



Local Government Rating Methodology

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This is an update to the methodology previously published in March 2019.
There are no material changes and as such no rating impact.

I. CRITERIA SUMMARY

This criteria report is an update to the version published in March 2019 and has no material changes in respect of ARC's approach to rating Local Governments. Please note that ARC has introduced a new section on Environmental, Social and Governance (ESG) factors with the aim of making ARC's approach to these factors clearer. The addition of these factors will not materially change our approach and thus no rating actions are expected.

II. FOREWORD

ARC's Local Government Credit Rating Methodology describes the framework for assessing an entity's willingness and ability to honour its financial obligations in full and on time. It is an international scale rating (ISR), and ratings of local governments are fully comparable to ratings of other entities rated by ARC, whether corporates, sovereigns, or structured finance obligations.

Local Government credit quality can be assessed over both the short-term and the long-term, with separate short term and long-term ratings being accorded. Long-term ratings are complemented by a rating outlook (positive, stable, negative or developing) that highlights the potential direction of a rating during the following 18 to 24 months. An outlook is not necessarily a precursor of a rating change or future follow-up ahead of schedule. The ratings are often highly correlated, but each rating is determined on a case-by-case basis. Ratings can be assigned to the issuer or to specific financial obligations, such as bonds. Bonds issued by local governments generally fall into three categories -- general obligation (GO) bonds, revenue bonds and pension obligation bonds (POBs). ARC's ratings for the different types of bonds issued by a local government can vary depending upon the specific characteristics of each bond issuance and the consequent estimation of credit risk.

Local governments possess revenue raising capacity and are responsible for the administration of public policy for a given jurisdiction. They also may rely on transfer from other levels of government for their budgets. They are responsible for financing locally-oriented government entities and public goods specific to the locale. This methodology concerns itself simply with the ratings of local governments. The regulatory and legal environment for each jurisdiction often varies considerably from sovereign to sovereign, and even from province/state to province/state, and municipality to municipality, and as such, local government ratings vary substantially from country to country, or even within a specific country.

ARC's ratings reflect an evaluation of the local authority's current financial position, as well as how the financial position may change in the future. Past performance serves as a guide, but our analysis is forward looking and follows a through the cycle philosophy, which focus on the fundamentals and minimises the volatility of ratings. To this end, the analysis focuses on a range of financial, economic, administrative, and legislative factors. ARC examines the ability of the authority to meet its obligations under reasonable and stressed scenarios. ARC's ratings are based on a clear understanding of the operating fundamentals of the rated administration and the economic environment in which it operates, so as to draw conclusions regarding the rated entity's risk profile. Assigning a credit rating is a dynamic process, as each rated entity possesses unique characteristics and assumes varying levels of risk. Ultimately, the goal of any credit analysis is to assess if, and to what extent, future cash flows cover interest

and principal payments (as well as ongoing operating expenses and liabilities), and the relative certainty associated with this coverage.

Local government ratings are often but not always capped by sovereign ratings (ARC's published Sovereign Rating Methodology is available at www.arcratings.com). They are constrained by the sovereign ceilings assigned for local and foreign currency transactions. In the event a local authority rating exceeds a sovereign rating, this must be justified by reduced Transfer & Convertibility (T&C) risk (specific to foreign currency transactions) and resilience to macroeconomic factors influencing the sovereign. The legal framework of a jurisdiction may also justify a delinking of creditworthiness, especially for highly decentralised systems of government.

ARC's analytical process focuses on the following key areas:

1. Economic and operating environment
2. Legal and institutional framework
3. Financial performance and ratio analysis
4. Funding profile
5. Management and administrative structures

III. THE PILLARS OF ARC'S LOCAL GOVERNMENT RATING CRITERIA

1. ECONOMIC AND OPERATING ENVIRONMENT

The economic environment of a local authority is critical to the rating analysis because of the jurisdiction's ability to mobilise revenues. This analysis covers demographic trends, measures of output and regional diversification, labour market performance, financial performance of households, wealth levels and recent long-term growth trends and all considerations that would support the administration's revenue base, including property value buoyancy. In general, higher per capita income levels translate into firmer revenues, and greater flexibility to raise taxes and access other funding. Even with robust economic/operating environment indicators, local populations may challenge spending priorities of a local authority, and this political backdrop also forms part of ARC's analysis. Lower per capita income levels increase the burden on local governments to fund or subsidise public goods and/or basic human services.

ARC also factors into this pillar contingent liabilities or extraordinary occurrences that could stem from macro factors, which the agency stress tests in its ratio analysis.

