

India

Construction Sector

Ratings Navigator Companion

Special Report

This report updates and replaces Rating Indian Construction Companies, dated 15 October 2012.

Navigator for Corporates is a graphical peer comparator that forms part of a series of similar tools being introduced across India Ratings and Research (Ind-Ra).

Information on the formal rating criteria that underlie Ind-Ra's corporate ratings can be found in Ind-Ra's Corporate Rating Methodology Master Criteria, dated 4 January 2017.

Click on Navigator Reference File Icon for the full range of Navigator Factor definitions. **Sector and Sub-Sectors:** This report presents the key peer comparator elements observed or expected for the engineering-procurement-construction (EPC) sectors and companies. The report covers companies across all EPC sub-sectors including but not limited to transportation, industrial, power infrastructure, buildings, water & irrigation, urban infrastructure and mining.

Key Factors: The Sector Risk Profile defines and groups companies operating in the sector into a "natural rating territory" based on Ind-Ra's view of the inherent risk profile of the sector. Each company's overall risk profile generally does not stray too far from this rating range. After assessing the management and corporate governance, the Navigator examines four sector-specific factors for given rating levels. Finally, three Financial Profile factors help capture financial attributes commensurate with particular rating categories.

Sector Risk Profile

Rating Range: The Sector Risk Profile ranges up to 'IND A' rating level, reflecting the contract risk, working capital intensity, risk of bad debts or significant delays in dues and consequently volatility in cash flows that a contractor is exposed to. Cyclicality is not a major factor in the Indian industry due to increasing spending on creation of transportation infrastructure, irrigation facilities, water supply projects and other sectors by the central government. Government counterparties are likely to dominate the sector going forward as well.

Sector-Specific Key Factors

Diversification and Market Position: Construction companies hedge their exposure to cyclicality and cash flows by diversifying geographically and into various segments. Companies also diversify their business profiles and cash flow streams by investing into concessions to build up an integrated model. Higher scale coupled with diversification, relationship with the public authorities and strong negotiation power with subcontractors are other factors which determine the market position of companies in this sector

Order Book and Revenue Visibility: Order book of construction companies provides visibility of future revenue, geographical and sub-sector diversification trends and also enables assessment of counterparties and associated risks. A diversified revenue base helps reduce cash flow volatility. Evaluation of order book also help identify stalled or delayed projects where the risk of invocation of bank gaurantee is high. Order book requiring additional working capital debt is considered disruptive while order execution which can be funded internally is sustainable

Competitive Positioning and Working Capital Management: Construction companies' ability to participate in contracts and manage working capital cycle while executing and billing in a timely manner together with their ability to secure longer credit terms from creditors are important parameters to determine companies' competitive ability. Mobilisation advance for projects and retention money are other key components which determine the working capital requirement of construction companies and have to be analysed in context of the sectoral mix of projects being undertaken by the company, as each sector has a different billing and payment cycle.

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Execution ability & Contract risk management: Timely execution of similar contracts and scale of operations are important determinants of execution ability of companies in this sector. Effectiveness of risk management framework is reflected in provisioning and contract losses booked historically and a well-documented contract risk management and bidding discipline framework. These factors will have a bearing on the profitability of companies in the sector.

Financial Profile Key Factors

Profitability: The analysis focuses on the stability of earnings and cash flow margins of the business. Sustainable operating cash flow supports the issuer's ability to service debt and finance its operations and capital expansion without reliance on external funding. EBIT and profitability head room, in addition to cash flow measures, are used to reflect the capital-intensity and its impact

Financial Structure and Flexibility: These factors use an array of predominantly cash-based metrics to measure the level of capitalisation of an issuer and other flexibility measures such as liquidity and exposure to foreign-exchange movements.

Sector Risk Profile

In India, companies engaged in pre-construction activities (Consultancy and Engineering designs services) are limited and most companies are engaged in construction activities either through project management of sub-contractors or directly by owning machinery; some of these companies have also diversified in to asset ownership over the last few years. Some companies are also focused solely on asset ownership.

