Rating Methodology - Toll Road Projects

[In supersession of "Rating Methodology - Toll Road Projects" issued in August 2019]

CARE's rating methodology for debt issues of road projects is designed to facilitate appropriate credit risk assessment, keeping in view the characteristics of the Indian road sector.

CARE Ratings examines the following critical areas while rating the Road Projects:

1. Revenue risk
2. O&M risk
3. Financial risk
4. Project Risk
5. Sponsor risk
6. Regulatory risk
7. Evaluation of Concession Agreement (CA)

1. Revenue risk

Revenue of the toll projects is the function of the traffic and toll rates. Furthermore, viability of the road project is critically dependent on the extent and nature of benefits enjoyed by the users of the facility and their willingness to pay for the same.

Demand analysis, Competition and Toll pricing

CARE's analysis focusses on traffic demand and potential variation of demand due to economic changes and competition. The linkage of demand to toll pricing and the users' willingness to pay is also examined based on traffic study report of reputed traffic consultant.

Track record of toll collection

CARE gives more importance to track record of actual toll collection of operational projects and connecting stretches to the operational projects. Absence of track record of toll collection constrains the rating for the under-construction and newly-built toll roads in light of challenges in estimating the traffic and possibilities of large variations in traffic as compared to traffic study. However, longer track record of stable toll collection provides assurance to the cash flow of operational projects while making its operations self-sustainable and hence it is credit positive for operational toll roads. Furthermore, extent of achievement of projected traffic in passenger car units (PCUs) and in turn toll collection based on traffic study shall also be analysed.

Demand Analysis and location of the stretch

Demand analysis involves analysis of the toll road region in terms of economic strength, demographic trend, diversity and historical vulnerability to negative shocks and trends of recovery for such period. For this, regional wealth indicators like level of industrialisation, availability of facilitating infrastructure, etc., are examined. A sound and growing local economy assures a high level of commercial and business travel, the mainstay for revenue generation. Demand analysis is crucial as wrong estimation of demand or deterioration in the economic base would adversely affect viability and debt servicing capability of a project.

Traffic study

CARE Rating's traffic demand analysis is based on studies carried out by traffic consultants who are reputed with adequate experience. Origin-Destination survey, number of alternate routes and its probable impact on the traffic of the project stretch and assumption of traffic growth rates on base traffic due to assumption of developmental traffic and seasonal variations are important aspects of traffic study report.

The nature and composition of traffic as well as volatility of traffic due to business cycles, natural factors (floods, landslides, etc.), social unrest and escalation in fuel prices is studied critically.

Traffic mix

While commercial traffic tends to serve as a stabilising force, CARE Ratings would favourably consider a balance between commercial and private vehicle traffic. Commercial traffic is less sensitive to toll increases than private traffic, since additional cost (tax deductible) can be passed on to the customers. However, commercial traffic increases susceptibility of revenue to slowdown in economic downturn as well change in load carrying regulations (axle norms) and disproportionately impact the revenue in case of large variations due to its higher toll rates.

As a general rule, a diverse traffic mix cushions the impact of a decline in any one segment.

Competition

Toll road projects are exposed to traffic diversion to alternate route and competitive facilities. Development of toll-free roads can divert traffic away from a toll facility and disturb the projected traffic growth and subsequent revenues. Covenants in the Concession Agreement (CA) which explicitly prohibit the government from setting up competing facilities upto a stipulated period will mitigate 'diversion risk' of the project to an extent.

Quality of connecting roads

Traffic density and construction quality of connecting roads also impact the traffic of the project stretch. Project stretch with good connectivity to high traffic and good quality connecting roads offer good prospects of origin destination traffic unlike project stretch with inferior connecting roads.

Toll pricing

Appropriate toll pricing, which is based on user's 'willingness to pay' is crucial for the success of any road project. Typically, a toll road project would result in benefits in form of (i) savings in vehicle operating costs (VOC), (ii) savings in time and (iii) savings in distance covered.

A Concession Agreement which provides for 'automatic' revision with pre-defined formula for revision in toll rates, e.g., linkage to inflation index along with requisite authority to the project directors to implement toll rate revisions is considered as a credit strength for the project.

2. O&M risk

O&M risk is the major risk in operational toll road projects as heavy traffic especially of commercial vehicles results into relatively higher wear and tear of the road surfaces. Inadequate maintenance on the project stretch can also lead to penalty from authority and closure of toll collection. Furthermore, higher-than-envisaged O&M and major maintenance reduces cash flow cushion while impacting Debt Service Coverage Ratio (DSCR).