Key Data Point specific to the locality:

- GDP
- Per capita GDP and its percentage of the national average
- Employment and Unemployment Rate

- GDP Growth Rate
- Population Growth Rate
- Economic diversification or concentration
- Dependent population % of Total
- Financial Performance of Households (if available)

2. THE LEGAL AND INSTITUTIONAL FRAMEWORK

This refers to the legislation (whether enacted, impending, or merely being raised within government circles or amongst social activists) that dictates spending flows among and between national, state and local governments, as well as the political stability and the rule of law that underpins the context where the local government acts.

A local government's ability to adapt to both a changing legislative environment and a shift in social norms is an important factor in the long-term risk assessment. Undue political influence, political instability and a low degree of fiscal and operational independence, may affect the ability of a public entity to act effectively and efficiently.

Assumed support from a higher level of government (national or regional), or lack thereof, plays an important role in the rating of any public or local government entities. An assessment is made of whether the public entity can rely on the higher level of government support in the event of stress or financial difficulties. For example, higher level of government support could be made readily available in the event of a natural disaster. **Support assessment must be considered in conjunction with the ability of the higher level of government to provide support, as well as the legal obligation to do so, if any.** This is a factor of the health of the country's or region's economy and the level of income available to the higher level of government relative to its other commitments.

Legal and institutional capacity is another consideration. This speaks to the level of corruption of a local authority and its reliability as a deliverer of public services. Lack of transparency and corruption often impede the efficient allocation of revenues, and this may create financing demands and also lead to lack of tax compliance.

3. FINANCIAL PERFORMANCE AND RATIO ANALYSIS

ARC relies on key public finance metrics in this segment of the analysis that closely examines revenues, expenditures, debt service coverage, and budgetary flexibility.

For revenues, ARC's analysis focuses on the diversification of sources of revenue, volatility of each source and dependence of the local government from the higher levels of government. A distinction is made between internally and externally generated sources of income and the relative contribution from each source. ARC considers internally generated funds (taxes) to be those income streams that are directly under the control of the local government, such as the ad valorem property tax, usually the most important tax in local government finance. A greater proportion of internally generated funds are indicative of enhanced financial flexibility. A key criterion in

this area is the ability of the public entity to collect revenue, and to counteract tax avoidance, a factor that is usually more pronounced in emerging markets. The higher the level of interdependence between the local government and the higher levels of government (both in terms of revenues and in terms of decision making) the more likely the support from the latter to the former if there is capacity to do so.

A more diversified revenue base may allow the local authority to access additional sources of funding, such as license fees or service charges. While such income may fluctuate through economic cycles, they can also be stable and predictable, particularly if a high level of diversification is evident.

For expenditures, the assessment revolves around fixed versus variable expenses, and whether these expenses are discretionary or non-discretionary. The relationship between discretionary expenses (such as non-essential capital expenditure) and non-discretionary expenses (such as debt service payments) is important. Salaries often make up the single largest portion of expenditure, and special attention is placed on the authority's ability to rationalise these costs in need.

Key Data/Ratios:

- Operating Balance % Operating Revenues
- Operating Balance % Overall Fiscal Balance
- Overall Fiscal Balance % Revenues
- Salaries and Wages % Expenditures
- Interest % Expenditures
- Interest % Revenues
- Primary Operating Balance % Revenue
- Intergovernmental Transfers/Grants % Revenue
- Pensions Expenses % Expenditures
- Pension Expenses % Revenues
- Financial Performance Ratios for Pension Fund(s)
- Capital Expenditures % of Total Expenditures
- Working Capital % Expenditures
- Revenues Growth Rate and 5- year Volatility
- Expenditures Growth Rate and 5- year Volatility

4. FUNDING PROFILE AND LIQUIDITY

An appraisal of the funding profile commences with the various sources of funding available to the public entity to

address expenditure requirements. The debt burden is assessed in terms of the historical trend, future expectations and the ability to service obligations.

ARC examines the trend in the gross quantum of debt, as well as in debt serviceability including the authority's exposure to interest rate risk. Debt serviceability is also a factor of the maturity profile of the debt. Debt is classified as short-term (maturity under one year) or long-term (maturity greater than one year). Particular emphasis is placed on any undue maturity concentrations, and the ability of the entity to meet these debt redemption obligations in the absence of available refinancing options.

For certain governments, legal restrictions may impede access to borrowings, and this is a consideration as well.

It should be noted that ARC also takes into account items that may not be consolidated into the government public financial accounting.