Figure 1 Engineering	ງ and Construction Va	alue Chain	
Particulars	Project management	Construction	Ownership and financing
Activities	Execution of construction through project management of sub-contractors	Execution of construction through owned machinery	Entitlement of future cash flow streams of the project
EBITDA margin	5%-10%	10%-15%	70%-80%
Capital intensive	Low; mostly for fund-based and non-fund-based working capital	Average; investment in equipment directly proportional to execution capability	High; close to being a financial investment
Barriers to entry	Average; low on capital but high on technical qualification	Average; moderately high on capital but low on technical qualification	Average; high on capital but low on technical qualification
Source: Ind-Ra			

While the Sector Risk Profile ranges up to the 'IND A' rating level, the ratings of companies in the sector could range between the 'IND AA' category down to the single 'IND B' category. Higher-rated entities transcend the Sector Risk Profile with their strong liquidity, low leverage, strong execution track record in complex projects, significant diversification (geographic, customer and segmental) sub-sector diversification, quality and longevity of order book, scale and market position, working capital management and management track record and the extent of robust contract risk mitigation.

Company-specific traits indicate ratings potentially up to 'IND AA' level depending on the ability of the company to demonstrate a track record of stability at the upper end of all sector-specific and financial parameters.

Weaker-rated companies usually have several the following characteristics:

- Limitation to the geography; project concentration; dependency on one customer
- Liquidity dependent on advance payments or short-term bank facilities
- Evidence of loss-making contracts

Applicable Criteria

Corporate Rating Methodology Master Criteria (January 2017)





Management and Corporate Governance See Appendix I

Limitations

This report outlines the indicative factors observed or extrapolated for rated issuers. Ratio levels refer to the mid-point of a through-the-cycle range, and actual observations are likely to vary from these. Certain sub-sectors may contain a small number of observations overall, or at any given rating category. Where no observations exist, guidelines for a category are extrapolated based on Ind-Ra's judgment. The relative importance of factors will vary substantially over time, both for a given issuer and between issuers, based on the significance agreed upon by the rating committee. The factors give a high-level overview and are neither exhaustive in scope nor uniformly applicable. Additional factors will influence ratings particularly where group relationships constrain or enhance a rating level.

Sector-Specific Key Factors

Diversification and Market Position

Most of the Indian companies in the sector are domestically focused, though a few have looked at diversification into overseas markets in the past few years when activity in India slowed down. Ind-Ra believes that the opportunity for companies in the sector remains within India. The experience of companies diversifying into overseas markets has been mixed. Hence, such diversification will be considered on a case-to-case basis and will be analysed from the angle of country risk, execution risk, variation of contract terms in the new market as compared to the existing market and forex risk.

In the Indian context, geographical diversification across multiple Indian states is relevant, as governments (central or state or local) or government-owned entities are typically the largest customer for the sector and the order inflow cycle and working capital cycle vary across states.

Entry into a new market to achieve diversification shall be considered a risk during the initial period and would count as diversification only after the company establishes track record of execution over one cycle.

End Market and Segment

Exposure to any particular sub-sector exposes a company to the sectoral dynamics such as variations in demand and working capital cycle, as has been seen in the power and industrials sector in India over the past few years. Hence, presence across sub-sectors is important.

Diversification into Concessions

Investing in concessions allows issuers to diversify their business profiles while building up an integrated model. This integration includes the construction and operation of these concessions which has enabled companies to maintain activity and order books. Ind-Ra views negatively an issuer's backlog highly dependent on this integrated model due to its lack of business diversification.

Ind-Ra views the impact of diversification in to concessions in terms of net cash flow impact of the concession portfolio. Mature concessions tend to provide stable and recurrent dividend flows and are viewed favourably while issuers who choose an asset-recycling strategy where concessions are likely to be disposed of after few years of operation, resulting in less stable dividends and higher execution risks would have a relatively lower ratings.



