Rating Methodology - Infrastructure Sector Ratings (ISR)

[In supersession of "Rating Methodology - Infrastructure Sector Ratings (ISR)" issued in Aug 2018]

Background

CARE's Infrastructure Sector Ratings (ISR) encompasses ratings assigned to debt programs of issuers in the power, roads, telecommunications, ports and other such infrastructure-related sectors. While CARE has separate rating methodologies for each of these sub sectors separately (refer our website www.careratings.com), this paper explains broader aspects considered while rating Infrastructure sector entities.

Infrastructure projects are capital intensive and have a long gestation period. CARE Ratings adopts a separate methodology for evaluation and assignment of ISR, distinct from corporate sector debt ratings. Usually, demand-related risks are minimal because of traditionally high demand-supply gap in infrastructure segments. As a result, supply-related risks assume paramount significance in these ratings. The projects are usually undertaken under distinct entities (Special Purpose Vehicles – SPVs) which have contractual 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. 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

- Demonstrated track record: The sponsor entities' established track record in the infrastructure sector, particularly in the same segment is viewed positively.
- Rationale for setting up of the project by the sponsor: The rationale for setting up the particular project is looked into. 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, shareholding and linkage with 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 so also its track record of support is considered.

- Technical strength: In case of multiple sponsors, the role of each 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.
- Track record of honoring operational and financial commitments

II. Implementation stage risk / construction risk

- Availability of infrastructure like land, water, construction equipment, adequate manpower: for a greenfield project, it is important to ensure availability of all resources for smooth implementation. The status of land acquisition, whether resources like water, power are already available nearby or need to be obtained by way of setting up another linked project. The construction status and progress is driven by mobilization of adequate manpower and machinery for the same.
- Statutory clearances: The availability of all statutory clearances or advanced stage of the same is viewed positively. The main clearances which impact execution include amongst others land acquisition, water allocation, mining rights, pollution, environment etc.
- Risk of time and cost overrun: Infrastructure projects specially 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 evaluates the mitigating factors built in for restricting the impact of such overrun.
- Third party risk assessment (LE, design consultants, etc.): CARE 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 other project is looked into. The projects with full or substantial financial closure are seen positively.
- Geographical Location of the project: Difficult geographical terrain may impose challenge in physical progress of the project. The same may also impact cost of the project.
- Track Record/Credit Rating of EPC Contractor: for construction of the infrastructure projects, EPC contractors are engaged. The relevant track record of such contractors and also strong credit profile is viewed positively.

- 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 in to consideration.

III. Contractual risk assessment:

CARE 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 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 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 of related to infrastructure projects, various contracts are put in place e.g. EPC contract, O&M 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.

IV. Business risk and Projected cash flow:

CARE’s analysis of infrastructure sector projects includes an in-depth analysis of the risks associated with the project. CARE studies adequacy of expected project cash flows for servicing the debt. CARE puts more emphasis on cash flow analysis amongst all financial statements. The DSCR – sensitivity is worked out under various scenarios to analyze the financial risk. 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. Such indicators are further used for sensitizing the projected cash flows. Post project completion risk in terms of competition is also suitably built in while analyzing and sensitizing the cash flows.

Rating methodology for Operational Phase projects:

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

I. **Management Risk:** Similar to projects under implementation, it is important to analyze the management risk for projects in operational stage also. Specially 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 promoters. The various aspects considered are financial position of the sponsors, continued strategic importance for the group, management experience etc.

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

- **Pricing:** Due to contractual or regulator driven pricing, infrastructure projects may have very low pricing flexibility. The mechanism for arriving at pricing is looked into.
- **Demand analysis:** Usually the demand risk is also low for infrastructure projects. CARE examines data pertaining to consumption to understand any major deviations from the original assumptions. E.g. number of units supplied to offtaker of power, actual traffic on the toll road etc.
- **Counter party** credit risk The long term contracts ensure offtake but ability to make timely payments assumes significance.
- **Raw material** / fuel supply: The arrangement of procurement of raw material, its pricing and its impact on realizations are examined. Presence of well-defined pricing structures, ability to pass on increase in input costs are viewed positively.
- **O & M** arrangements: CARE 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 looked into. 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 which are seen are cash flow, DSCR/ cash coverage ratio, waterfall arrangements etc. The financial and operational covenants stipulated in financing agreements are looked into.

IV. **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 is considered important. The comprehensiveness and enforceability of the relevant project related contracts is 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 is seen.

CARE'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.

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CARE Ratings Limited
4th Floor, Godrej Coliseum, Somaiya Hospital Road,
Off Eastern Express Highway, Sion (East), Mumbai - 400 022.
Tel: +91-22-6754 3456, Fax: +91-22- 6754 3457, E-mail: care@careratings.com