ARC's focus on liquidity involves an evaluation of the operating cushion afforded by the government's cash balances and revenue flow. Liquidity may be complemented by access to internal and external sources of funding. The key ratios considered are the level of days' cash on hand and cash coverage of short-term debt and interest payments.

Key Data/Ratios:

- Debt % Operating Revenues
- ST Debt % Operating Revenues
- ST Debt % Total Debt
- Gross Financing Requirement % Operating Revenues
- Debt Amortizations Falling % Operating Revenues
- Total Debt Service % Operating Revenues
- Liquid Assets % Debt Falling Due
- Indirect Debt % Operating Revenues
- FX Debt % Total Debt

5. MANAGEMENT AND ADMINISTRATIVE STRUCTURES

Ultimately, the performance of any rated entity depends, to a large extent, on the strengths and capabilities of its policymakers and bureaucracy. ARC analyses the ability of management to react to changes in the operating environment in an efficient and effective manner, recognising that flexibility is crucial. The "depth of management" is also important and the entity should not be unduly exposed to "key man" risk. The effectiveness of systems and controls enables better revenue collection, and limits wastage and malfeasance. In this regard, ARC considers the recent fiscal performance very informative about the institutional capacity of a government.

6. ENVIRONMENTAL, SOCIAL AND GOVERNANCE FACTORS

ARC's rating actions are always based on a holistic analysis of the issuer and issue to be rated with the goal of identifying all relevant aspects, including environmental, social and governance factors, that might impact the issuer's capacity and willingness to pay in due time and in full its obligations. Furthermore, ARC always takes the most forward-looking perspective that the current knowledge about these risks permits, acknowledging that in the case of some ESG factors (climate change or demographics are examples) the credit impact of such factors will only be known over a very long time horizon, making an accurate quantification of its potential impact impossible. Therefore, ARC will try to incorporate these into its ratings mostly through qualitative analysis. Within this broad context ARC must highlight that governance factors are usually the most relevant factors to impact creditworthiness and therefore they are covered in Sections Two and Five of this methodology. Environmental and social factors are also captured and highlighted in ARC's analysis whenever it is considered that these might have a material impact on credit quality and ARC acknowledges that these usually have more relevance in sovereign and sub-sovereign ratings than in commercial entities ratings.

For local government ratings, usually the most relevant environmental factors are:

- Air pollution
- Energy management
- Water and wastewater management
- Natural resources management
- Exposure to climate change and extreme natural disasters / events

ARC assesses both the consequences (effective or potential) from the environmental factors, as well as the impact of regulatory or policy initiatives aimed at minimizing or preventing the deterioration of these environmental factors.

The most relevant social factors are:

- Demographic factors
- Human rights
- Health and education standards
- Social and economic equality
- Public security

ESG factors typically may differentiate ratings between different sectors, but generally will only differentiate ratings from issuers within the same sector when an issuer is unusually strong or weak in a specific ESG factor.

Where ESG factors are a key driver behind the assignment or change of a credit rating or rating outlook this will be outlined, the ESG factor that was considered a key driver identified and its materiality will be explained in the accompanying press release or report.

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ARC Ratings

11 Hollingworth Court

Turkey Mill, Ashford Road

Maidstone, Kent ME14 5PP

UNITED KINGDOM

Phone: +44 (0) 1622 397350

E-mail: arcratings@arcratings.com

Site: www.arcratings.com



Analytical Contact:

Mark Vrdoljak

mark.vrdoljak@arcratings.com

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ARC Ratings, S.A. historical default rates are published in the European Securities and Markets Authority Central Repository (CEREP) which can be accessed on the website cerep.esma.europa.eu/cerep-web/. ARC Ratings default rate is the probability of lack of full and timely payment of capital or interest or of the occurrence of any event that explicitly indicates that the future full and timely payment of those commitments will not occur (e.g., in case of insolvency).

Ratings do not constitute a recommendation to buy or sell, but only one of the factors to be weighted by investors.

Throughout the entire period during which ratings are valid, ARC Ratings monitors the issuer's performance on a constant basis, and may even bring forward the date of the review unless stated as point in time. Hence, prior to an investor using a rating, ARC Ratings recommends that it be confirmed, namely by consulting the list of public ratings available on the website www.arcratings.com.

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In the rating process, ARC Ratings adopts procedures and methodologies aimed at ensuring transparency, credibility and independence, and also that rating classifications are not influenced by situations of conflict of interests. Any exceptions to these principles are disclosed by ARC Ratings together with the rating of the financial commitment in question.