Sub Fact	Sub Factor: Diversification and Market Position						
Rating category	Geographic concentration	End-market and segment	Diversification in to concessions				
A or above	Track record of execution across various states with exposure of less than 25% to any one state	Diversified in a number of sub-sectors or concentration in one sub-sector with large market size with a market leading position	Mature concession portfolio with a track record of providing recurring dividends. A significant portion (around 75%) of equity investments is from positive net cash flows from operational projects, while the balance is funded through profits generated from project construction.				
BBB	Diversified with a significant exposure (more than 50%) to any one state		Concession portfolio is largely mature with some greenfield activities. Project cash flows of the operational portfolio meet less than 50% of investments.				
BB or below	Limited diversification outside of one state or a diversification that has exposure to high-risk states	Focused on a single sub- sector or involved in highly fragmented sub-sectors	Aggressive investment into greenfield concessions. Project cash flows of the operational portfolio is negative				

Note: % shall be calculated based on sum of revenue over last five years and current order book. Source: Ind-Ra

Order Book and Revenue Visibility

Order Book Sustainability

Figure 2

Ind-Ra considers the order book-to-revenue ratio as an important forward-looking operating factor in the analysis of construction EPC companies. The industry is late cyclical and therefore order book evolution provides an insight, to some extent, into future cash-flow generation.

The order book provides visibility into geographical and sub-sector diversification trends of future projects, and the growth rates (year-on-year order intake) provide a significant indication of where a company may be in the working-capital cycle. However, Ind-Ra applies caution while evaluating the order book composition as the published order book figures are not audited and are susceptible to varying definitions. Typically these are contracted orders only. Other limitations of the order book as a measure of future cash-flow generation include little insight into operating margins upon project execution.

The strength of the order book will be measured in terms of the proportion of projected revenue which can be generated from it. A strong order book would provide visibility for above 80% of the projected revenue for the next two years. A moderate order book would provide visibility for 50%-80% of projected revenue for the next two years. A weak order book would provide visibility for less than 50% of projected revenue for the next two years.

An order book, whose execution would require significant additional debt to fund working capital and equipment, would be considered as disruptive. An order book, whose execution can be funded through existing cash flows, would be considered as sustainable. An order book, whose execution would require additional debt but without a material deterioration in credit metrics, would be considered as stable.

Customer relationship is important for repeat business but it is not considered to be an important parameter as most of the orders are based on tenders in India.

Customer Concentration and counter party Risk

Ind-Ra assesses the risk of bad debts to the company through two components i.e. the concentration of the order book by customer and the credit strength of the customers. Hence, any concentration shall be mitigated by the credit strength of the counterparty, which is to be measured in terms of both the counterparty's credit rating and its track record of payments. For instance, a road contractor may have an order book with 100% concentration towards National Highway Authority of India (NHAI; IND AAA /Stable)_as a customer; however, given the credit strength of NHAI, we may still assess this sub-factor at 'A' category.



The credit strength of the customers is a function of a weighted average of the counterparty risk for the orders. The counterparties can be classified according to their risk profile as below:

- Central government projects, high-rated private entities (A or above), central government agencies such as NHAI or Ministry Of Road Transport and Highway are considered to carry low counter party risk
- State government projects with clear budgetary allocation and funding tied-up, state government or municipal projects with funding from central government or multilateral agencies or moderately-rated private entities (BBB category) are considered to carry medium counter Party risk
- State government projects with low budgetary allocation and unclear funding, Municipal Projects and low – rated private entities (IND BB or below) are considered to carry high counter party risk

Project Concentration

Similarly, a diversified revenue base from different projects helps companies protect themselves from volatility in revenue and working capital cycle of a particular project. This subfactor is to be evaluated in conjugation with the order book and customer level concentration.

Proportion of Risky Projects

Risky projects are defined as projects which are either stalled or unduly delayed or in high risk of delay in execution (as per Ind-Ra assessment) against original project schedule. These are the projects where there is a heightened risk of bank guarantee (BG) invocation.

