Local and State Government

Local and State Governments Rating Criteria

Master Criteria

This criteria report is a combined version of Tax Supported rating criteria and Rating Criteria for Local and Regional Governments and replaces the previous versions, dated 6 December 2018 **Scope and Limitations:** This master criteria report identifies rating factors considered by India Ratings and Research (Ind-Ra) when assigning ratings to a particular entity or debt instrument within its scope of the master criteria. Not all rating factors in the master criteria may apply to each individual rating or rating action. Each specific rating action commentary or rating report will discuss those factors most relevant to the individual rating action.

Institutional Framework: To determine the rating of an Indian local or state government, Ind-Ra first evaluates the institutional framework under which the subnational operates. In the institutional framework assessment, Ind-Ra considers constitutional and statutory regulation, control, oversight and intergovernmental fiscal transfers by the upper tiers of government, fiscal flexibility and degree of responsibilities, transparency and prudential regulations.

Five Key Rating Factors: Once the institutional framework has been assessed, Ind-Ra evaluates other five major rating factors to establish the credit quality of a local or state government. These include the quality of social and physical infrastructure, economic profile, management and administration, financial performance, and liquidity, debt and other long-term liabilities. The rating process analyses trends in these areas and seeks to identify actual and potential future obligations and exposures. In general, consistency and an ability to absorb shocks are likely to contribute to stronger ratings, while fluctuations and a limited capacity to respond to unforeseen events are likely to lead to weaker ratings.

Social and Economic Infrastructure: Ind-Ra considers the level of development in the social and physical infrastructure sectors. A better performance on social and physical infrastructure indicators is supportive of growth prospects and revenue generation potential and alleviates spending pressure on local and state government budgets.

Economic Profile: Ind-Ra's economic analysis considers the capacity of the issuer's economic base to support ongoing operations and repayment of debt and provides insight into potential future financial and debt resources or challenges.

Management and Administration: Management practices and actions can positively or negatively influence the other major credit factors. Ind-Ra considers the fiscal marksmanship to assess effectiveness of management and administration.

Financial Performance: Analysis of finances is focused on the issuer's financial resources and flexibility to support its obligations over the near and long terms.

Liquidity: Ind-Ra analyses the ability of the issuer to receive dues and make payments of the debt obligation as per schedule. The liquidity position highlights the ability of an issuer to make resources available to meet revenue requirement when there is a slump in demand or an increase in costs. The available cash position determines the strength of the liquidity profile; a strong-to-moderate cash position ensures minimum liquidity risk.

Debt and Other Long-Term Liabilities: In evaluating debt and other long-term liabilities, Ind-Ra seeks to determine the extent and nature of the issuer's outstanding liabilities and evaluates the outlook for the future with a focus on affordability and flexibility.

Interaction of Rating Factors: The major rating factors are interactive. Ind-Ra assesses each of the five ratings factors by considering the interplay between the sources of risk exposure and the corresponding risk mitigants - an issuer's exposure to cyclical and structural downturn risks

Analysts

Anuradha Basumatari +91 22 4035 6123 anuradha.basumatari@indiaratings.co.in

Sunil Kumar Sinha +91 124 668 7255 sunil.sinha@indiaratings.co.in on the one hand (robustness/sustainability) and the options available to address those risks (adjustability/flexibility) on the other. For instance, while an issuer may have a vibrant and wealthy economy, weak fiscal management or stringent tax rate limits may offset the positive credit factors, resulting in a reduced ability to meet obligations. In turn, a weak economy may be offset by other strengths, such as proactive management, higher support by way of transfers from upper tiers of government or a low debt burden.

Specific Debt Securities: For local governments, Ind-Ra's analysis focuses on specific security structures, and an assessment of the subnational credit quality. When a specific security is being rated, the rating will reflect the nature of the security, its relationship to the general credit quality of the issuer and any credit enhancements. The most common form of credit enhancers are: guarantees from upper-tier government, debt service reserve fund and upfront cash collateral.

Issuer Rating and Bottom-Up Notching: Ind-Ra's starting point is assessing the standalone credit profile of the subnational issuer. Subsequently, the degree of uplift the security rating may receive above the issuer rating — the rating assigned to its general unsecured obligations — of the subnational will depend on the legal and financial strengths of the debt structure.

The uplift is normally capped at four notches above the standalone rating based on the five key rating factors. The degree of potential uplift depends on the structure strengths, enhancements and how those enable revenues to flow uninterrupted to debt service upon financial distress of the subnational issuer.

Legal Framework of Rated Security

Legal framework in which the security is issued is the starting point of Ind-Ra's rating process. Once the agency has a reasonably clear view of legal framework it assesses the other rating factors.

Legal Pledge

A security's rating takes into account the strength of the legal pledge. The rating for a special tax security, where payment is derived from a specific tax revenue source, while still informed by the analysis of the issuer's general credit, also reflects structural factors, such as lien status, indenture requirements, and debt service coverage.

Lien Status

In tax-supported ratings, the lien status is generally only a rating consideration for special tax bonds, which normally provide a first lien on the pledged revenue. Rating distinctions between senior and subordinate lien debt generally are based on notably weaker legal protections for subordinate bonds provided by the indenture. Ind-Ra only makes such distinctions in cases where there are no cross-default provisions between the liens and, when made, the distinctions are generally small (one to two notches).

