FitchRatings

Public Finance
Local and Regional Governments
Global - Non-US

International Local and Regional Governments Rating Criteria

Master Criteria

Scope

This report outlines the criteria that apply to the rating of local and regional governments (LRGs) outside the US or to debt issued by them. Ratings under these criteria are typically assigned to entities (Issuer Default Ratings; IDRs) and their debt instruments (issue ratings). They do not incorporate recovery prospects given default. These criteria apply to both new ratings and the surveillance of existing ratings.

Key Rating Drivers

Key Risk Factors: The risk profile of the LRG is determined by the interplay between risk sources and corresponding risk mitigants. Fitch Ratings has identified three main risk pillars: revenues, expenditures and debt and liquidity. These combine three risk sources and their corresponding risk mitigants.

Fitch analyses the extent to which LRGs' resilience to risk can be derived from the ability to adjust revenues, curtail or recover expenses, and access backup liquidity. Fitch assigns assessments (attributes) to each of these six Key Risk Factors (KRFs). The analysis focuses on long-term trends and expectations.

The six KRFs, combined according to their relative importance, collectively represent the risk profile of the LRG. KRFs do not have specific weights when determining the risk profile, and risk profile assessments consider the relative importance of each KRF on an entity-specific basis. The blend will generally reflect the interplay between risk sources and corresponding risk mitigants for each entity, with more importance given to sources of risk.

LRGs are vested with missions by their relevant sovereigns with corresponding revenue to fund these responsibilities. Their ability to borrow or access liquidity may be regulated, including how they manage and report their liabilities. This set of (often evolving) rules is referred to as the institutional framework. The influence of the institutional framework on an LRG's risk profile is captured through the assessments of the KRFs.

Debt Sustainability: Fitch applies several quantitative metrics to assess the ability of the LRG to withstand a reasonable downturn over the rating horizon. This is done through the application of an issuer-specific rating case scenario and results in the LRG's Debt Sustainability assessment. This approach establishes the range of performance where a rating would be expected to remain stable.

Standalone Credit Profile: Risk Profile and Debt Sustainability assessments are combined in a global Standalone Credit Profile (SCP) positioning table to suggest a category-specific SCP outcome for the most common combinations of risk profiles and debt sustainability levels. A notch-specific SCP is determined based on the components of the Risk Profile, the position of Debt Sustainability metrics in the score range, and the peer analysis that provides the overarching consistency.

Extraordinary Support, Asymmetric Risks: Most risk factors are addressed and captured in the KRFs. Some additional risk factors, such as transparency and governance, are not scaled and only weaker characteristics affect the rating. However, some issuers may benefit from

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This report updates and replaces International Local and Regional Governments Rating Criteria, dated 27 October 2020.

Related Criteria

National Scale Rating Criteria (December 2020)

Government-Related Entities Rating Criteria (September 2020)

Country Ceilings Criteria (July 2020)

Emerging Market Countries' Local and Regional Governments' Specific Securities Rating Criteria (December 2020)

Public-Sector Counterparty Obligations in PPP Transactions Rating Criteria (May 2021)

Sovereign Rating Criteria (April 2021)

Sukuk Rating Criteria (February 2021)

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extraordinary support from an upper tier of government. These negative or positive factors are assessed once the SCP has been established and together with the SCP produce the IDR.

Influence of the Sovereign Rating: LRG ratings are typically capped by the sovereign rating in recognition of the high degree of control and potential intervention by the central government, even within the most decentralised frameworks. LRGs that have a high degree of financial autonomy and institutional recognition could have a Long-Term Local-Currency (LT LC) IDR above the LT LC IDR of the sovereign.

Framework

This criteria report identifies rating factors considered by Fitch when assigning ratings to a particular LRG or debt instrument within the scope of the criteria. LRGs are defined as subnational or sub-sovereign governments in their institutional frameworks, as well as their groupings. They are run by elected or appointed officials and carry some autonomy on own-source revenues and expenditure.

Not all rating factors in the 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.

Summary of the IDR Derivation Steps

Step 1: KRF Analysis

Fitch assesses attributes for each KRFs, including both the robustness/sustainability and flexibility/adjustability factors noted above. Each factor is evaluated based on a guidance table that combines the identified risk components and supports the consistency of the assessments of the KRFs. For each factor, Fitch expresses the resulting attribute as either "Stronger", "Midrange", or "Weaker".