Higher rated entities would have low to negligible proportion of such projects with minor impact on credit profile or liquidity in case of BG invocation. Lower rated entities typically have a proportion of such projects as a percentage of the total order book with limited ability to absorb the shock of BG invocation.

Figure 3					
Sub-Factor:	Order	book	and	Revenue	Visibility

Rating category	Order book sustainability	Project concentration	Customer diversification	Risky projects
A or above	Strong order book with a track record of achieving sustainable growth rates	Limited project concentration with top-10 contracts accounting for less than 40% of order book	Limited customer concentration with top-10 customers accounting for less than 40% of order book with medium or low weighted average counterparty risk (or) higher concentration with low weighted average counterparty risk	Negligible or low level of risky projects with minor impact on credit metrics and liquidity in case of BG invocation
BBB	Good quality order book with a track record of stability	Moderate project concentration with top-10 contracts accounting for 40%-60% of order book	Moderate customer concentration with top-10 customers accounting for 40-60% of order book with medium weighted average counterparty risk	Moderate level of risky projects with moderate impact on credit metrics and liquidity in case of BG invocation
BB or below	Poor quality order book with concentration risk, new customers, history of high cancellation rates and volatility	High project concentration with top-10 contracts accounting for more than 60% of order book	High customer concentration with top-10 customers accounting for more than 60% of order book or lower concentration with high weighted average counterparty risk	High level of risky projects with significant impact on credit metrics and liquidity in case of BG invocation

Source: Ind-Ra

Competitive Positioning and Working Capital Management Competitiveness

The higher rated companies usually benefit from the scale and market position during the bidding phase. A contractor's competitive advantage is typically its relationship with the public authorities and strong negotiating power with smaller sub-contractors.

Relationship with public authorities can be measured by the proportion of order book contributed by projects the company can undertake where the extent of competition is likely to be limited. The competition is limited by the technical qualification norms set by public authorities which are measured in terms of size and complexity of projects.



A key characteristic of the Indian construction industry is the working-capital intensity due to the high level of receivables and work in progress (WIP)/inventory. The working-capital requirement can either be funded using bank funding or through credit from suppliers.

Working capital components such as receivables, WIP, mobilisation advances and retention money have to be analysed in context of the sectoral mix of projects being undertaken by the company, as each sector has a different billing and payment cycle. Also, the impact of any shift in sectoral mix of projects or significant growth in order book over a period of time needs to be analysed.

Receivables-holding period (not including retention money) reflects the credit period offered to the customer and their propensity to pay on time. It would depend on the credit quality of the counterparties involved. It has to be analysed in tandem with the receivables aging profile.

Receivables aging profile reflects the timeliness of the receipt of payments from customers. It will also reflect any particular project constituting a large proportion of debtors or delaying payments beyond the general cycle. It can be used to identify problematic counterparties (including potential or existing bad debts) and the potential impact on cash flows if the overdue receivables are not collected.

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, as against a monthly billing cycle typically followed in most contracts.

Creditors-holding period reflects the credit period offered by suppliers and the ability of the company to delay payment to its suppliers.

Working-capital cycle (receivables-holding period plus inventory-holding period minus creditors-holding period) reflects the ability of the company to fund receivables and inventory using credit period from suppliers, thus lowering the dependence on working capital debt.

Flexibility in Working Capital Management

Companies balance an increase in working capital requirements (receivables or WIP) by delaying payment to creditors (sub-contractors/suppliers of materials or equipment). Hence, the ability to delay payment to creditors is an important factor contributing to the flexibility in working capital management. This may not be possible in case a large portion of creditors is backed by letters of credit (LCs), in which case there is a finite date for the payment. LCs are typically provided towards purchase of equipment boilers, turbines and generators, solar panels, transformers and other industrial equipment, while payments for other standard materials or to sub-contractors such as steel or cement are typically unsecured.

