



## Rating Criteria for Infrastructure Sector

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### **Executive Summary**

The infrastructure sector typically comprises road (toll, annuity and hybrid annuity), airport, railways, power (generation (thermal, solar, wind and hydro), transmission and distribution), telecommunication, ports and urban infrastructure, along with other sub-segments of these sectors. Being an important stimulant of growth, the sector provides connectivity, enables trade and employs a significant proportion of the population. The rating of infrastructure entities is driven by drivers different from those in corporate sector ratings, such as policy changes by the government, pricing for provided services being determined by the regulator or government and a low impact of demand-supply-driven risks, especially in annuity projects, power and urban infrastructure.

Companies in the infrastructure sector have a long gestation period and are highly capital-intensive in nature. Their revenue streams are expected over a longer term as compared to other sectors, as infrastructure projects normally have a higher gestation period and longer project life.

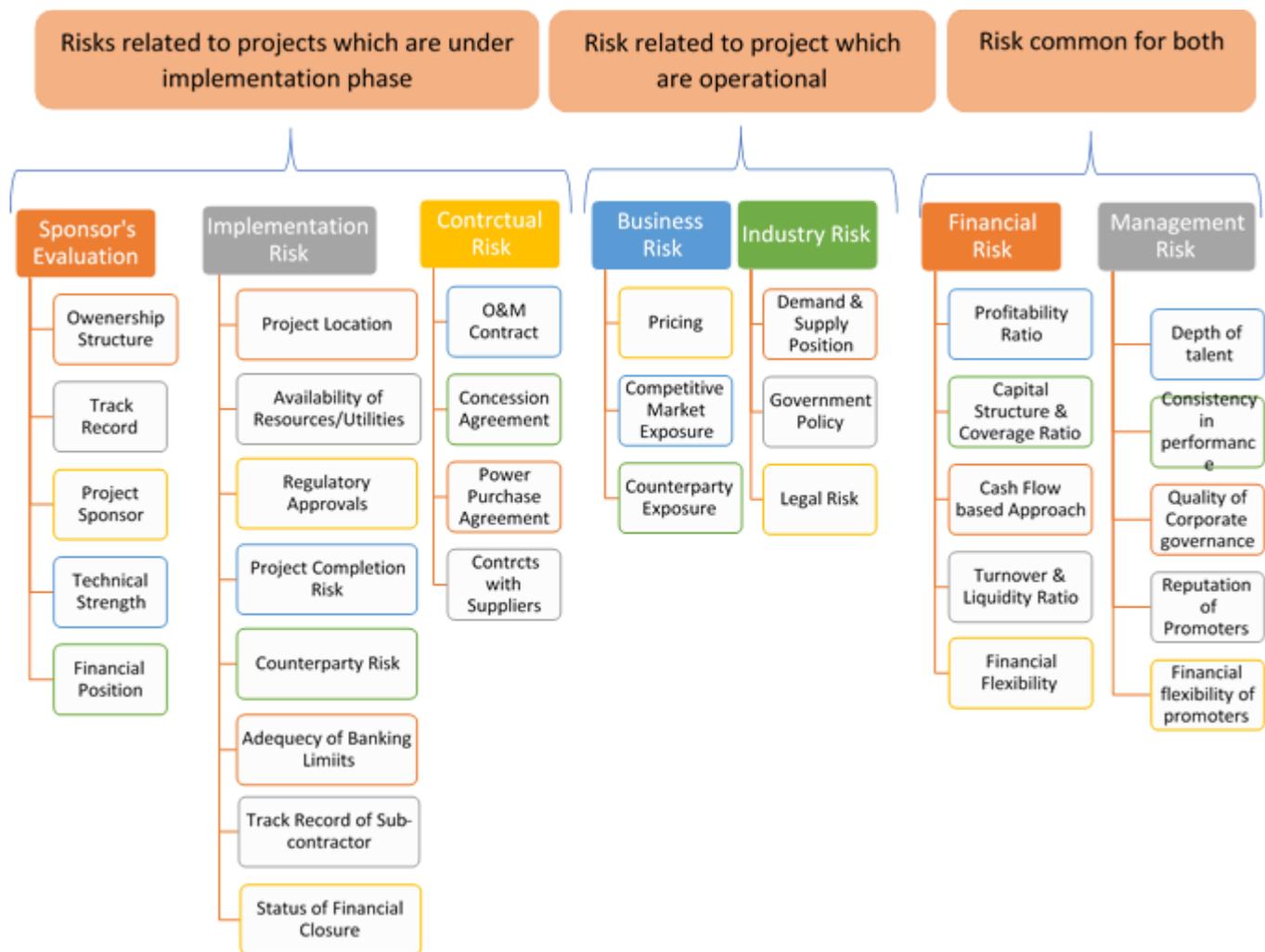
### **Scope of the Criteria**

The document contains the broad parameters assessed by Brickwork Ratings (BWR) while rating entities in the infrastructure sector. Since the sector is capital-intensive and has a long gestation period, it is imperative for the entity to have sustained cash flows over a longer term, and access to capital markets and banks for funding. The risk is assessed separately for entities engaged in greenfield or brown field projects. BWR has separate rating criteria/methodologies for each of the aforesaid sectors, as listed on our website. However, this criteria enlists the broader aspects analysed for rating infrastructure companies.

### **Risk assessment and Rating Criteria**

The assessment of credit risk is done after evaluating an issuer's business and financial risks, its competitive strengths, likely cash flows over the life of the instrument being rated, and the certainty and adequacy of such cash flows vis-à-vis its debt servicing obligations. BWR assesses the various risks during the project implementation phase and/or operational stage of the project.

Following are the major influencing factors for the infrastructure sector:



**Various risks assessed while the project is under Implementation phase as follows:**

### 1. Sponsor's Evaluation:

- a. **Ownership Structure:** SPVs are created by the group/holding company to execute specific infra projects. These are operated by single or multiple owners or joint ventures. Hence, the ability to take up and complete the project, the ownership transferability, as well as guarantees provided by these promoters, is assessed.
- b. **Sponsor's Track Record:** The track record of the sponsor company is assessed. Focus is mainly on the size and complexity of projects executed, timeliness and quality of project, cost-effectiveness and levy of liquidated damages or penalties by the client/concessionaire, if any, and the track record of supporting distressed projects in the past.
- c. **Project Sponsor:** The factor is assessed on the basis of the position of the project sponsor by way of the shared brand, management, shareholding pattern, net worth of promoters/management, infusion capacity of the management as and when required during the completion of project and cost overrun.