Indenture Requirements and Relevant Statutes

Similar to lien status, indenture requirements are most relevant to special tax bonds. Important indenture provisions include: the issuer's covenants, including the rate covenant (where applicable); the flow of funds; any requirements that enhance or hinder the bondholders' ability to be repaid; and recourse available to bondholders that could prevent a default. For example, the additional bonds test is key to special tax bond ratings, while legal and statutory provisions that strengthen the issuer's incentive to appropriate can enhance the rating of appropriation-backed debt. Bondholder protections that are incorporated into statute are particularly strong.

A properly structured debt service reserve fund can provide protection for special tax bondholders by providing a buffer against low tax collection periods. Ind-Ra believes this protection is more important for entities with relatively weak coverage or tax streams with significant volatility and has little impact on the credit quality of bonds whose coverage and additional bonds tests are already strong. A debt service reserve fund is also a rating factor in appropriation-backed debt where construction risk is a rating factor.

Related Criteria

Rating Criteria for Partial Credit Guarantee Debt Partial credit guarantee under different conditions may give another three-notch uplift from the four notches uplift based on structure.

Variations from Criteria

Ind-Ra's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on an instrument-by-instrument or issuer-by-issuer basis and full disclosure via rating action commentary (RAC), strengthens Ind-Ra's rating process while assisting market participants in understanding the analysis used in the ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific instrument or entity. Such adjustments are called variations. All variations will be disclosed in the respective RACs, including their impact on the rating where appropriate.

A variation can be approved by a ratings committee where the risk, feature, or other factor relevant to the assignment of a rating and the methodology applied to it are both included within the scope of the criteria, but where the analysis described in the criteria requires modification to address factors specific to the particular instrument or entity.

Institutional Framework

A study of the institutional framework in which the subnational authority operates is a fundamental and necessary beginning Ind-Ra's rating process. Once the agency has a clear view of intergovernmental relations and funding, it assesses the other rating factors.

The institutional framework, whether centralised or decentralised, influences sub-nationals' operating revenue and expenditure. To assess it, Ind-Ra looks at the revenue structure and flexibility of the subnational and the funding arrangements, if any, from the central/state government. Any equalisation mechanisms in place that could mitigate a weaker socioeconomic profile would be viewed as positive. An assessment of the type of responsibilities of the subnational, whether operating or investment focused, is also important.

A detailed description of the types of public services provided by the entity, and an understanding of the legal and regulatory environment, enables Ind-Ra to assess the degree of autonomy, rigidity of expenditure, demand for capital investment and other constraints. Full autonomy is rare, and cities and other local governments are normally subject to constitutional and statutory regulation regarding governmental powers, organisational structure, financial operations, debt issuance, and government service provision. Therefore, in most cases the central government has greater financial flexibility than states and local bodies.

In analysing the strength of the institutional framework, Ind-Ra gauges, amongst other things, the level of control the central or upper tiers of government have over the subnational. The agency views prudential regulations (e.g., debt or debt-servicing limits) favourably if they are not too restrictive. In developed markets where debt-management experience among sub-nationals is considerable, formal prudential regulations can be replaced by capital market discipline. However, in India with an evolving regulatory framework or where responsibilities have recently been devolved to the subnational, prudential regulations can act as a control mechanism for responsible debt accumulation and affordability.

Ceiling and Floor of State Government Ratings

Ind-Ra applies a ceiling and floor to its credit assessment of state governments. Under the federal structure, the state government has four major sources/heads of revenue – own taxes, own non-taxes, share in central taxes and grants from the central government. Central taxes (income tax, corporation tax, union excise duty, and customs duty) are collected by the central government and these are shared with states based on the recommendation of the finance commission (a constitutional body constituted every five years). Major responsibilities of the finance commission inter alia include: a) the quantum of central taxes to be shared with states, b) share of each state in the central taxes, c) roadmap of fiscal discipline for states, and d) allocation of state/sector specific grants to states. Proportion of devolution and grants from the centre forms a significant part of a state's aggregate revenue.

Under the constitution some states are given the special category status. These states are either small in size and/or have a difficult geographical terrain which severely limits their ability to undertake industrialisation/step-up economic activities that generates own tax and non-tax revenue and in turn limits the ability of the said states to provide and maintain a minimum level of governance. These states are eight north-eastern states, Uttarakhand, and Himachal Pradesh. They also have international borders and significant forest cover. Share of devolution and grants from the centre in the state revenue for these special category states is as high as 80%. Apart from devolution and grants, the union government at times provides a special package to a state or a region of a state to address the specific socio-economic challenges faced by the state/region.

The central government also has a tight control over the borrowings of states. As per Article 293(3) of the Constitution of India - a state may not without the consent of the government of India raise any loan if there is still outstanding any part of a loan which has been made to the state by the government of India, or in respect of which a guarantee has been given by the government of India. Thus, states' market borrowings are also subject to approval of the union government. Due to the aforesaid mechanism, Ind-Ra's floor level rating of Indian states is 'IND BBB-'. Since local bodies under the federal structure are the third tier of government, they also receive significant revenue both from the central and state governments and their market borrowings are subject to the approval from their state governments.

Lastly, since both local and state governments are subject to various policy initiatives, and the oversight and regulation framed by the upper tier government, the local and state governments cannot be rated at par with the sovereign 'IND AAA' based on their own credit profile.