Retention Money Headroom

Another characteristic of the construction industry is the high level of retention money of 5%-10% (or sometimes even higher). Retention money is an amount deducted by the customer from every bill raised by the company and paid after the defect liability period (which typically ranges up to one year post completion) expires. Thus, in a typical case, 10% of the project value is locked up as working capital for a period of half the project duration and this is not funded through working capital facilities by bankers. Thus, it becomes essential that the company's profit margin is higher than the retention money.

Ind-Ra uses a factor which would approximately measure the headroom between the EBITDA margin and the retention money. Retention money headroom is defined as average operating EBITDA margin minus average retention money (in %). Average operating EBITDA margin shall be calculated as the weighted average of the EBITDA margins reported by the company in the past three years with the recent year being given the highest weight and the earliest year being given the lowest weight.



Average retention money shall be calculated as the weighted average of the retention money (in %) deductible in the various projects in the order book. Retention money on projects with back-to-back arrangement for payment of retention money to sub-contractors or equipment suppliers shall be taken as the net value after deducting the retention money on payables.

Structural Working Capital Requirements

Ind-Ra will also assess the working capital to see if there is a possibility of structural unwinding as existing orders get completed due to items such as mobilisation advances and deferred revenue. For instance, a particular project may carry a large mobilisation advance which is unlikely to be replaced by new order inflows or projects may be structured such that a large portion of the profits are generated as cash flows in the initial period of the order (deferred revenue), leaving negative cash flows to be funded in the later period. In such cases, availability of cash balance or unutilised funding lines to cover unwinding of the working capital will be tested.

Price Variation clause

The composition of the order book with respect to the proportion of fixed-price and variable-price contracts is crucial, as fixed-price contracts lead to volatility in margins.

Companies at the higher end of the rating spectrum would protect their margins by entering into back-to-back fixed-price contracts for equipment or materials due to their disciplined working capital management. Margins of the lower rated companies would most likely be exposed to price variation clause as their working capital management would be weaker due to limited availability of committed working capital lines.

Sub-Factor: (Competitive	Positioning and Wo	rking Capital Management
Workin	na Flexibility	Retention Structural	

Rating category	capital cycle	in working capital	money		Competitiveness	Price variation clause
A or above	Short and stable	Less than 25% of the creditors are backed by LCs	>5%	Structural unwinding is either not foreseen or is covered sufficiently by cash balances.	Participates mostly (>75%) in projects where the competition is restricted to three or four players	High proportion (>60%) of contracts with variation clause and strong working capital availability to lock in input prices to protect margins
BBB	Moderate or has moderate volatility	LC-backed creditors constitute moderate portion of creditors (25%-50%)	0%-5%	Structural unwinding is not covered sufficiently by cash balances and funding the same requires replacement of order book with similar orders.	Can compete in projects where the competition is restricted but such orders are only a small component (<40%) of the order book	Equal proportion of fixed-price contracts and those with variation clause and moderate ability to protect margins by locking in input prices due to working capital requirements
BB or below	Long or highly volatile	Significant portion (>50%) of creditors is LC-backed	Negative	Structural unwinding is highly likely and is not covered sufficiently by cash balances and funding the same requires significant growth in order book.	Competes against large number of players for all its contracts	High proportion (>60%) of fixed- price contracts and limited ability to tie up for inputs due to working capital constrains
Source: Ind-R	la					



Execution Ability and Contract Risk Management Revenue Base

Although size is not necessarily a credit positive in itself, it is a pre-qualification to bid for most of the projects in India. Scale and revenue are important determinants of the companies' execution ability. Further they also provide insulation against a single project failure or loss, provided there is no concentration.

The highest-rated companies usually benefit from scale and market position during the bidding phase while companies at lower end of the rating spectrum face limitations in terms of execution capability and resources to bid for large scale projects.

Execution Track Record

Execution track record refers to the track record of the company in executing projects in a particular sector and geography demonstrated through the successful and timely execution of similar projects. This provides the company the ability to bid directly for new orders, as bidding requires technical qualification which is based on history of executing projects of similar technical and operational scale. This eliminates the need to share margins with other contractors. Also, companies with ability to execute projects of higher complexity are likely to face lower competition and hence earn higher margins.