- d. **Technical Strength:** The sponsor's experience in terms of handling large/complex projects, expertise in operating in a particular area or sector, how well they are organised and efficient in the performance of completing the projects in terms of adherence to quality

parameters, cost estimates and time schedule, among others. Appropriate use of technology ensures adequate project life and the speed of project implementation.

- e. Sponsor's Financial Position: These risks emphasise the sponsor's ability to service its debt obligations on time, raise funding as required and in the maintenance of its operations and liquidity efficiently.

## **2. Implementation Risk:**

- a. Project Location: Project location is one of the major factors considered to assess any infrastructure project as difficult geographical terrain may lead to difficulties and challenges in completing the project on time. Cost overruns could also be caused.
- b. Availability of Resources/Utilities: For greenfield projects, it is important to have all the proper utilities such as power, water, equipment and skilled, as well as unskilled manpower availability,. All these factors ensure smooth project implementation. An important factor in this assessment is the status of land acquisition and the likely timelines for handing over the balance land.
- c. Regulatory Approvals: Regulatory approvals such as permits, environmental clearances, utilities movement and other statutory clearances are analysed and evaluated.
- d. Project Completion Risk: Every project, before construction, is required to define its implementation schedule. BWR analyses whether the project implementation is as per the estimated schedule. A project falling behind the defined schedule can impact its viability and credit profile significantly. BWR relies on periodic progress reports by independent consultants and evaluates any pending issue that may hamper timely project completion.
- e. Counterparty Risk: The credit profile of the principal (contract owner) invariably determines the timely flow of funds and thus, has a direct impact on the on-time execution of contracts. BWR also assesses the concentration risk in the sense that high exposure to a few smaller counterparties may have a negative impact on the rating as against concentration on an entity with a better credit profile.
- f. Adequacy of Banking Limits: BWR analyses the cost of projects and sources of finance. BWR assesses the level of financial tie-up and level of disbursement towards the project. The contingency amount left during the construction/implementation of the project is also assessed during the rating process.
- g. Track Record of Sub-Contractor: For the construction of projects, the company appoints various contractors at different stages of the project. BWR analyses these contractors according to their experience, ability to handle such projects, past record and credit quality, among others.
- h. Status of Financial Closure: The financial closure of a project is one of the most critical factors determining timely project completion. The company's ability to tie-up requisite finances, current status of funding the tie-up or financial closure and equity contribution by the sponsor are critical for timely project completion. In the case of under-construction road projects, a delay in funding can lead to significant time and cost overruns.