Veaker Veaker Outstate by levels of control non-appenders of government Outstate by levels of control non-appenders	Stronger	 Effective oversight from upper tiers of government Strong horizontal and vertical fiscal transfer mechanism Realistic prudential ratios with benefits for adherence Formula driven and predictable transfers systems
 No predictability in the funding from upper tiers of government, Limited or inadequate controls in place 	lidrange	 Formula driven horizontal but limited vertical fiscal transfer mechanism Some prudential regulations in place
	Veaker	No predictability in the funding from upper tiers of government,

Social and Physical Infrastructure Performance

The level of social and physical infrastructure has a strong link with the fiscal performance of the issuer. A relatively less developed social and physical infrastructure means a higher burden on the issuer's budget.

It is widely recognised that the availability of good social and physical infrastructure facilities are vital for an economy. If well developed, they stimulate economic growth and development but if inadequate they prove to be hindrance in the growth process. Social infrastructure refers to the core elements of social change such as education and health implying the development of skilled personnel as well as healthy and efficient human beings. Physical infrastructure refers to elements such as power, roads, transport and communication etc. which are critical for economic activities and growth. At the local government level, Ind-Ra considers the local bodies' track record on delivery of key basic civic services such as water supply, sewerage system, storm water drainage and solid waste management.

Figure 2 Attribute	s: Social and Physical Infrastructure
Stronger	 Well-developed, diverse and stable social and physical infrastructure base Strong visibility with respect to long term planning and development of social and physical infrastructure base Institutionalised and prudent budgetary/non-budgetary mechanism to sustain/improve social and physical infrastructure Strong ability and fiscal flexibility to make adjustments/allocate resources as needed during the fiscal year
Midrange	 Diverse and stable social and physical infrastructure base Moderate visibility with respect to long term planning and development of social and physical infrastructure base Budgetary/non-budgetary mechanism to sustain/improve social and physical infrastructure Moderate ability and fiscal flexibility to make adjustments/allocate resources as needed during the fiscal year
Weaker	 Weak social and physical infrastructure base Lack of long-term planning to develop social and physical infrastructure base Weak budgetary/non-budgetary mechanism to sustain/improve social and physical infrastructure Weak ability and limited fiscal space to make adjustments as needed during the fiscal year
Source: Ind-Ra	

Debt and Other Long-Term Liabilities

In evaluating debt and other long-term liabilities, Ind-Ra seeks to determine the extent and nature of the issuer's current liabilities and evaluates the outlook for the future, with a focus on affordability and flexibility.

Debt Ratios and Trends

Debt analysis includes a review of trends in the amount of debt issued and outstanding. Ind-Ra analyses the trend in debt in relation to resources. Sustained increases in debt at a rate in excess of economic growth may ultimately overburden a tax base and strain budget resources.

Ind-Ra uses various ratios to measure the burden of debt on the issuer's population and tax base. Calculations include all long-term, fixed obligations of the issuer, excluding unfunded pension and other post-employment benefit (OPEB) liabilities, which are considered separately in the context of an issuer's overall long-term liabilities. In general, a low debt burden is a positive credit factor.

For special tax supported bonds, debt ratio analysis includes the calculation of historical, current, and projected coverage of debt service by the pledged revenue source.

However, ratings should not change due to routine cyclical swings. Economic downturns are inevitable, and even if an issuer's financial performance does not correlate to the broader economy, significant year-to-year variations in revenue, expenditure and debt costs may be evident. Ind-Ra believes that ratings should account for this. On the other hand, structural shifts (broad shifts different from the ebb and flow of a routine economic cycle) are also inevitable. Ind-Ra's assessment make the distinction between the two and communicates what may rise to the level of a credit event and what is already anticipated in the current rating.

Future Capital and Debt Needs

Debt factors are considered within the context of the issuer's infrastructure needs and capital plans. Current debt levels may be low; however, future capital projects may significantly increase debt ratios, weakening the issuer's debt profile. Ind-Ra evaluates the impact of expected future debt on the issuer's debt ratios and follows a comprehensive and realistic approach to capital planning. The issuer's ability to meet its capital needs where there are restrictions on debt issuance is also evaluated.

Debt Structure

Ind-Ra reviews the types and proportions of debt utilised and the rate at which the debt is repaid. The review of outstanding debt also includes an assessment of the uses of borrowed funds, with uses for non-capital purposes viewed as credit weakness.

Another consideration is the percentage of fixed-rate debt in the issuer's debt portfolio. Ind-Ra views high levels of short-term debt, variable-rate debt, and/or derivatives with concern, as they expose the issuer to the possibility of unexpected and, in extreme cases, unaffordable future financial demands. Ind-Ra evaluates whether the issuer has a clear understanding of the benefits and risks of entering into these types of transactions.

Indirect Risks and Contingent Liabilities

In looking at an issuer's debt obligations, Ind-Ra examines not only liabilities directly incurred and payable by the issuer but also outstanding debt of state-owned enterprises and agencies for which the issuer may in the future have an obligation. Examples include moral obligations, where the issuer may support but is not legally obligated to support – the debt upon failure of the primary security, and needs of related governmental entities that may require financial resources of the rated issuer. Such obligations are monitored but typically excluded from direct debt calculations unless the issuer's resources have been relied on to cover the obligation during the past three years.

All state governments provide guarantees on the loans raised by their public sector enterprises and other government bodies. Guarantees are contingent liabilities of a state in cases of default by the borrowers for whom the guarantees have been extended. Ind-Ra examines the adherence to guarantee ceilings, wherein states have established such a ceiling, and outstanding amounts in the guarantee redemption fund, which as a prudent measure is required to be established, to discharge the liabilities arising out of the guarantee invoked.

