in power availability or volatility in energy costs are considered key risks that can impact operating margins and sector stability, while access to reliable, cost-efficient power and adoption of energy-efficient operations are positive factors that enhance operational resilience and strengthen the sector's credit profile.

d) Market competition and saturation

BWR views market competition as a key industry risk, as it directly affects pricing power, lease renewals, utilisation levels and cash-flow predictability. The assessment considers regional supply demand dynamics, the scale of existing and upcoming capacity, and the intensity of competition from both established and new entrants. High competition or market saturation can lead to pricing pressure, shorter contract tenures and lower occupancy, thereby impacting profitability. In contrast, data centers with strategic locations, modern and scalable infrastructure and differentiated service offerings are better positioned to retain tenants, maintain utilisation, and generate stable revenues, supporting their overall credit profile.

B. Business risks

Factors that shape business risk for data centers include:

a) Business model and revenue stability

BWR evaluates the issuer's operating model to understand the stability and diversification of revenue streams. Key business models include retail colocation, which offers diversified tenancy, pricing power, and higher margins wholesale or hyperscale facilities, characterized by large contracts and higher tenant concentration or single-tenant, enterprise or on-premises captive facilities, power pass through clauses where revenue is strictly linked to the parent organization's credit profile, and cloud service-integrated platforms, which combine data center services with managed cloud offerings. The revenue profile is assessed based on how these models influence recurring earnings, operational scalability, and resilience to market fluctuations, ensuring that the business structure aligns with long-term debt-servicing capabilities.

b) Market position and downtime risk

The market position of a data center operator is assessed based on the scale, quality, and durability of its platform, which together determines its ability to maintain competitive relevance and stable cash flow over time. Durability is supported by higher-tier facilities, diversified tenant exposure, long-term contractual

arrangements with strong renewal rates, and geographic diversification, all of which reduce revenue volatility. Higher-tier facilities and diversified revenue streams enhance operational resilience and long-term growth potential, thereby strengthening the operator's competitive position.

The Tier level (Uptime Tier I–IV certification) is a key indicator of service criticality and pricing power, with higher-tier facilities (Tier III–IV) typically supporting mission-critical workloads, exhibiting stronger demand, higher switching costs, historical outage records and greater customer retention with SLA penalties.

c) Demand and market volatility

BWR assesses how fluctuations in demand for data center services influence revenue stability. Rapid growth in AI, cloud, or hyperscale workloads can support expansion, but over-reliance on a few large tenants exposes operators to vacancy risks if tenants consolidate, default, or shift to self-owned facilities. While concentration in high-value tenants can enhance revenue predictability, it also increases counterparty risk under non-take-or-pay arrangements. BWR examines lease structures, diversification of the customer base, and regional market trends to gauge the resilience and stability of revenue streams.

d) Customer concentration and counterparty risks

A critical component of the rating assessment is the analysis of the tenant mix and the resulting sensitivity to counterparty risk. While high-value tenants like hyperscalers -that provides extreme scalability capabilities and is engineered for large scale workloads (such as Amazon, Microsoft, Google)/enterprise clients/ startups and global enterprises can enhance revenue predictability, an over-reliance on a limited number of these entities or single-tenants increases exposure to significant vacancy risk. BWR examines the potential impact if major tenants choose to consolidate, insource their infrastructure, or face financial default. This risk profile focuses on the vulnerability of the asset to the strategic decisions or credit health of its primary users.

e) Contractual strength and pricing power

BWR emphasizes contractual protections as a key pillar for stabilizing cash flows and ensuring financial predictability. The assessment focuses on take or pay clauses and minimum committed payments to guarantee baseline revenue, escalation clauses linked to inflation, take-or-pay/fixed capacity agreement and power costs to protect margins, and the operator's renewal track record combined with high switching costs to deter tenant churn. Additionally, the strength of termination penalties/provisions and break options is evaluated to ensure early exits provide adequate financial compensation and safeguard debt servicing capacity.

f) Technological and operational risks

To remain competitive amid rapid technological advancements, data centers must continuously upgrade high-tech components, including servers, AI-powered GPUs, and cooling systems. However, if a facility invests in advanced chips without the necessary power or cooling infrastructure to support them - a situation known as misaligned refresh cycles, the hardware remains idle. When coupled with supply chain disruptions, construction delays, or local energy constraints, the data center is left with 'unplugged' capacity that fails to generate revenue.

