Rating Methodology: Infrastructure Sector Ratings

CareEdge RATINGS SOUTH AFRICA
A CareEdge Ratings India Group Company

Background

CARE Ratings South Africa (Pty) Limited (CARE SA) Infrastructure Sector Ratings (ISR) encompass ratings assigned to debt programs of issuers in thermal power, solar energy, wind energy, hydro energy, transmission, power distribution companies, roads (toll, annuity and hybrid annuity), telecommunications, airports, ports and other such infrastructure-related sectors. CARE SA adopts a separate methodology for evaluation and assignment of ISR, distinct from corporate sector debt ratings as rating drivers for ISR are quite different from that of the corporate sector. For example, revenues are driven by tariffs determined by regulator or government and any changes in government policies will impact the ratings of entities in infrastructure segment significantly. Also, the demand-related risks are minimal because of traditionally high demand-supply gap in the infrastructure segments, whereas demand growth is one of the key drivers for corporate sector.

Scope

Infrastructure projects are capital intensive and have a long gestation period. The projects are usually undertaken under distinct entities (Special Purpose Vehicles – SPVs) which have contractual life/asset life and revenue model. The risks are assessed separately for project phase (funding risk, completion risk) and operational phase (revenue risk, regulatory policy framework) of the entities. While CARE SA has separate rating methodologies for each of the sub sectors of infrastructure (refer our website www.careedgesouthafrica.com), this paper explains broader aspects considered while rating the infrastructure sector entities. The rating methodology also includes rating of debt which has access to pooling of cashflows of SPVs; e.g., rating of debt of an infrastructure investment trusts (InvITs) in conjunction with rating methodology for InvITs.

The rating methodologies for project implementation phase and operational infrastructure entities are explained below.

Rating methodology for Project Implementation Phase:

The various risks which are assessed when the entity is under project implementation phase are as under:

I. Sponsor's evaluation

- Ownership structure: SPVs are typically owned by single owner/multiple owners or joint ventures. Hence, the ability of majority owner as well as other minority owners to complete the project, the potential for change of ownership, and undertakings or guarantees provided by each of these owners will be assessed.
- Demonstrated track record: The track record of the sponsor entities in completing the infrastructure sector projects, particularly in the same segment, and the track record of supporting distressed projects in the past are evaluated.
- Rationale for setting up of the project by the sponsor: The rationale for setting up the specific project is evaluated. It is generally assumed that the sponsor would extend support to the project if the same is strategically important to the sponsor. The same can also be assessed based on the stated position by the sponsor on the project by way of shared brand, management, majority shareholding and strategic importance of the project in operations of other businesses, etc.

- Current financial position: The sponsor's current financial position is assessed to judge the ability to provide need-based support for timely completion of the project. The credit rating of sponsor, if any, is considered. Stated position of the sponsor on support as well as its track record of support is considered.
- Technical strength: The sponsor's past-experience with the technology and similar projects that have been developed successfully are evaluated. In case of multiple sponsors, the role of each sponsor is examined. Some of the sponsors may be joining solely on-the-basis of technical capabilities rather than their financial strength. The underlying agreement / clauses on transfer of technology, exclusivity about technology, etc., are examined to understand likely operational and financial implications on the project.

