Rating Indian Construction Companies

Sector Credit Factors

Special Report

Specific Rating Factors: The report addresses India Ratings' specific credit factors used while analysing Indian construction companies. The construction sector encompasses companies that offer civil construction and engineering-procurement-construction services (EPC) as well as those that have transformed into asset owners by participating in various public–private partnership programmes (PPP).

Rating Category: After highlighting the inherent risk profile of the Indian construction industry, the report examines the additional company-specific operating traits, which influence the ratings – and therefore positions the company more finely by rating category. Finally, the report explains how a company's financial profile (credit metrics and financial flexibility) influences its creditworthiness and final ratings.

Sector Risk Profile

Rating Territory: The representative companies in this sector range from the 'IND AA' down to the 'IND B' rating category. This reflects the expanse and segmentation of the industry, as well as the inherent volatility, cyclicality and seasonality of the industry and the differences in working-capital intensity and cash flow from operations among the construction companies.

Rapid Growth: The industry has been in a rapid growth phase in which resources are spread thinly – skilled manpower, construction equipment, project management, capital – all scarce. Rapid growth has also attracted a large number of companies including smaller and ambitious aspirants, which has increased competition, putting pressure on margins.

Pressure Exerted by Growth: This is also likely to put pressure on margins due to the higher level of subcontracting. In extreme cases this may also lead to relinquishing of contracts won and the loss of performance guarantees as the stretched company finds it difficult to execute orders on time.

Profit Margins: Profit margins are dependent on a variety of factors, primarily on the type and complexity of projects being executed. The companies providing more specialised and complex construction services tend to enjoy higher margins, as the complexity limits the level of competition. Profit margins are also affected by factors such as the mix of fixed-price and variable-price contracts and sub-contracted and self-executed contracts.

Working Capital: The working-capital management of construction companies is the key to their ability to manage liquidity. The companies tend to obtain mobilisation advance payments from customers and credit from their suppliers to fund their receivables and work-in-progress/stock.

Asset Ownership: Construction companies emerged from being contractors to asset owners as they have taken up infrastructure projects comprising the road, power, airport and port sectors under the PPP model housed in separate special-purpose vehicles (SPVs). The projects are typically funded at the SPV level with debt to equity ratios above 3:1 (debt from banks/financial institutions and equity from the sponsor construction companies).

Rating Effect: India Ratings assesses the rating effect of asset ownership based on the funds needed to be invested in these projects and the source of such funds. The agency also quantifies the effect of the various issues, which the sponsors of such projects are exposed to.

Related Research

Treatment of Non-Recourse Debt (October 2012)

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Building Blocks - Indian Construction Industry

	Sector Risk Profile	Company-Specific Traits				Financial Profile (historical where relevant and forecast, mid-point)			
		Execution capability	Order book	Working capital	Impact of asset ownership	EBITDA margin (%)	EBITDA/Interest expense (x)	Adjusted debt/EBITDA (x)	Cashflows
IND AA & above		• Execution capability in highly complex projects and large projects across sectors • Strong execution capabilities	• Revenue visibility for 3-4 years • Diversified order book • Strong counterparties • High proportion of third party contracts with variation clause	• Negative working capital cycle	• Significant funding of equity needs of new projects from completed projects • Balance investment commitment less than 20% of tangible net worth as on last audited B/S (6 month)	>12	>6	<2	Strong cashflows FFO/ revenue and CFO/revenue >10%
IND A				• Low working capital cycle	• Partial funding of equity needs of new projects from completed projects • Balance investment commitment less than 50% of tangible net worth		3.5-6	2-4	Moderate cashflows FFO/ revenue and CFO/revenue 5-10%
IND BBB		• Executes moderately complex projects in diverse sectors • Executes a mix of direct and sub-contracts or only direct contracts • Moderate execution capabilities with partial dependence on sub-contractors	• Revenue visibility for 1.5-3 years • Moderate concentration order book • Weak to moderate counterparties • Equal proportion of own contracts and third party contracts	• Medium working capital cycle	• Completed projects are cash neutral or a low positive • Balance investment commitment less than 75% of tangible net worth	8-12	2-3.5	3-5	Weak cashflows FFO/revenue 0-5% CFO/ revenue close to zero
IND BB & below		• Executes only simple civil projects in single sector (low complexity) • Works majorly as sub-contractor • Weak execution capabilities with high dependence on sub-contractors	• Revenue visibility for below 1.5 years • High concentration order book • Weak counterparties • High proportion of own contracts without variation clause	• Long working capital cyle	• Completed projects have funding gap for debt service • Balance investment commitment more than 75% of tangible net worth	<8	<2	>5	Negative FFO and CFO