Step 2: Risk Profile

Fitch's KRF assessments are combined into a Risk Profile, based on the Risk Profile Guidance Table provided in these criteria (see Aggregating KRF Assessments: Tackling the Interplay of Risk Sources and Corresponding Risk Mitigants).

Step 3: Debt Sustainability and Scenarios

Fitch creates issuer-specific scenarios that project the financial metrics to assess the LRG's debt sustainability, using stresses informed by the historical data and the qualitative inputs consistent with each of the KRF attributes. This scenario analysis is an important step in Fitch's "through-the-cycle" approach to ratings and longer-term risk assessment. The stresses included in the main scenario, called the rating case, indicate where the rating would be expected to remain stable over the course of an economic cycle and relative to historical revenue and expenditure volatility.

Step 4: Rating Positioning

Risk Profile (Step 2) and Debt Sustainability (Step 3) assessments are combined in a global SCP positioning table. Because differences in issuers' institutional framework have been included in Steps 1 and 2, the table is applicable worldwide except for LRGs in the United States. This provides a category (not notch-specific) indication of the SCP outcome.

Step 5: Fine Positioning and Peer Analysis

The notch-specific positioning and verification of consistency of the SCP suggested by the rating positioning procedure (Step 4) is then achieved through the comparison of the issuers' peers. Applicable peers are selected based on a mix of parameters: sovereign (anchor), same country/tier, same tier/other country, same country/other tier, same SCP/other country, and same risk profile/other rating, subject to availability. Indicators used to draw the comparisons are the key risk factor attributes assigned in Step 1, their constituent metrics, such as measure of revenue adjustability, and the financial metrics used for debt sustainability assessment.

IDR Derivation Steps

1	**KRFs**
2	**Risk profile assessment** Combination of KRFs provides an aggregated Risk Profile (from Stronger to Vulnerable)
3	**Debt sustainability and scenarios**
4	**SCP positioning table** Connects risk profile with debt sustainability assessment into a standalone credit profile – cross-country relevant
5	**Peer analysis**
	↓ **SCP**
6	+ Potential extraordinary support - Potential asymmetric risk factors subject to sovereign ceiling/floor

Source: Fitch Ratings

Step 6: Factors Beyond SCP

In some cases, LRGs can benefit from external support, including potential for bail-out from an upper tier of government. This may take the form of intergovernmental debt with concessionary terms or ad hoc flexibility measures such as additional revenues or exemption of expenditure obligations. Such contingent support, which has not translated into debt relief or an improved financial condition, is not reflected in the SCP assessment. Instead, this is reflected in various ways, including rating floors and rating uplift, subject to the sovereign ceiling.

Three Pillars of Capacity for Payment of Financial Commitments

Fitch's rating approach is based on the forward-looking assessment and international comparison of the three risk pillars that influence the financial performance of an issuer, which together represent the capacity for payment of financial commitments.

The first two pillars relate to the LRG's cash flow (i.e. the *capacity*), which is determined by the revenue structure, particularly the risk that it shrinks beyond cyclical expectations; and the expenditure structure, particularly the risk that it rises during economic recession. When analysed together, they address the risk that the cash flow contracts beyond expectations, creating a budget gap that would lead to an accumulation of debt or increased utilisation of reserves, ie an increase in net debt.

The third pillar relates to the debt service (ie the *payment of financial commitments*). This is the risk that debt service obligations increase for reasons other than those already captured by the two factors above. This could be due to either a rise in the cost of debt (price/rate effect) or an increase in the nominal debt levels (volume effect) due to the realisation of contingent risks or unhedged exposure to foreign-currency debt or the risk that maturing debt cannot be rolled over (liquidity risk).

Sources of Risk and Possible Mitigants

Fitch assesses each of the three risk pillars 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 on the one hand (robustness/sustainability) and the options available to address those risks (adjustability/flexibility) on the other. This creates a set of six KRFs grouped in the three pillars:

Revenue Risks $KRF_{1.a}$ – Revenue Robustness (growth, stability and predictability, ie risk that revenue shrinks)

Revenue Risks Mitigants $KRF_{1.b}$ – Revenue Adjustability (ability to increase)

Expenditure Risks $KRF_{2.a}$ – Expenditure Sustainability (risk that expenditure rises)

Expenditure Risks Mitigants $KRF_{2.b}$ – Expenditure Adjustability (ability to curb)