Figure 3 Attributes	: Debt and Other Long-Term Liabilities
Stronger	 Low overall debt levels as measured by debt to current revenue or gross state domestic product (GSDP) Low debt service burden Modest future capital and debt needs, with comprehensive long-term capital planning; Predominantly fixed-rate, amortising debt Limited indirect risk and strong liquidity Substantial available liquidity, without requiring external short-term borrowing
Midrange	 Moderate overall debt levels as measured by debt per current revenue or GSDP Affordable debt burden Manageable future capital and debt needs with identified funding sources; attention to long-term capital planning Mostly fixed-rate, amortizing debt Sound available liquidity
Weaker	 Above-average to high overall debt levels as measured by debt to current revenue or GSDP High debt burden Large future capital and debt needs without identified funding sources; limited attention to long-term capital planning leading to deferred maintenance Elevated levels of short-term debt Low liquidity levels; reliance on short-term borrowing to meet routine obligations
Source: Ind-Ra	

Economy

Ind-Ra's economic analysis considers the capacity of the issuer's economic base to support balanced operations and repayment of debt, capital expenditure needs and provides insight into potential future financial and debt resources or challenges.

Major Economic Drivers

The evaluation of the economy begins with a determination of the types of economic activity that dominate the area. For example, some issuers are heavily reliant on an industry like automobile manufacturing or natural resource mining, while others have a more diverse base. A broad, diverse, and stable economy is credit strength, and undue concentration on one or a small group of industry sectors or taxpayers, or a high level of cyclicality may be cause for concern. For issuers (local bodies) that are dependent on property taxes for a large proportion of their revenue, Ind-Ra pays particular attention to the level of and trends in the valuation of the total tax base and the largest taxpayers.

Other Demographic Factors

Ind-Ra reviews key demographic metrics, particularly population trends. Although population growth is usually considered a positive factor, population stability can also be a positive rating consideration, particularly for states that do not have a wide range of service demands and spending pressures. Conversely, high-growth areas can pose risks, as capital needs are often great, and providing the appropriate level of infrastructure and services to match, but not exceed growth needs can be difficult. Ind-Ra considers the reasons a particular area attracts or loses population. Demographic structure and projections are also important for assessing future expenditure pressures, particularly in healthcare, education and infrastructure.

Tax Rate and Base

Comparing the level of taxation, can provide an indication of competitiveness, financial flexibility, and/or tax relief pressures. The level of taxation can either encourage or hinder economic development. If the tax burden is already high, an increase may be difficult to implement and have ill effects. Ind-Ra reviews tax rates in comparison to those of similar entities nationally and other entities in the region. For local bodies, Ind-Ra assesses trend in key taxes such as property and water taxes and their collection efficiency.

Figure 4 Attributes	s: Economy
Stronger	 Broad, diverse, and stable economic base Lack of taxpayer concentration Consistent, moderate population and employment growth levels Stability and diversity among major employers Robust wealth indicators, including personal income per capita Moderate tax burden relative to area or other similar communities nationally Good infrastructure and business environment
Midrange	 Fairly diverse economic base Moderate taxpayer concentration Stagnant or rapidly growing population Moderately diverse employment base, with some dominance of a few industries or employers Sound wealth indicators, including average to above-average personal income per capita Moderate infrastructure and business environment
Weaker	 Small limited or concentrated economic base Taxpayer concentration Declining or extremely rapidly growing population Dominance of one or a handful of industries or employers Unfavourable demographic profile Below-average wealth indicators Weak infrastructure and business environment
Source: Ind-Ra	

Management and Administration

The quality and effectiveness of governance and management is an important consideration in Ind-Ra's evaluation of creditworthiness as management's decisions and initiatives – subject to the oversight and strategic direction ultimately determine an entity's long-term financial viability. Management practices and actions can positively or negatively influence the other major credit factors.

Institutionalised Policies

Ind-Ra views positively the implementation of and consistent adherence to sound processes and policies for budgeting/resource allocation, debt, and financial operations. Notable policies include established rainy day reserve funds (particularly those with automatic funding sources and limits on use), multiyear revenue and expenditure forecasts, restricting use of nonrecurring revenue to nonrecurring expenses, sound capital planning, and debt affordability guidelines.

Budgeting Practices

Ind-Ra reviews an issuer's budgeting/resource allocation practices, particularly revenue and expenditure estimations, and compares the key assumptions included in an issuer's budgets to actual revenues and expenditures over time. Ind-Ra views conservative estimates favourably and is concerned if an issuer does not appear to be incorporating fully current economic, political, or financial conditions. Regular intra-year budget reviews, although rare at state and local bodies, can allow an issuer to identify underperforming revenues or overspending in time to make necessary adjustments to eliminate or lessen budget/resource allocation gaps and are also a positive credit factor.

Financial Reporting and Accounting

Where established accounting practices exist, Ind-Ra expects the issuer will be in compliance. Additional financial reporting, such as interim revenue reporting throughout the year, is viewed positively.

Revenue and Spending Limitations

Establishing and adhering to policy guidelines is considered a credit positive. However, onerous statutory or constitutional operating limitations are potential credit risks. Additionally, Ind-Ra recognises that, in some instances, practical limitations are just as restrictive. An inability to generate sufficient revenue or fund needed services to adequate levels due to political or other practical concerns can have long-term implications for an issuer's financial and economic health.