BWR evaluates how operators manage these risks, including the scalability of infrastructure, redundancy measures, and maintenance protocols. Operational efficiency and timely technology upgrades are critical to sustaining margins and ensuring consistent cash generation.

g) Project implementation risk

If the project is under construction or greenfield, then risk associated with delays in construction, commissioning, cost overrun and delays in tenant onboarding have bearing on the ratings. Further, tenant occupancy as against the total available capacity will be analyzed post completion of the project, and is one of the key credit risk factors, while arriving at the rating.

C. Financial risks

In evaluating the financial risk of data center operators, BWR assesses profitability, cash flow generation, leverage and liquidity, taking into account the capital-intensive nature of the data center business. To assess profitability and cash-flow strength, the operator's ability to convert revenues into stable cash earnings is reflected in the operating margins, continuous funds generation through operations, and free cash flow which are considered. The evaluation makes a clear distinction between maintenance capital expenditure, which is necessary to maintain the quality and uptime of the assets, and growth capital expenditure which is related to expanding the capacity. The maintenance vs. growth capital expenditures balance determines the discretionary cash flow and thus financial flexibility. In view of the massive initial investment involved in power, cooling, IT infrastructure, and real estate, when looking at leverage metrics, the focus is on the debt compared to earnings and cash flow, the share of operating cash flow that can be used to service debt, and the sufficiency of earnings to pay interest obligations. Furthermore, financial durability is also scrutinized through the ramp-up period of a new facility when it might not have full occupancy yet and cash flow is low, and the second phase when the facility is fully occupied and contract renewals are positive to allow for steady cash generation. Liquidity and refinancing risk are gauged according to the amount of cash on hand, the extent of credit facilities that have been committed, the debt maturity structure and the timing of it, etc. In the case of a stress scenario, the company's ability to raise funds determines its financial flexibility and ability to raise funds from alternate sources in case need arises.

For a detailed reference on BWR approach to financial ratios considered, please refer to the Commercial Real Estate methodology criteria:

https://www.brickworkratings.com/download/Criteria-Commercial%20Real%20Estate_Latest_C.pdf

D. Management and corporate governance

BWR assesses the consistency of performance demonstrated by the management and the quality of corporate governance adopted by the entity.

Additionally, BWR evaluates the company's accounting quality and the reliability of its financial statements while assessing key risks and overall performance. A strong, dedicated and highly experienced board of directors helps the organization achieve profitability and operating efficiency targets, while also supporting improvements in the company's financial and liquidity position. A strong, dedicated and highly experienced board of directors helps the organization achieve profitability and operating efficiency targets, while also supporting improvements in the company's financial and liquidity position. Any red flags highlighted by internal or external stakeholders may negatively affect the rating.

The evaluation covers the standards of corporate governance practices, the quality of accounts, and the integrity of financial reporting. Overall, effective management and robust corporate governance underpin operational resilience, stable cash flows and a strong credit profile for data centers.

Environmental, Social and Governance factors (ESG)

ESG factors are becoming increasingly critical for data center operators, given their high energy consumption, environmental footprint, and dependence on reliable infrastructure. Data centers are energy intensive facilities, requiring focused sustainability initiatives such as increasing the share of renewable energy in power sourcing, implementing robust carbon reduction strategies and using water usage effectiveness for cooling operations.

Accordingly, BWR while assessing the credit profile of a data center entity, also evaluates their ESG profile based on the available data. The impact of an issuer's ESG profile, in terms of both its strengths and weaknesses, is incorporated into the various management risk parameters.

Conclusion

BWR's credit assessment of data center companies reflects a holistic evaluation of industry and business risks, operational performance, market position, financial flexibility, and growth prospects. The rating captures the company's ability to sustain profitability, manage technology and market cycles, maintain high occupancy and utilisation, secure long-term contracts, and meet financial obligations, providing a comprehensive view of its overall credit quality and resilience in a capital-intensive, rapidly evolving sector.

This is the first criterion document, so no prior version or reference link exists.

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