## **3. Contractual Risk:**

- a. O&M Contract: Such contracts are examined to gain clarity on the project and its completeness. The presence of contracts in clear, comprehensive and enforceable terms provides comfort to the overall credit profile, and the credentials of equipment suppliers

are also evaluated. BWR evaluates whether the said contract is a fixed-time, fixed-price contract (as is the case generally), and accordingly, related risks are factored in for the rating assessment.

- b. **Concession Agreement:** For certain sectors such as road and irrigation, the project details are governed by respective ministries, and projects are allotted by these ministries. The terms of concession agreements, their inherent risks, and the rewards thereon, are assessed by BWR. Generally, these are long-term arrangements between the government and concessionaire for the time-bound completion of construction activities with pre-defined performance and measurable outputs. For power projects, the risks related to environmental clearances, forest clearances, resettlement and rehabilitation and offtake arrangements are well-documented.
- c. **Purchase Agreements (PPA):** BWR evaluates the contractual agreement between the entity (rated) and off-taker/concessionaire, which are detailed in the agreement. The major clauses related to tariff, tenure, off-taker and termination, among others, are critically evaluated, and the same are factored in the issuer's assessment.
- d. **Contracts with Suppliers:** The project company enters contracts and engages suppliers to meet the performance requirement. Supply contracts should have the presence of adequate back-to-back warranties and guarantees in line with the terms of the main contract.

## **Various risks assessed when the infrastructure project is operational, are as follows:**

### **1. Business Risk**

- a. **Pricing:** Infrastructure sector entities enjoy lesser pricing flexibility when compared to entities operating in other sectors due to the government/regulatory authority determining tariff rates. Due to the high strategic importance of the sector, pricing decisions are heavily scrutinized and if altered, are met with hostile reactions from the authorities and media. Higher government intervention implies lesser pricing flexibility, which is seen negatively by BWR. Similarly, the pricing/tariff mechanism in toll road projects, is clearly articulated in the Concession Agreement, which enables issuers to factor-in associated risks while bidding for projects.
- b. **Competitive Market Exposure:** An evaluation of the way in which a project would perform when faced with competitive market exposure is important for all projects, not only those that currently face market risks. The analysis of a project's competitive market position may consider factors below as applicable:
  - Industry fundamentals
  - Commodity price risk
  - Supply and cost risk
  - Foreign exchange exposure
  - Project's source of competitive advantage
  - Potential for new entrants, disruptive technologies or exits
- c. **Impact of Monopoly:** Merely having a monopoly status in a given market does not guarantee stronger financials. BWR assesses whether the entity is able to effectively make use of its monopoly status to generate higher profits. If an infrastructure entity ends up being completely controlled by the government's decisions regarding pricing, it may incur losses.

- d. Counterparty Exposure: BWR assesses the ability of parties involved in the contract to pay their debt obligations in a timely manner. The willingness of counterparties to perform may stem from economic incentives, business relations, market position, reputation, ownership and relation with the government, rather than from contractual arrangements.

## 2. Industry Risk:

- a. Demand and Supply Position: A lower demand risk reflects favourably on the credit profiles of players. In comparison with corporate entities, infrastructure entities face a favourable demand-supply situation where demand, in most cases, outstrips supply.
- b. Government Policy: BWR classifies infrastructure companies in three broad categories:
- Public-policy-based institutions, which play a central role in meeting political and economic objectives
  - Commercial enterprises, which play a smaller or no public policy role
  - Commercial enterprises that include corporate or financial institutions likely to receive extraordinary government assistance
- c. The assessment of an entity is a function of the level of influence of government policies for an entity's independent functioning. Government influence comes in the form of direct and indirect taxes, funding support and the provision of government guarantees, among others.
- d. Legal Risk: The infrastructure sector has seen increased participation of foreign players due to impetus by the government, stressing the importance of the sector in overall economic development. Infrastructure projects undertaken in collaboration with foreign entities involve legal risks. BWR assesses the ability of the entity to gauge all the aspects of legal risks from the inception of the project, its financial close, design, investment, construction, operations and management.
- e. Contractual Foundation: During construction, numerous contracts with multiple tiers of contractors are entered, which must be undertaken smoothly. An efficient contractual management is one where there is competitive advantage through a better understanding of existing contractual obligations, developing foresight into contracts, uncovering contractual and regulatory risks and improving compliance through standardised processes.