Stronger	 Highly efficient decision-making process, based on financial prudence 				
	Highly efficient delivery mechanism using electronic platform for providing government services/collection of taxes				
	 Institutionalised, prudent financial and debt management policies 				
	 Conservative and thorough budgeting process with regular interim reviews, contingency planning, and the ability to make adjustments as needed during the fiscal year 				
	Long-term financial planning process				
	 Good level of transparency and disclosure 				
	Timely financial reporting				
	 Good financial marksmanship (actual vis-a-vis budgeted/allocated operating revenue, operating expenditure and capital expenditure) 				
Midrange	 Efficient decision-making process Efficient delivery mechanism using electronic platform for providing government services/collection of taxesFinancial and debt management policies that may be somewhat less conservative but still reasonable and, if not followed, a process is in place to regain compliance 				
	 Realistic budgeting process and some ability to make adjustments during the fiscal year Good level of transparency but limited public disclosure 				
	Timely financial reporting				
	 Moderate financial marksmanship (actual vis-a-vis budgeted/allocated operating revenue, operating expenditure and capital expenditure) 				

Figure 5	
i igule J	

Weaker

Attributes: Management, Administration and Reforms

- Often cumbersome decision-making process; resolution of key issues is problematic
 Weak delivery mechanism using electronic platform for providing government
 - Financial and debt management policies not present or not consistently followed,
 - Infancial and debt management policies not present of not consistently followed, without plans to gain compliance
 - Optimistic budget assumptions and inflexible budget amendment process that makes midyear adjustments difficult
 - · Weak level of disclosure or reliability of accounts
 - Financial reporting delayed
 - Poor financial marksmanship (actual vis-a-vis budgeted/allocated operating revenue, operating expenditure and capital expenditure)

Source: Ind-Ra

Event Risks

Where relevant to the sector and material to the rating, Ind-Ra explicitly considers the potential event risks that may adversely affect the issuer's ability to repay the debt. Event risks arising from natural hazards as well as human error or mechanical malfunctions are identified and the management of the relevant risks evaluated. Ind-Ra also evaluates issuers ability to safe guard itself from such unforeseen events. Where it is determined that a credit has vulnerability to event risk, mitigating factors will be evaluated. Some issuers have multiple assets and analysis may consider a single event unlikely to affect all assets to such an extent that it would hurt timely payment of debt. The debt will not be affected so long as there is sufficient liquidity to get through the immediate impact of the event. In these cases where operating characteristics and revenue frameworks provide mitigation of risk, self-insurance may be a common option for an issuer. In some cases, risk mitigation will not be sufficient and the rating may be capped below an investment-grade threshold depending on vulnerability to the uninsured risk.

Financial Performance

The analysis of an issuer's finances is focused on evaluating the issuer's financial resources and flexibility to support its obligations over the near and long term.

Financial Reporting and Accounting

Where established accounting practices and requirements exist, Ind-Ra expects the issuer to be in compliance with them. Additional financial reporting, such as interim revenue reporting throughout the year, is viewed positively. Budgetary and cash flow presentations are the most commonly available form of financial disclosure for sub-national entities.

Revenue Analysis

Ind-Ra reviews revenue sources through a combination of growth, volatility and diversity. In general, a diverse revenue system with a foundation of broad-based taxes is more stable and better able to capture the issuer's economic wealth, resulting in a stronger financial profile. The analysis of the revenue system identifies the revenue drivers, establishing the links with the socio-economic profile of the issuer - the base on which taxes are levied and collected. These mainly include the diversity of the economy, demographic trends and the structure of key industries. An issuer's ability to control its own revenue sources, including the power to adjust tax rates, is an important credit positive. For entities that rely heavily on funding from upper tiers of government, Ind-Ra evaluates the consistency of the funding and how potential adjustments would affect the rated issuer.

Expenditure Analysis

After evaluating an issuer's spending responsibilities and policy positions, Ind-Ra reviews trends in expenditures, the issuer's flexibility to make adjustments in spending (both as part of the annual budget/allocation process and during the course of the fiscal year), and the expected stability in each major spending item. For example, an issuer with a high fixed-cost burden or a high committed expenditure (salary, pension, interest payment etc.) will generally have less flexibility to make meaningful spending cuts than one with a low fixed-cost burden or a low committed expenditure. The analysis also considers potential funding pressures, including outstanding litigation. The centralised ability, or mandate, to implement timely spending cuts to maintain balance with the pace in revenue growth is a credit strength.

Operating Margin Trends

Ind-Ra evaluates recurring revenues, compared with recurring expenditures. Concerns arise when operating expenditures consistently exceed operating revenues, as the use of nonrecurring revenue is unsustainable and usually leads to depletion of reserves and deeper financial imbalances.

Fund Balance and Reserve Levels

Ind-Ra views a satisfactory fund balance as an important cushion against potential revenue and expenditure volatility. The amount Ind-Ra considers satisfactory varies based on such factors as economic or tax base concentration, revenue and/or expenditure volatility, and flexibility to adjust revenues and spending. Established reserves that benefit from automatic funding mechanisms and clear restrictions on use are the strongest credit features. Fund balances that have been maintained consistently over time also are beneficial. Similarly, segregated funds that are available, or could be made available, for general expenditures can contribute to financial flexibility.

Liquidity

Ind-Ra considers both - the liquidity needs and liquidity resources (internal and external) - to analyse the ability of the issuer to make payments of the debt obligation as per the schedule. The analysis of the issuer's liquidity position takes into the consideration the outstanding cash and bank balances and investment position of the issuer, receipts and expenditures in the revenue and capital accounts, capex funding, interest servicing and debt repayment obligations, and any committed undrawn bank lines. The liquidity position highlights the ability of an issuer to make resources available to meet revenue requirements and debt payment obligations when there is a slump in demand or an increase in costs. The available cash position determines the strength of the liquidity profile; a strong-to-moderate cash position ensures minimum liquidity risk.