General
- Diverse industry - covers construction of simple roads to complex refineries
- Industry in rapid growth phase
- Infrastructure key component
- Working capital intensive
- Cyclical and seasonal
- Moving towards capital intensive asset ownership

Indicative factors observed or extrapolated for rated issuers. Ratio levels refer to the mid-point of a through-the-cycle range; actual observations are likely to vary from these. Certain sub-sectors may contain a small number of observations; where no observations currently exist, guidelines for a category are extrapolated based on Fitch judgement. The factors give a high-level overview and are neither exhaustive in scope nor uniformly applicable. Additional factors will influence ratings, particularly in emerging markets and where group relationships constrain or enhance a rating level.

Related Criteria

Corporate Rating Methodology (September 2012)

Company-Specific Traits

Execution Capability

Execution capability reflects the company's ability to execute projects of certain size, scale and complexity in certain sectors and geographies demonstrated through the successful execution of similar projects. It helps the company in the following ways:

- *Qualification for bidding:* It helps the company obtain new orders. Bidding for any order requires financial and technical qualification. Technical qualification reflects the company's history of executing projects of similar technical and operational scale.
- *EBITDA margins:* The ability of the company to execute complex projects also helps in the margins of the company, as the complex projects generally have lower competition and higher margins.

India Ratings notes that higher-rated companies will typically focus on more complex projects, where they would enjoy technical advantages and therefore tend to be less exposed to competition and have higher margins.

Lower-rated companies typically tend to concentrate on orders from their home states and compete for contracts in highly competitive and relatively less complex contracts and typically have lower margins.

Figure 1

Ability to Execute Complex Projects

Rating category	Execution capability
IND A and above	• Execution capability in highly complex projects and large projects across sectors • Strong execution capabilities
IND BBB	• Executes moderately complex projects in diverse sectors • Executes a mix of direct and sub-contracts or only direct contracts • Moderate execution capabilities with partial dependence on sub-contractors
IND BB and below	• Executes only simple civil projects in single sector (low complexity) • Works majorly as sub-contractor • Weak execution capabilities with high dependence on sub-contractors

Source: India Ratings

Complexity is analysed by classifying the contracts being undertaken by a company into high, moderate and low complexity work and then the execution capability is decided based on the classification of the majority of the contracts by value. An indicative list of projects based on complexity is as follows:

- High complexity: EPC contracts in the power sector, refineries and complex industrial units, hydro power plants in mountainous terrain and large dams and barrages
- Moderate complexity: Highway contracts, transmission and distribution segment and balance of plant contract in the power sector
- Low complexity: City roads, canals and basic irrigation contracts and other civil works.

Niche companies, even if small may have a majority of highly complex and specialised contracts and can therefore be classified to have high execution capability.

Order Book

Over the past few years, there has been strong demand through infrastructure spends by the government as well as corporate capex (although this seems to be slowing down).

This has translated into robust order book for most construction companies.

While order books provide revenue visibility for the company, they also place pressure on the execution machinery. A rapid growth of order book without a corresponding increase in execution strength will lead to the dependence on sub-contractors for execution, which puts pressure on margins.

A rapid growth in order book without a matching increase in execution capability may also lead to relinquishing of contracts won and loss of performance guarantees as the stretched company finds it difficult to execute orders on time.

The order book is analysed using the following parameters:

- *Execution strength* – The ability of the company to execute the order book and if it cannot, its plans to augment capabilities and measures such as fixed assets turnover are used for this purpose. Reliance on sub-contractors for the execution can lead to lower margins (as margins have to be shared) as well as slippages in execution.
- *Fixed-price and. variable-price contracts* – A higher proportion of fixed-price contracts leads to volatility in margins, as changes in raw-material prices cannot be passed to customers.
- *Own and outside contracts* – A higher proportion of orders from SPV subsidiaries or group companies is considered undesirable as these contracts are either fixed price or the cost variation is borne by the company, which exposes it to financing risk.
- *Customer/project concentration risks* – A large exposure to single/small group of customers/projects may lead to an adverse effect on the credit profile in case the customer/project faces challenges.
- *Counterparty profile* – The credit profile of the counterparties being serviced is crucial, as it affects the receivables cycle of the company. The counterparties range from private companies, central government, state governments and multilateral agency-funded projects.
- *Sectoral profile* – profitability, working-capital cycle and competition differs among segments (such as irrigation, power, industrial, real estate and infrastructure)

Diversification is beneficial for companies, as it helps them avoid overexposure to weaknesses arising in particular sectors, geographies and counterparties.