II. Permitting and Completion risk

- Geographical location of project: Difficult geographical terrain may impose challenge in physical progress of the project. The same may also impact the cost of the project. Hence, CARE SA evaluates the location of project and its access to resources and mobilization of resources.
- Availability of land, water, construction equipment, skilled manpower: For a greenfield project, it is important to ensure availability of all resources for smooth implementation, current status of land acquisition and likely obstacles in acquiring pending land for completing the project. For example, deforestation and environmental permits or rehabilitation issues could take longer time. While greenfield project comes with cheaper access to land, it may require additional infrastructure for setting up the project. CARE SA evaluates whether resources like water, power are already available nearby or need to be obtained by way of setting up another linked project.
- Permits and Statutory clearances: The availability of all permits, licenses, approvals and statutory clearances and status of the same are evaluated. The main clearances which impact execution include amongst others land acquisition, water allocation, mining rights, pollution, environmental, etc.
- Risk of time and cost overrun: Infrastructure projects, especially the green field projects, face the risk of time and cost overrun due to issues at any of the above two stages, i.e., statutory clearances and availability of resources. The same can impact viability and credit profile of the project significantly. CARE SA evaluates the mitigating factors built in to minimize the impact of such overrun. For example, inflation-linked cost escalations in a contract or sub-contracting to reputed entity at fixed-price mitigates cost overrun risk to a larger extent.
- Third-party risk assessment (Lender's Engineer, design consultants, etc.): CARE SA relies on reports from third-party experts such as lenders' independent engineers (LE/ LIE), design consultants, traffic consultants, etc., to judge technical viability of the project as well as status of project implementation during construction.
- Extent of financial closure, tie-up of funds, proposed funding mix: Cost of project and break up, means of financing and break up, adequacy of each of these, whether comparable to similar kind of projects are evaluated.
- Track record and reputation of Contractor: For construction of the infrastructure projects, contractors are engaged. CARE SA evaluates the experience of contractor in executing similar kind of projects and also considers the credit quality of contractors.
- Physical status of project implementation, any pending issues: The timely progress on construction based on envisaged milestones provides comfort. Any pending issues that may hamper the construction are analysed and impact thereof is taken into consideration.

III. Contractual risk assessment:

CARE SA undertakes identification of various risks and mitigants in place through contractual arrangements. The extent of adequacy of risk allocation framework provides comfort to the overall credit profile of the project.

For certain sectors, viz., road, transmission, irrigation, etc., the project details are worked out by the Ministry sponsoring the project and the terms of concession are put forth by way of model concession agreements. These terms of concession broadly determine the allocation of key risks associated with the project. In its first step of evaluation, CARE SA examines these terms for the clarity of their definitions, their inherent risks, which are irrespective of the project developer and the rewards thereon. A concession agreement with well-defined terms and conditions, optimum risk allocation and suitable rewards for the risks allocated is considered as adequate/complete. For instance, in power projects, it is pertinent that the risks related to environmental clearances, forest clearances, resettlement and rehabilitation and off-take arrangements are well documented. In this context, the regulatory and legal environment and track record of various entities is taken into consideration.

For other aspects related to infrastructure projects, various contracts are put in place, e.g., engineering procurement and construction (EPC) contract, Operation & Maintenance contract, etc., which are also examined in detail from the point of view of clarity and completeness. The presence of contracts in clear, comprehensive and enforceable terms provides comfort to the overall credit profile, and the credentials of equipment supplier are also evaluated.

IV. Revenue risk :

CARE SA’s analysis of revenue risk involves assessment of demand and price risk. Availability-based projects such as annuity roads, transmission projects derive their revenue streams through contractual agreements with counterparties and are therefore less exposed to demand and price risks, whereas projects with no contractual agreements (e.g., a power project which sells power on merchant basis) are exposed to demand and price risks. In case of projects with high demand and price risks, CARE SA evaluates third-party reports such as traffic studies for toll roads, wind resource assessment for wind energy, etc, to determine the adequacy of revenues/cashflows for servicing debt.

V. Debt maturity and structural features:

Shorter tenor loans may get exposed to refinancing risks while longer tenor debt for similar kind of leverage ratio may result into better debt service coverage ratios (DSCRs). For projects wherein ramp-up in operations takes time, ballooning structure is preferable. Structural features such as major maintenance reserve, invertor reserve and other liquidity support mechanisms such as debt service reserve account (DSRA), etc, provide liquidity support. Presence of escrow mechanism and/or Trust retention account (TRA), ring fencing of cashflows and presence of trustee/signatory who effectively controls payments in a timely manner and monitors the structure related to payments provide support to the rating.