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, lift irrigation and balance of plant contract in power sector
- Low complexity: City roads, canals and basic irrigation contracts and other civil works

Risk Management and Contract Execution

A key component in profitability is managing contract risk, building on budget and as per contract specifications. Depending on experience and attitude towards risk, management teams are likely to apply varying levels of scrutiny and discipline in the bidding phase of a contract.

Ind-Ra gauges the robustness of this parameter through historical data on provisioning, losses on contracts, receivables aging and track record of timely completion and invocation of BGs by customers or by the company on its suppliers.

Risk and dispute management procedures shall be gauged through documented procedures and checks and balances formally put in place (as explained by the management). If this does not exist, then the stated policy of the management as evidenced by track record would be taken in to account.

Bidding Discipline

Highly rated engineering and construction companies have consistent formal risk management frameworks that apply disciplined hurdle rates for bidding, ensuring limited margin contraction during a downturn. Weaker-rated entities tend to be considerably less disciplined in a downturn, often forced into outbidding competition to maintain order book growth and the corresponding flow of advance payments that they often depend on. Stronger-rated entities tend to be conservative when entering new markets, setting larger-than-normal project margins and advance payment rates to mitigate the increased risk of dealing with new sub-contractors and counterparties.

Track record of bidding discipline can be gauged through i) the volatility in margins and ROCE, ii) the difference between L1 and L2 in the projects won by the company and iii) the difference against the project cost assessed by the customer.



Figure 5					
Execution	Ability	and	Contract	Risk	Management

Rating category	Risk management and contract execution	Bidding discipline	Revenue base (INR million)	Execution track record
A or above	Successful contract execution with non- recurring historic losses and good dispute management procedures.	Good track record of bidding discipline. Management policies clearly articulate the risk and reward of pricing contracts.	20,000	Execution track record in highly complex projects size in all sectors in which the company is present. Ability to bid directly for all projects
BBB	Some occurrence of contract losses but appropriately managed. Evidence of successful claims and arbitration for large losses.	Evidence of bidding discipline.	3,000	Execution track record in moderately complex projects. Partial reliance on other contractors in bidding for more complex projects
BB or below	Poor track record in contract execution with recurring contract losses; poor dispute management capability.	Aggressive margin bidding	1,000	Execution track record in simple projects. Works primarily as sub- contractor

Source: Ind-Ra

Financial Risk Profile

Profitability

Profitability levels and trends serve a number of analytical functions. Cost parameters are not important determinants of profitability for companies in this sector (each contract has its own complexity). Instead, profits are driven by ability to provide value added services and execute complex projects. A sudden decline in margins may reflect increased competition or loss making contracts with corresponding provisions

Figure 6	
Sub-Factor:	Profitability

		EBIT	CFO	Profitability
Category	Volatility of profitability	margin (%)	margin (%)	headroom (%)
A or above	Volatility of profits in line with industry average.	10	5	5
BBB	Higher volatility of profits than industry average.	8.5	Near zero	2
BB	Volatility of profits viewed as a negative outlier for the industry.	7	Negative	<2
В	Volatility of profits viewed as a negative outlier for the industry	5	Negative	Negative
Source: Ind-R	a			

Volatility of profitability will be measured through a graph of margins of many companies in the sector on the same chart and outlier volatility will be identified by visual inspection. A steady parallel to the X-axis, while the other companies' margins are moving up and down may yield a positive outlier. Similarly a widely fluctuating line while the others are more or less steady can point to a negative outlier. It should be noted that both these measure are better at identifying outliers and calibrating in the middle spectrum (BB to A) may not be accurate and where important should be left to the discretion of the rating committees.

EBIT margins are used as measure of profitability as it captures the impact of capital intensity of the operations and enables comparison of companies which use own machinery and those that do not. Ind-Ra also uses profitability headroom (ROCE minus cost of borrowing) to understand the impact of capital intensity.