Figure 2
Features of Order Book

Rating category	Order book
IND A and above	• Revenue visibility for 3-4 years • Diversified order book • Strong counterparties • High proportion of third-party contracts with variation clause
IND BBB	• Revenue visibility for 1.5-3 years • Moderate concentration order book • Weak-to-moderate counterparties • Equal proportion of own contracts and third-party contracts
IND BB and below	• Revenue visibility for below 1.5 years • High concentration order book • Weak counterparties • High proportion of own contracts without variation clause

Source: India Ratings

The final classification will be based on the position of the majority of the parameters.

Working-Capital Management

The key characteristic of the Indian construction industry is the working-capital intensity due to the high level of receivables and WIP/inventory. The working-capital gap can either be funded using bank funding or through mobilisation advance payments from clients and credit from suppliers. The ability of the companies to reduce their dependence on bank funding using the mobilisation advance payments from clients and credit from suppliers is positive for the rating.

Receivables-holding period would depend on the credit quality of the counterparties involved. The counterparties are classified according to their risk profile in Figure 3.

Figure 3

Counterparty Risk

High counterparty risk	Medium counterparty risk	Low counterparty risk
• Weaker state government projects • Municipal projects • Low rated private entities	• Stronger state government projects • State government or municipal projects with funding from central governments	• Central government/central agency projects with budgetary allocation • Projects funded by multilateral funding agencies • Highly rated private entities

Source: India Ratings

The strength of government projects (municipal/state/central) is interpreted using two parameters – credit strength (rating) of the government and the extent of budgetary funding for the project. Even governments with high ratings can have poorly funded projects – for example, the Andhra Pradesh government's contracts in the irrigation sector are executed (with budgetary funding) over a stretched schedule, which is significantly different from the one planned at the time of awarding the contracts.

Debtors' ageing profile will reflect the timeliness of the receipt of payments from customers and can be used to identify problematic counterparties. It will also reflect any particular project constituting a large proportion of debtors or delaying payments beyond the general cycle, which may lead to liquidity trouble or bad debt in the future.

WIP/inventory-holding period reflects the billing cycle of the contracts and the ability to bill customers on time. WIP/inventory-holding period will be higher in projects with significant equipment delivery portion and in projects with a milestone-based billing cycle. Milestone-based billing is generally seen in oil- and gas-related work, pipeline work and power EPC work, while projects in sectors such as roads and irrigation have a monthly billing cycle.

Payables-holding period would reflect the ability of the company to fund working capital by stretching payment to its suppliers and through mobilisation advance payments from its clients. The ability to stretch payables is generally higher in the case of larger companies.

Working-capital cycle (receivables-holding period plus inventory-holding period minus payables-holding period) reflects the ability of the company to fund receivables and inventory using advance payments from clients and credit period from suppliers: the lower the working-capital cycle, the greater the benefit.

Figure 4

Working-Capital Cycle

Rating category	Working capital
IND AA and above	• Negative working-capital cycle
IND A	• Low working-capital cycle
IND BBB	• Medium working-capital cycle
IND BB and below	• Long working-capital cycle

Source: India Ratings

Asset Ownership

Over time, the nature of construction companies has changed from being contractors to asset owners. Various companies have now taken up infrastructure projects comprising the road, power, airport and port sectors under the PPP model. Most of these infrastructure projects are housed in separate special-purpose vehicles (SPVs). The projects are typically funded at the SPV level with debt to equity ratios above 3:1 (debt from banks/financial institutions and equity from the sponsor construction companies).

Such asset ownership exposes sponsors to various risks such as land acquisition, delay in government approvals and fuel allocations not faced by them earlier as pure construction entities. These risks are the key reasons for the cost and time overruns in the execution of infrastructure projects.

Further, although the debt of such SPVs is generally non-recourse to the sponsor, the sponsor companies generally provide temporary cash flow support in case of underperformance by the SPV due to reputation risks involved.