VI. Financial risk:

Cash flow analysis has been given significant emphasis while rating the entities in the infrastructure segment. CARE SA evaluates stability of cashflows, profitability of project, leverage, liquidity, debt service protection metrics and financial flexibility while rating projects in the infrastructure segment. In debt protection metrics, one of the key ratios to determine repayment capacity, i.e., debt service coverage ratio (DSCR) is calculated under base case scenario as well as under stress scenarios. The project report prepared by independent engineers provides other financial indicators like IRR and Payback period of the project which reflect project's financial viability.

Rating methodology for Operational Phase projects:

The various risks which are assessed when the entity is under operational phase are as under:

I. **Contractual arrangement, risk allocation:** The regulatory environment and the legal factors impacting the operations of the project are identified and analyzed. The identification of risks involved over project life and mitigation thereof through various contractual arrangements are analyzed. Risk allocations through penalty payments, retentions and liquidated damages if project is not completed within budgeted cost, time and performance guarantees to adhere to performance standards are evaluated. The comprehensiveness and enforceability of the relevant project-related contracts are examined; e.g., concession agreement, O&M, raw material and utilities supply, off-take arrangement, etc. The provisions in respect of force majeure, provisions in respect of financial implications of liquidated damages, whether the same are balanced/ proportionate for various parties to the project are evaluated.

II. **Business Risk:** While analyzing business risk the following aspects are covered.

- Pricing risk: Due to contractual or regulator-driven pricing, infrastructure projects may have very low pricing flexibility. The mechanism for arriving at pricing is evaluated.
- Demand risk: Usually the demand risk is also low for availability-based infrastructure projects. For projects which are exposed to demand risk, CARE SA examines data pertaining to consumption to understand any major deviations from the original assumptions considered during construction stage, which are based on third-party studies; e.g., number of units supplied to off-taker of power, actual traffic on the toll road, etc.
- Counter party risk: The long-term contracts ensure offtake; however, ability to make timely payments assumes paramount importance.
- Raw material / fuel supply: The arrangement of procurement of raw material, its pricing and its impact on realizations are examined. Cost structures, the ability to pass on increase in input costs are evaluated.
- O & M arrangements: CARE SA views fixed-price contracts for O&M favorably. Profile of O&M contractor is also kept in view and its credit rating if available is considered.

III. **Financial Risk:** For the operational projects, cash flow adequacy and financial flexibility are important financial parameters, which are being evaluated. Any refinance risk is analysed in relation to overall debt profile and the future earning capacity of the asset at the time of refinance. Some key financial aspects considered include cash flow, DSCR/ cash coverage ratio, waterfall arrangements, etc. The financial and operational covenants stipulated in financing agreements are evaluated.

IV. **Management Risk:** CARE SA evaluates management's risk appetite, competence, their active involvement in managing operations of project and integrity of the promoters. Especially for such sectors, where performance can be affected due to disruptions in factors beyond management control like fuel supply, wind pattern, non-availability of transmission network, etc., the cash flows may require support from the promoters. The various aspects considered are financial position of the sponsors, continued strategic importance of project for the group, management experience in handling similar kind of projects, etc.

CARE SA's adoption of a distinctive rating methodology for ISR, enables the investors/ issuers/ regulators gather a better perspective on the attributes of the rated entity. **The rating determination is a matter of experience and holistic judgement of the Rating Committee, based on the relevant quantitative and qualitative factors affecting the credit quality of the issuer.**

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About Us:

CARE Ratings South Africa (Pty) Limited (CareEdge South Africa) is incorporated in 2023 to provide credit ratings and related services in South Africa. CARE SA is a wholly owned subsidiary of CARE Ratings Africa (Private) Limited (CareEdge Africa), which is a part of CareEdge Group based in India. In October 2024, CareEdge South Africa has received its license from the Financial Sector Conduct Authority (FSCA) of South Africa, allowing it to conduct and issue credit ratings for corporate bonds, sovereign ratings, financial institutions, structured finance, and green and sustainability-linked bonds.

CARE SA provides Ratings of various instruments such as Bonds, Money Market Instruments, Bank Deposits, Structured Finance and Bank Facilities. CareEdge South Africa also does Issuer Rating (Banks, Corporates, NBDTIs & Insurance companies), ESG Ratings, and Second Party Opinion Reports.

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