Companies at higher Investment grade will have stable operating cash flow margins (CFO margins) while lower rated entities will have near zero or negative CFO's indicating reliance on external source to fund the working capital requirement.





Financial Structure

Ind-Ra is cognizant of the fact that leverage matrices of construction companies are more conservative due to their negative working capital cycle and higher operating risk profile as compared to the over-all corporate universe.

While Ind-Ra does not strip out the benefit of the negative working capital entirely since it is an inherent part of the business, It would, on a case to case basis assess the ability of companies to continue to maintain such cash flow benefits. Higher rated entities would continue to maintain their order book intake and advance inflows at high levels, while maintaining their longer credit period with suppliers and sub-contractors. Entities rated lower are unlikely to retain the benefits of negative working capital and some unwinding of working capital is modelled while computing forward looking leverage ratios.

Higher-rated entities will typically have a liquid concession portfolio that could comfortably repay all corporate gross debt for investments (excluding debt related to working capital and capex). On the other hand, lower-rated entities tend to have fairly illiquid portfolios which are unlikely to be able to repay all corporate gross debt.

Ind-Ra calculates the Concession Value (value of equity held by the company being rated) based on Discounted Cash Flows of the concession. However, in case information is not sufficient to arrive at Concession Value, Concession Book Value as per company's disclosures should be used.

Figure 7
Sub-Factor: Financial Structure

Category	Lease adjusted FFO net leverage (x)	Corporate gross debt/ concession value (x)	Total adjusted debt/ operating EBITDAR (x)
A or above	2	Nil	2.5
BBB	3	0.25	3
BB	3.5	0.75	4
В	5	1.0	5.5
Source: Ind-Ra			

Financial Flexibility

Financial flexibility allows an issuer to meet its debt service obligations and manage periods of volatility without eroding credit quality.

Financial Discipline

The more conservatively capitalised an issuer, the greater its financial flexibility. In general, a commitment to maintaining debt within a certain range allows an issuer to cope better with the effect of unexpected events. This is reflected in the Financial Discipline Sub-Factor.

Liquidity

Other factors that contribute to financial flexibility are the ability to revise plans for capital spending, strong banking relationships, the degree of access to a range of debt and equity markets, committed, long-dated bank lines and the proportion of short-term debt in the capital structure. These issues are incorporated in the Liquidity Sub-Factor. Once liquidity reaches a certain level, it is generally not a source of rating differentiation.

FFO Fixed Charge Coverage and EBITDAR Gross Interest+ Rent Coverage

Fixed charge coverage ratios are a central measure of the financial flexibility of an entity, which compares the operational cash-generating ability of an issuer (after tax) to its financing costs. Many factors influence coverage ratios – including general funding costs, the mix of fixed-rate versus floating-rate funding, the use of zero-coupon debt, and so on. For this reason, the coverage ratios should be considered alongside the appropriate leverage ratios.



FX Exposure

Foreign exchange exposure can also impact Financial Flexibility. Some companies may have a natural currency hedge (oil and gas), or an acceptable unhedged exposure in pegged currency regimes, given the type of products they sell and their own cost base. For other companies, there may be a material mismatch between the currency borrowed and the currency in which they have internal cash resources. Where there is a mismatch, Ind-Ra will assess the company's approach and management of that exposure.

Debt-Equity

Debt-equity ratio is often an indicator of an entity's flexibility to borrow from the banking system.

Rating category	Financial discipline	Liquidity	FFO fixed charge cover (x)	EBITDAR fixed charge cover (x)	FX exposure
A or above	Publicly announced conservative financial policy. Track record of strict compliance.	Very comfortable liquidity. One-year liquidity ratio above 1.25x. Well-spread debt maturity schedule. Diversified sources of funding.	3	3.5	Unhedged forex exposure within 10% of EBITDA
BBB	Less conservative policy but generally applied consistently.	One year liquidity ratio above 1.25x. Well- spread maturity schedule of debt but funding may be less diversified.	2.25	2.5	Unhedged forex exposure within 20% of EBITDA
ВВ	Financial policies in place but flexibility in applying it could lead to temporarily exceed downgrade guidelines.	Liquidity ratio around 1x. Less smooth debt maturity or concentrated funding.	1.75	2	Unhedged forex exposure within 40% of EBITDA
В	No financial policy or track record of ignoring it. Opportunistic behaviour.	Liquidity ratio below 1x. Overly reliant on one funding source.	1.5	1.5	Unhedged forex exposure higher than 40% of EBITDA