Liabilities and Liquidity Risks $KRF_{3.a}$ – Liabilities and Liquidity Robustness (risk that debt service increases suddenly)

Liabilities and Liquidity Risks Mitigants $KRF_{3.b}$ – Liabilities and Liquidity Flexibility (ability to use liquidity or access new financing)

These six KRFs (three risk sources and three risk mitigants) capture the primary elements driving financial performance. They are influenced by other considerations, such as the institutional framework, the state of the economy, as well as governance and management practices, none of which are scored or graded in themselves. Rather, these influencing elements feed into the assessment of the risk factors when relevant. This allows the specific circumstances of a rated entity to be assessed in the appropriate context. For example, a population with a low level of personal income may not be considered credit negative if household income has little influence on the assessment of the revenue robustness, as may be the case when the LRG's revenues are mainly derived from per-capita grants from the national government.

Institutional Rules Are Analysed Within the KRFs

In the analysis of the various KRFs, the institutional rules applicable to each credit play a major role. These rules and mechanisms, known as the institutional framework, include an LRG's

Sovereign Rating Requested

In order to assign a rating to an LRG in a given country, Fitch needs first to have a sovereign rating on the same scale (international or national) and in the same currency (foreign or local). If such a sovereign rating is not available, Fitch will ask the sovereign group to provide a rating, possibly private.

revenue mix, tax autonomy, intergovernmental relations, funding and any equalisation mechanisms, expenditure profile, level and mix of responsibilities, bankruptcy regime, sector-wide accounting and reporting policies for borrowing, and control and monitoring. The analysis of the same rules, applicable to a given tier of government in a given country, may produce two different attributes when two issuers in the same country/tier are considered. An example is tax autonomy (legal ability to hike tax rates): if two municipalities legally enjoy a large degree of tax autonomy, one with an affluent population may be judged Stronger on Revenue Adjustability, while one with a deprived community would likely receive a Weaker attribute, because what matters is the actual ability to generate additional revenue, not just hike the tax rate.

Attribute Guidance

Each risk factor is assessed using a *KRF Attribute Guidance Table* described below, which outlines general expectations for a given group of rating categories. The table combines qualitative and quantitative considerations, drawing from both the issuer institutional framework and issuer-specific data. Framework-specific items are analysed with the institutional rules applicable to each issuer and are consistent across the portfolio of entities sharing similar features.