### The following risk assessment factors remain common for both - Corporate Ratings Criteria and Criteria for Infrastructure Projects:

1. **Financial Risk:** Setting-up large infrastructure projects requires huge sums of funding, and these projects have long gestation periods and are exposed to several financial risks during their construction and operational period. Operational and financial covenants, including cash sweep, restricted payments, escrow waterfall and minimum D/E ratio as stipulated in financing agreements are evaluated. BWR assesses the following ratios to determine the extent of financial risks the infra company is exposed to:
  - a. Profitability Ratios: An infra company that follows a more transparent and consistent accounting approach would likely score higher as compared to entities with less transparent approach or low level of disclosures in public domain. Given the variance in accounting policies, the assessment of various ratios, whether from a cash flow-based approach or an

accrued income perspective, could tweak the ratios significantly. A sustained track record of an entity maintaining margins similar to / better than its peers would augur well for the overall credit.

- b. **Capital Structure and Coverage Ratios:** These helps ascertain the level of debt held by the entity and also to gauge their ability to pay-off their debt servicing obligations. For example, a higher exposure to BOT projects could expose the issuer to higher leverage and an increased risk of incremental debt tie-up. While most BOT projects are funded on a non-recourse basis, BWR believes that the sponsor, more often than not, either through explicit undertakings/guarantees or implicitly, will be inclined to support its portfolio of projects. Thus, the assessment of risks in each project and the parent's ability to support the projects through the infusion of funds, when in need, would be critically evaluated.
- c. **Cash Flow Based Approach:** As highlighted earlier, a buffer available in banking limits is viewed favourably from a credit perspective. While funds from operations denote a stronger debt servicing ability, the cash flow from operations indicates an entity's ability to efficiently manage its suppliers and debtors. The resultant leverage and coverage ratios ascertain the ability to pay-off fixed-interest obligations.
- d. **Turnover and Liquidity Ratio:** With exposure to several macroeconomic risks, it is imperative for infrastructure entities to have high levels of liquidity to account for contingencies arising out of labour strikes and the non-availability of raw material, among others, all of which causes project delays. A higher scale and sustained ability of cash generation defines the scale of operations, diversity of projects, high economies of scale and access to low cost of capital. Developer's liquidity is reflected from its cash balances, unutilised bank limits, investment in liquid assets, the availability of bank credits and other intermediaries. Furthermore, the availability of customer advances and an escrow mechanism towards the maintenance of such cash flows, and a debt service reserve account are seen positively.
- e. **Financial Flexibility:** BWR ascertains the trends in revenue and cash generated from operations, along with the entity's track record in raising funds to analyse its financial flexibility. It can be identified through the group/promoter's ability to raise funds in case need arises on a short-term basis and ability to refinance its debt with ease. BWR assesses companies' fund-raising ability based on the past track record and overall leverage level. Lower leverage provides higher financial flexibility to a developer.

## **2. Management Risk:**

A strong, dedicated and highly experienced board of directors helps the organisation achieve its profitability and operating efficiency targets and also helps improve the company's financials. The management helps establish relations with the government/clients/other stakeholders and is responsible for identifying new projects, completed projects, past track record of execution, quality of construction, timely construction and brand reputation. An inexperienced sponsor with no prior experience may indulge in aggressive bidding, which leads to a huge difference between the actual and expected costs of the project. Poor management can result in delays in regulatory approvals, funding tie-ups, a low level of liquidity and high operating expenses, all of which reduce the returns on investment in the project. Furthermore, a history of litigations and regulatory actions will be seen negatively. BWR assesses the consistency of performance demonstrated by the management and the quality of corporate governance adopted by the entity. Red flags, if any, highlighted by internal or external stakeholders would negatively reflect in the rating.

## Conclusion

BWR analyses each parameter after measuring the impact of the aforementioned risks and attributes, along with financial projections over the life of the facility, to arrive at the overall credit assessment of infrastructure entities. Due to the capital-intensive nature of these projects, emphasis is laid on the entity's ability to raise funds and ensure stability and adequacy of cash flows towards meeting debt servicing requirements. Government intervention and policy imposition poses a challenge for the pricing power of these entities, which BWR factors in negatively while assessing profitability. While the methodology comprises a comprehensive analysis of various risks associated with the regulatory aspects, financial risk, industry, operational and project implementation risk and competitive position, the final rating is assigned based on the overall credit assessment of the infrastructure entity.

*The previous version of this document can be found in [www.brickworkratings.com/download/Criteria-Infrastructure.pdf](http://www.brickworkratings.com/download/Criteria-Infrastructure.pdf)*

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