CARE Ratings evaluates the O&M risk considering the following factors:

- Terrain, traffic mix and actual traffic vis-à-vis design capacity in order to access O&M cost and major maintenance cost. For example, O&M cost and major maintenance cost can be lower for relatively lower-traffic state highway projects and it can be substantially higher for projects carrying heavy vehicles.
- Comparison of O&M cost and major maintenance cost of projects with the industry aggregates
- Presence of fixed-price O&M contract and credential of O&M contractor
- Provision for major maintenance reserve and its adequacy to fund actual major maintenance expenditure
- Number of major maintenance cycles completed and their actual cost

3. Financial analysis

An in-depth analysis of the projected operations is undertaken to get a clear indication of the SPV's ability to service debt. The analysis would include critical examination of the underlying assumptions, location of possible stress points and the extent of flexibility to tide over difficulties. A sensitivity analysis is carried out to evaluate the impact on debt servicing ability due to changes in assumptions.

The financial analysis takes into account the following factors:

- Financial structure and leverage measured by Debt/ Cash Flow Available for Debt (CFAD) Servicing

- Debt service coverage ratio (DSCR) and interest coverage ratio
- Debt/ Toll collection in comparison to balance loan tenor
- Financial flexibility and tail period. Longer the tail period, better the financial flexibility.
- Since road projects generate revenue in Indian Rupees, any foreign exchange debt by the project results in exchange risk.
- Adequacy of debt service reserve account (DSRA). If DSRA is created in the form of bank guarantee, renewal clauses of such bank guarantee before its expiry mitigates roll over risk. However, in absence of such clauses, roll over risk of DSRA bank guarantee generally lies with the sponsor. Stronger credit profile of the sponsor mitigates the roll over risk to an extent while moderate to weak credit profile of sponsor increases roll over risk associated with such bank guarantee and dilutes the liquidity support feature of DSRA. Presence of DSRA or cash trap mechanism lends higher cash flow resilience to operational toll roads in case of exigencies.
- Provision of cash sweep, if any
- Restricted payment covenant and clauses in case of actual DSCR is lower than threshold DSCR assumed at the time of funding

4. Project implementation risk

The risk associated with implementation of a toll road project can be quite high considering the long gestation period and large investments required. CARE Ratings analyses the following factors to estimate the risks associated with the completion of the project.

- The extent of tie-up for finance
- The capability of the Sponsor/ SPV to raise additional resources in case of cost over-runs
- The capability of the Engineering, Procurement and Construction (EPC) contractor, based on technical and financial strengths as well as past experience and terms of EPC contract
- Status of land acquisition both in terms of available area (3G and 3H basis) and length at the time of declaration of appointed date
- Status of de-linking of unavailable land, if any
- Availability of resources in the vicinity of project area
- Extent of structural work in total EPC cost and complexity associated with such work
- Status of clearances mainly forest, tree cutting and rail over bridge.
- Environmental, social and political issues.
- Comparison of project progress with schedule progress

- Status of approval of extension of time (EOT) from NHAI in case of delay in project execution and corresponding approval from lender for the shifting of repayments in line with EOT, if any
- Appointment of reputed contractors increases the chances of successful and timely implementation of the project. Other tools to mitigate construction risks include: fixed-price contracts with suitable clauses to motivate the contractor to complete the project ahead of time; liquidated damages upon delay; performance bonds; a favourable contractor payment schedule, including partial withholding or subordination of contract repayment during construction, etc. During project implementation, CARE would monitor the progress vis-à-vis the initial cost and time estimates to determine the effect of variations from schedule on the ability to meet debt servicing obligations.

5. Sponsor evaluation

CARE Ratings evaluates the management from different perspectives like financial capabilities and track record in implementing and operating project of similar nature and size. Despite non-recourse nature of the debt of the SPV, financial flexibility and execution track record of sponsor are important in pre-COD phase. Furthermore, sponsor is required to fund cost overrun, if any as per sponsor support agreement entered with lenders. In a road project, management's ability to accurately assess traffic and operating and maintenance expenses are important to protect future revenue streams for debt servicing.

6. Regulatory risk

CARE has observed that ratings assigned to the debt of state highways projects are exposed to regulatory risk in case toll exemption of cars announced by state governments. Although government is required to pay the concessionaire loss of revenue due to toll exemption, delay in finalization of modalities for release of compensation and release of funds from state government exposes projects to cash flow risk. CARE evaluates track record of release of compensation payment and its adequacy in these cases.

7. Evaluation of Concession Agreement (CA)

The right to implement the project and to levy and collect tolls emanates from the Concession Agreement (CA). Hence, the terms of the CA are carefully examined, especially those relating to:

- Tenor of concession and provision of extension of concession period in case of short fall in revenues.

- Clauses for de-scoping of unavailable land and issue commercial operations date (COD)
- Levy of tolls and their periodic revision
- Termination of CA.
- Issues relating to land acquisition.

It is essential that the CA contains sufficient safeguards to provide disincentive to any of the contracting parties to default.

Qualified Investments

Pending redemption of debt obligations, surplus funds would have to be appropriately invested by the SPV. CARE Ratings examines the proposed investment policies to ensure the safety of such investments. Liquidity aspects of the proposed investments also are considered. CARE analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality.

Conclusion:

The rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality of an issuer. While the methodology encompasses comprehensive technical, financial, commercial, economic and management analysis, credit rating is an overall assessment of all aspects of the issuer.

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