State governments have access to financial accommodation from the Reserve Bank of India in the form of Ways and Means Advances (WMA) to manage temporary cash flow mismatches. States can also avail special drawing facility, which is extended to them by the Reserve Bank of India against the collateral of government securities. In addition to WMA, overdraft facility is also provided to states whenever financial accommodation exceeds special drawing facility and WMA limits, which carries higher interest rates.

Stronger	 Diverse stable and broad-based sources of operating revenue with substantial flexibility to be increased, if needed
	 Ample ability to adjust spending, either as part of the budget/allocation process of during the fiscal year, without undue impact on service provision
	 Consistently positive operating margins
	 Ability to easily adjust capital expenditure and high proportion of capex funded freinternal resources
	 Consistently sound reserve levels, with automatic funding mechanisms and clear restrictions on their use
Midrange	 Somewhat concentrated operating revenue, but in a relatively broad-based, stable source, with some flexibility to be increased, if needed
	 Some ability to make spending adjustments, although avenues to make reductions may be limited without affecting services, or less timely.
	 General trend of positive operating margins
	 Moderate proportion of capex funded from the current balance
	 Satisfactory reserve levels maintained over time, although some year-to-year fluctuation may be present
Weaker	Severely limited revenue flexibility particularly in a declining revenue environmer
	 Spending levels heavily dictated by long-term contracts or other agreements tha make adjustments difficult, if not impossible
	 Trend of negative operating margins
	 Consistent budget/expenditure deficits and capital expenditure funded essentiall from borrowing

Rating Approach: Specific Debt Securities Backed by Pledged Receivables

The issuer rating assigned by Ind-Ra evaluate the willingness and capacity of an entity to make timely payments on its financial obligations, without considering any specific guarantee, enhancements or subordination. When a specific security is being rated, the rating will reflect the nature of the security, considering its legal and financial strengths, its linkage to the general credit quality of the underlying issuer and any credit enhancements.

In general, this approach applies to securities backed with specific revenues Ind-Ra classifies as operating revenues, whether these are directly collected by the subnational/local government, or collected by the national or state government and subsequently transferred to the subnational/ local government.

Revenues used to secure and prioritise debt service payments typically include federal or other specific central/state government transfers, as well as cash flows derived from property taxes, vehicle taxes, or other taxes, fees, user charges and revenues where the subnational entity continues to own and control the revenue.

While sources of revenue flows and the structures designed to capture these flows may vary from entity to entity, the criteria outline the principles necessary to notching up from the long-term rating of the issuer to the debt instruments they may issue.

Rating Factors

To determine the rating of the specific security, Ind-Ra considers the following factors:

- Impact of the proposed additional secured/unsecured debt on the issuer rating, if any;
- Analysis of the revenue pledged as a source of payment;
- Structure of the financing, and the protection it provides for holders of the security;
- DSCRs and any credit enhancements; and
- Legal protection for creditors.

The characteristics, strengths and weaknesses of each factor are analysed, and no specific weighting of such factors is made to reach a particular rating or for notching above the issuer rating.

Evaluating Pledged Flows

Ind-Ra requests monthly historical information regarding tax collections or related revenues being pledged. Growth rates in nominal terms for different periods are evaluated, and projections are made considering scenarios described in the coverage analysis section.

Subnational/local governments create a security pledge and some form of custodial arrangement to prevent an interruption or a redirection of cash flows from security/loan repayment. Ind-Ra evaluates demonstration of irrevocability features and notifications of such pledges may favourably impact the rating of a security.

If there is an interruption of the revenue source or a shortfall in pledged revenue, structures establish an obligation for the subnational or local government to cover revenue shortfalls with other resources.

Financing Structure

Ind-Ra reviews the waterfall mechanism of the transaction structure, any segregation into subaccounts, funding and maintenance of reserve funds, covenants or triggers established, responsibilities and obligations of the trustee, and all factors in general that provide greater financial certainty to creditors and/or investors.

Pledged revenues are transferred to the escrow account, then segregation is made to each account of interest, sinking fund and reserves funds to complete debt service payment. Finally, if excess cash flow remains, funds are transferred to the issuer.

For covenants established in the trust and financing documents, Ind-Ra also considers covenants that limit future borrowing in addition to the usual trigger to maintain a DSCR higher than a required minimum. Ind-Ra evaluates the historical and projected performance of financial metrics relative to the trigger limits established at the security contract/agreement.

Coverage Analysis

Ind-Ra will evaluate a DSCR scenario that serves as the agency's expected case that factors a slowdown in revenue performance. This case serves as a rating case. The rating case will consist of a through-the-cycle performance that incorporates a combination of revenue pledged and debt service stresses. These stresses may incorporate a particular scenario of events in which the pledged revenues/receivables are vulnerable to a downturn in economic activity, significant increase in operating expenditure and/or interest rate volatility.

When analysing debt securities in structures demonstrating strong coverage metrics, Ind-Ra usually limits uplift for the debt instrument to up to four notches above the issuer rating (see the Appendix A). Strong coverage means Ind-Ra generally expects revenues pledged to be enough to cover debt service payments under the Ind-Ra's rating case scenario without using reserve funds.

Legal Considerations

The information Ind-Ra analyses from a legal perspective (based on external legal opinion) includes laws and regulations applicable in public debt; government orders and/or agreements of authorisation to incur debt, legal authorisation to pledge resources for debt repayment and constitute custodial mechanisms to hold the revenues that support debt service; loan agreements and/or issuance offering memos; trust agreements; irrevocable instructions to pledge resources, among others documents particular to a transaction.