This affects the cash flow of the sponsor in two ways. First, the sponsors are required to fund the equity as well as any cost and time overruns at the SPV level. Such equity needs are generally funded at the sponsor/intermediate Holdco level with a mix of debt and equity, leading to double leverage. Secondly, it also affects their margins as the construction contracts for these SPVs are generally awarded to sponsor companies as fixed-price contracts.

India Ratings assesses the rating effect of asset ownership based on the funds required to be invested in these projects and the source of such funds. The mix of projects between completed and cash-flow-generating projects and under-construction projects is also important. India Ratings also quantifies the effect of contingent obligations in the form of cost and time overruns and revenue underperformance (at the SPV level) on the sponsors. This is done by incorporating certain stresses into the cash flow projections of sponsors (explained in detail in a separate report "Treatment of Non-Recourse Debt").

Figure 5
Effect of Asset Ownership

Rating category	Equity commitment
IND AA and above	• Significant funding of equity needs of new projects from completed projects • The rest of the investment commitment less than 20% of tangible net worth as of the previous audited balance sheet (six months)
IND A	• Partial funding of equity needs of new projects from completed projects • The rest of the investment commitment less than 50% of tangible net worth
IND BBB	• Completed projects are cash neutral or a low positive • The rest of the investment commitment less than 75% of tangible net worth
IND BB and below	• Completed projects have funding gap for debt service • The rest of the investment commitment more than 75% of tangible net worth

Source: India Ratings

Financial Flexibility

Construction companies generally have huge funding needs, due to the need for continuous purchase of equipment with growing revenue, working-capital funding needs and the equity needs of the asset ownership business. Such funding needs can be financed through various sources. Debt funds can be raised either through the banking system or debt capital markets, while equity funds can be raised through equity capital markets and private equity.

Financial flexibility is determined using the following parameters:

- Gearing ratio (debt to equity)
- The access to debt-funding can be gauged through the ability to tap numerous banks for funding and the ease and frequency of issuance of various instruments such as non-convertible debentures, commercial paper and external commercial borrowings.
- The access to equity funding depends on the company's promoter holdings. The higher the holding, the better the ability to dilute. It is also reflected in the company's interactions with the public offering and private equity markets.

Financial Profile

Following the sector risk profile and the company-specific traits, an analysis of the company's current and future financial profile further narrows down the range of each rating category. It has to be noted that the financial metrics can provide only limited support to the rating in case of adverse company-specific traits. Conversely, a company with strong traits may be burdened by adverse financial metrics, which may exert a strong downward pressure on the ratings.

EBITDA Margin

EBITDA margin levels reflect both the execution capabilities of the company and the ability to control costs. The companies that can execute complex projects without dependence on sub-contractors would have better EBITDA margins. Higher EBITDA margins usually result in lower volatility in credit metrics such as interest coverage and leverage.

Figure 6
EBITDA Margin

Rating category	EBITDA margin (%)
IND A and above	>12
IND BBB	8-12
IND BB and below	<8

Source: India Ratings

Interest Coverage and Adjusted Leverage

EBITDA interest cover is an indicator of the ability to service debt and adjusted debt/EBITDA is an indicator of the company's debt in relation to cash flow. Higher-rated entities would have higher interest cover and lower adjusted leverage.

Figure 7
Credit Metrics

Rating category	EBITDA/interest expense (x)	Adjusted debt/EBITDA (x)
IND AA and above	>6	<2
IND A	3.5-6	2-4
IND BBB	2-3.5	3-5
IND BB and below	<2	>5

Source: India Ratings

Cash Flow Metrics

FFO and CFO margin showcases the company's ability to generate strong operational cash flow to service debt. FFO reflects the strength of operational cash flow available after servicing interest and payment of tax. CFO reflects the company's ability to manage working capital through the use of mobilisation payments and credit from suppliers. Higher rated companies would have positive CFO.

Figure 8
Cash Flow

Rating category	Cash flow
IND AA and above	• Strong cash flow • Fund flow from operations (FFO)/revenue and cash flow from operations (CFO)/revenue >10%
IND A	• Moderate cash flow • FFO/revenue and CFO/revenue 5%-10%
IND BBB	• Weak cash flow • FFO/revenue 0%-5% • CFO/revenue close to zero
IND BB and below	• Negative FFO and CFO

Source: India Ratings