Appendix I: Management and Corporate Governance

Figure 9 Management and Corporate Governance: Sub-Factors				
Category	Management strategy	Governance structure	Group structure	Financial transparency
IND AA	Consistent and robust strategy and very strong track record in implementation	No record of governance failing; Strong management team, experienced board with presence of independent directors and functional heads	Transparent group structure; Related party transactions, if any, are insignificant and have an economic rationale.	High-quality and timely financial reporting
IND A	Coherent strategy and good track record in implementation	Good governance track record Experienced board exercising effective check and balances	Group structure shows some complexity but mitigated by transparent reporting. Related party transactions have an economic rationale.	Good quality and timely financial reporting
IND BBB	Strategy may include opportunistic/aggres sive elements but soundly implemented	Adequate governance track record	Some group complexity; No significant related- party transactions without appropriate economic rationale	Average financial reporting without significant failing
IND BB	Strategy lacks consistency/coheren ce and/or weakness in implementation	Inadequate governance structure; Very high Key-man risk	Complex group structure or non- transparent ownership structure; Presence of significant related- party transactions	Financial reporting is appropriate but with some failings (e.g., lack of interim or segment analysis)
IND B	Lack of adequate strategic planning and implementation	Poor governance structure; Significant instances of governance failing	Highly complex group with large and opaque related-party transactions or opaque ownership structure	Defective financial reporting; Aggressive accounting policies
Source: Ind-Ra				

Management and Corporate Governance

The company-specific management and corporate governance factor is composed of four subfactors: management strategy, corporate governance, group structure and financial transparency.



Sub-Factors

Management Strategy

Ind-Ra considers management's track record in terms of its ability to create a healthy business mix, maintain operating efficiency, and strengthen its market position. Financial performance over time notably provides a useful measure of the management's ability to execute its operational and financial strategies.

Corporate goals are evaluated centring upon track record and future strategy. Risk tolerance and consistency are important elements in the assessment. The historical mode of financing acquisitions and internal expansion provides insight into management's risk tolerance.

Governance Structure, Group Structure and Financial Transparency

The three other sub-factors address different aspects of the general issue of corporate governance. The purpose of addressing governance structure is to assess the way effective power within an issuer is distributed.

Elements considered are notably the presence of effective controls for ensuring sound policies, an effective and independent board of directors, succession plan, talent bench, management compensation, related-party transactions, integrity of the accounting and audit process and key-man risk.

Corporate governance operates as an asymmetric consideration. Where it is deemed adequate or strong, it typically has little or no impact on the issuer's credit ratings, i.e. it is not an incremental positive in the rating calculus. Where a deficiency which may diminish lenders' protection is observed, the consideration may have a negative impact on the rating assigned. Ind-Ra's approach to evaluating corporate governance is described in the Criteria Report *Evaluating Corporate Governance* dated 4 April 2016.

The Corporate Governance Sub-Factor focuses on the structural aspects of governance, in particular board of directors' characteristics.

Group Structure and Financial Transparency assess how easy it is for investors to be in a position to assess an issuer's financial condition and fundamental risks. These aspects are somewhat linked to Corporate Governance as high-quality and timely financial reporting is generally considered by Ind-Ra to be indicative of robust governance. Likewise, publishing intentionally inaccurate or misleading accounting statements is symptomatic of deeper flaws in an issuer's governance framework. The public exposure of techniques that subvert the spirit of accepted accounting standards or, worse yet, are designed to mask fraudulent activity can undermine investor confidence.





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