The irrevocability features of the structures and actions taken by a subnational to legally pledge revenues to debt securities, and the legal language of the documents that protect investors and lenders from actions that may affect the assets' performance, are the essential factors assessed in Ind-Ra's review to effectively apply the uplift approach for rating the security.

Ind-Ra considers that such irrevocability features are an important protection against political risks, such as changing political agendas or government administration changes, and some financial risks, such as short-term liquidity pressures.

Rating Sensitivity

Securities ratings are linked to the issuer ratings. Any movement in the issuer rating could change the security rating in the same direction. Any additional robust enhancement extended to lower the securities' likelihood of default could upgrade the security rating. Any covenant violation established in the transaction documents that could increase the likelihood of default or affect the credit profile of the subnational could result in a downgrade of the security rating.

While the asset pledge analysis; financing structure, financial and legal system and entity coverage analysis for a particular subnational/local government may suggest up to a four-notch uplift from issuer rating, the instrument rating will have a cap of 'IND AA+'.

However, under two circumstances bond/loan rating of a local government can be IND AAA(CE) – (i) the presence of an unconditional, irrevocable, pre-default and continuing guarantee from the sovereign both for principal and interest payments throughout the life of the instrument or (ii) the presence of a full/partial credit guarantee from multilateral donor agencies.

Credit Enhancements by way of Partial Credit Guarantee (PCG)

Ind-Ra evaluates additional credit enhancements debt securities may have, which could extend the security rating uplift to above four notches. When a PCG provided by third parties is incorporated, the additional notching of the security ranges from one to three notches, depending on the strength of the enhancements and PCG extended on the principal amount, assuming the security's first line of defence (assessed in the Appendix A) is depleted or interrupted.

The nature and terms of a PCG can vary. Ind-Ra assesses the presence of the following key elements to provide additional uplift to a security rating:

- Repayment of any draws on a PCG must be subordinated to debt service payments on the securities;
- The PCG must have a term at least equal to the term of the securities benefited by the PCG;
- Reimbursement of a PCG can be made from future excess over debt service on the security; if the reimbursement does not replenish the drawable balance of the PCG, the remaining balance will be used to determine notching uplift;
- Timeliness of payment under a PCG will be evaluated to assure draws can occur before default on the benefited securities. Ind-Ra will follow its Partial Credit Guarantee criteria for credit enhancement through a PCG.

Note on Sources

Ind-Ra's analysis and rating decisions are based on relevant information available to its analysts. The sources of this information include the issuer and/or the obligor, the financial advisor if a financial advisor is engaged and the public domain. Sources also include relevant publicly available information on the issuer, such as financial statements, regulatory filings, audited reports of Comptroller and Auditor General and different reports tabled in state legislatures and Parliament. The rating process may also incorporate the information provided by other third-party sources. If this other third-party information is material to the rating, the specific rating action will disclose the relevant source.

Appendix A

Figure 7

Notching Guidelines for Specific Securities – Pledge is from Own Resources

Asset pledge analysis	Structure, financial and legal strength				Coverage analysis
Asset performance	Legal foundation ^b	Trustee monitoring	Interest rate risk	DSRA	DSCR ^a
Stability in asset performance, resilient behaviour under downturn economic cycles. Historical positive growth rates	Robust legal foundation. Transaction full compliance with regulations, enforceability of terms agreed and irrevocability features	Pledged revenues are set apart in trust or other custodial arrangement and are sufficient to ensure full and timely debt service payment	Fixed interest rate obligation	Robust DSRA (upfront for one year or more) that reduces liquidity risks and provisions for replenishment if used	High DSCR in rating case (DSCR>2x)
Asset performance in line with national/regional economic performance	Sound legal foundation with some contingencies	or other custodial arrangement and are sufficient to ensure full and timely debt	Exposed to variable interest rate risk	Moderate DSRA (less than one year)	Moderate DSCR in rating case (1x>DSCR<2x)
Uncertain asset performance under adverse economic scenarios. Frequent penative growth rates	Sound legal foundation with some contingencies	Weaker structure and monitoring	Exposed to variable interest rate risk	No DSRA	Low DSCR in rating case (DSCR<1x)
	Asset performance Stability in asset performance, resilient behaviour under downturn economic cycles. Historical positive growth rates Asset performance in line with national/regional economic performance Uncertain asset performance under adverse economic	Legal foundation ^b Stability in asset performance, resilient behaviour under downturn economic cycles. Historical positive growth ratesRobust legal foundation. Transaction full compliance with regulations, enforceability of terms agreed and irrevocability featuresAsset performance in line with national/regional economic performanceSound legal foundation with some contingenciesUncertain asset performance under adverse economic scenarios. FrequentSound legal foundation with some contingencies	Legal foundation ^b Trustee monitoringStability in asset performance, resilient behaviour under downturn economic cycles. Historical positive growth ratesRobust legal foundation. Transaction full compliance with regulations, enforceability of terms agreed and irrevocability featuresPledged revenues are set apart in trust or other custodial arrangement and are sufficient to ensure full and timely debt service paymentAsset performance in line with national/regional economic performanceSound legal foundation with some contingenciesPledged revenues are sufficient to ensure full and timely debt service paymentUncertain asset performance under adverse economic scenarios. FrequentSound legal foundation with some contingenciesWeaker structure and monitoring	Asset performanceLegal foundationbTrustee monitoringInterest rate riskStability in asset performance, resilient behaviour under downturn economic cycles. Historical positive growth ratesRobust legal foundation. Transaction full compliance with regulations, enforceability of terms agreed and arrangement end terms agreed and arrangementPledged revenues are set apart in trust or other custodial arrangement and are sufficient to ensure full and timely debt service paymentFixed interest rate obligationAsset performance in line with national/regional economic performanceSound legal foundation with some contingenciesPledged revenues are set apart in trust or other custodial arrangement and are sufficient to ensure full and timely debt service paymentExposed to variable interest rate riskUncertain asset performance under adverse economic scenarios. FrequentSound legal foundation with some contingenciesWeaker structure and monitoringExposed to variable interest rate risk	Asset performanceLegal foundation ^b Trustee monitoringInterest rate riskDSRAStability in asset performance, resilient behaviour under downturn economic cycles. Historical positive growth ratesRobust legal foundation. Transaction full compliance with enforceability of terms agreed and set apart in trust enforceability featuresPledged revenues are set apart in trust or other custodial arrangement and are service paymentFixed interest rate obligationRobust DSRA (upfront for one year or more) that reduces inquidity risks and provisions for replenishment if usedAsset performance in line with national/regional economic performanceSound legal foundation with some contingenciesPledged revenues are set apart in trust or other custodial arrangement arangement and are set apart in trust or otherExposed to variable interest rate riskModerate DSRA (less than one year)Uncertain asset performance under adverse economic scenarios. FrequentSound legal foundation with some contingenciesWeaker structure and monitoringExposed to variable interest rate riskNo DSRA

^b Based on external legal opinion Source: Ind-Ra

Appendix B

Figure 8 Key Development	al/Financial/Credit Ratios	
Ratio	Calculation	Significance
Debt, other long-term liabilities	Debt/GDP, debt servicing/operating balance, PSU debt and guarantees outstanding (loan and principal) given to PSU	Debt is a crucial aspect in evaluating credit risk. Fundamentally, economies may have good economic and fiscal foundations, but high debt could undermine this solid base, leading to stress on debt-servicing obligations
Economic profile	Average annual GDP growth, share of agriculture industry and services in the economy, growth volatility, per capita income ratio, proportion to national income	The economic structure and growth are the key drivers of entity's own revenues. A favourable economic structure and higher GDP growth mean lower dependence on the share in national tax or grants/subsidies. A higher share of own revenue in total revenue indicates lesser reliance on grants from the upper tier of government for ULBs.
Financial performance	Revenue receipt growth, proportion of own revenue in total revenue, non-tax revenue to total revenue, own revenue buoyancy, state's own tax revenue/GDP, revenue expenditure growth, proportion of development expenditure in revenue expenditure, proportion of selected committed expenditure in revenue expenditure, capital expenditure growth, revenue balance/GDP, operating balance/operating revenue, fiscal balance/GDP, primary balance/GDP, ways and means advances utilisation ratio. ULB's operating margin, operating ratio, capital expenditure to total expenditure ratio, debt servicing ratio, capital utilisation ratio, dependency ratio and liquidity position	The fiscal performance captured by the trends in a variety of fiscal ratios defines the fiscal strength/weakness of the entity. It also allows the assessment of the entity's ability to carry out its stated economic and policy objectives in the short/medium term and in turn entity's developmental prospect.
Management and administration	Adherence to FRBM act, guarantee ceilings, fiscal marksmanship, establishment of, sinking fund, guarantee redemption fund, sectoral reforms/initiatives and electronic platform for providing government services	Strong management and reforms measures undertaken by an entity ensure success of policy interventions and adoption of best practice in financial management
Source: Ind-Ra		

ALL CREDIT RATINGS ASSIGNED BY INDIA RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: HTTPS://WWW.INDIARATINGS.CO.IN/RATING-DEFINITIONS. IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEBSITE WWW.INDIARATINGS.CO.IN. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. INDIA RATINGS' CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE.

Copyright © 2021 by Fitch Ratings, Inc., Fitch Ratings, Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax. (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings, India Ratings and Research (Ind-Ra) relies on factual information it receives from issuers and underwiters and from other sources Ind-Ra believes to be credible. Ind-Ra conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information if receives from issuers and underwiters sources are available for a given purisdiction. The manner of Ind-Ra's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction or any third-party verification on any the information Ind-Ra relies on in connection with a rating will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Ind-Ra and to the market in offering documents and other reports. In issuing its rating Round that neither an enhanced ta total information addresses are responsible for the accuracy of the information they provide to Ind-Ra and to the ma

The information in this report is provided "as is" without any representation or warranty of any kind. An Ind-Ra rating is an opinion as to the creditworthiness of a security. This opinion is based on established criteria and methodologies that Ind-Ra rating is an opinion as to the creditworthiness of a security. This opinion is based on established criteria and methodologies that Ind-Ra is continuously evaluating and updating. Therefore, ratings are the collective work product of Ind-Ra and no individual, or group of individuals, is solely responsible for a rating. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Ind-Ra is not engaged in the offer or sale of any security. All Ind-Ra reports have shared authorship. Individuals identified in a Ind-Ra report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Ind-Ra rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at anytime for any reason in the sole discretion of Ind-Ra. Ind-Ra does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Ind-Ra receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Ind-Ra will rate all or a number of issues issued by a particular issuer, or insured or quaranteed by a particular insurer or quarantor, for a single annual fee. Such fees are exp