KRF Attribute Guidance Table

Revenue	Stronger	Midrange	Weaker
KRF1a revenue robustness	Highly stable revenue sources (eg tax revenues mostly based on property with delayed assessment, stable transfers from AAA-AA counterparties)	Stable revenue sources (eg stable transfers from A-BBB counterparties; tax revenues based on moderately cyclical economic activities like retail sales)	Volatile revenue sources (unstable transfer framework or stable transfers from BB+ and below counterparties; tax revenues based on highly cyclical economic activities like housing or commodity sales)
	Sustainable and sound revenue growth expected to be fueled by strong economic prospects	Revenue growth expected to be marginally positive due to sound economic growth prospects	Weak revenue growth prospects to be flat or slightly negative due to limited or negative economic growth
KRF1b revenue adjustability	Additional revenue increase covering 200% of reasonably expected decline of revenue, using discretionary tax leeway up to legal maximum rate and base width[a]	Additional revenue increase covering at least 50% of reasonably expected decline of revenue, using discretionary tax leeway up to legal maximum rate and base width	Additional revenue increase covering less than 50% of reasonably expected decline of revenue, using discretionary tax leeway up to legal maximum rate and base width
	Strong affordability of additional taxation (additional local taxes represent a marginal proportion of median household disposable income, wide and diversified corporate tax base)	Moderate affordability of additional taxation (additional local taxes represent a modest proportion of median household disposable income, average width and diversification of corporate tax base)	Low affordability of additional taxation (additional local taxes represent a material proportion of median household disposable income, narrow or concentrated corporate tax base)
	OR	OR	OR
	Strong track record of revenue equalisation (with constitutional rank or high legal anchor)	Moderate track record of revenue equalisation (with legal anchor but no constitutional rank)	Low track record of revenue equalisation (with no constitutional rank or high legal anchor)
Expenditure	**Stronger**	**Midrange**	**Weaker**
KRF2a expenditure sustainability	Proven track record and good prospects of tight control over total expenditure growth (eg below pace of total revenue growth).	Moderate control over total expenditure growth prospects (eg close to total revenue growth).	Weak control over total expenditure growth prospects (eg above total revenue growth).
	Responsibilities over expenditure that are relatively stable through the economic cycle (eg maintenance, planned investment, education)	Responsibilities over expenditure that are moderately correlated to the economic cycle (eg healthcare)	Responsibilities over expenditure that are highly correlated to the economic cycle implying little control during downturns (eg unemployment benefits, social assistance) or track record of stimulus package
KRF2b expenditure adjustability	Effective budget balance rules in place	Budget balance rules in place but no strong track record of application	No budget balance rule in place or track record of deficits carried forward
	Low share of inflexible costs. Minimum expenditure can be measured by benchmarking to best peers, as well as by: <70% share of mandatory or committed expenditure. Flexibility in workforce management (volume or price)	Moderate share of inflexible costs. Minimum expenditure can be measured by benchmarking to best peers as well as by: 70%-90% share of mandatory or committed expenditure. Flexibility in workforce management (volume or price)	High share of inflexible costs. Minimum expenditure can be measured by benchmarking to best peers as well as by: >90% share of mandatory or committed expenditure. Very limited flexibility in workforce management (volume or price)
	Strong affordability of reduction (high level of existing service or investment)	Moderate affordability of reduction (moderate level of existing service or inv.)	Low affordability of reduction (low level of existing service or investment)
Liab. & liquid.	**Stronger**	**Midrange**	**Weaker**
KRF3a liabilities and liquidity robustness	Developed financial market and solid national framework for debt and liquidity management, strict formal prudential regulations and/or financial market discipline.	Evolving financial market and national framework for debt and liquidity management.	Underdeveloped financial market, weak national framework for debt and liquidity management
	Robust issuer-specific framework for debt, liquidity and off-balance-sheet management (proven low appetite for risk, eg restrictions on risky loan types, derivatives.)	Moderate issuer-specific framework for debt, liquidity and off-balance-sheet management (eg some appetite for risk, provision for loose prudential borrowing limits, restrictions on risky loan types, derivatives.)	Weak issuer-specific framework for debt, liquidity and off-balance-sheet management (eg proven high appetite for risk, weak/no prudential borrowing limits, reliance on risky loan types, derivatives)

KRF Attribute Guidance Table (Cont.)

Liab. & liquid.	Stronger	Midrange	Weaker
	Strong debt profile: fully amortising debt – little proportion of short-term debt, established market access	Some use of bullet debt with substantially amortising debt – no maturity concentration, moderate market access	Sculpted debt profile or use of bullet debt with no/little amortising debt, maturity concentration or high proportion of short-term debt, limited track record of market access
	Negligible exposure to unhedged[b] Interest rate or FX risk, very limited off-balance sheet risks[c] (satellites, guarantees, pensions etc.).	Limited exposure to Interest rate or FX risk; Some off-balance sheet risks (satellites, guarantees, pensions etc.)	Material exposure to Interest rate or FX risk; Material off-balance sheet risks (satellites, guarantees, pensions etc.)
KRF3b liabilities and liquidity flexibility	Strong framework for emergency liquidity support from upper tier(s) with counterparty risk on Treasury facilities above A+ level	Framework providing emergency liquidity support from upper tier(s), yet within limits of the issuer's possible needs, with counterparty risk on Treasury facilities between BBB- and A+	Framework providing no or very limited emergency liquidity support from upper tier(s), below the issuer's possible needs with counterparty risk below BBB-
	OR	OR	OR
	Abundant access to liquidity in various forms, ie unrestricted cash, liquid deposits, undrawn committed lines with counterparty risk (banks' IDRs) above A+	Liquidity available in various forms, notably unrestricted cash, liquid deposits, undrawn committed lines with counterparty risk (banks' IDRs) between BBB- and A+	Low liquidity available; high concentration of counterparty risk on committed liquidity lines (banks' IDRs) below BBB-

[a] Terms are defined in the *Revenue - Adjustability* paragraphs
[b] Hedged with counterparties commensurate with the attribute level (eg minimum AA- for Stronger)
[c] Off-balance-sheet risk-weighted (eg guarantees extended to very safe sectors less risky than weak government-related entities)
Source: Fitch Ratings

Sovereign Rating Is Usually a "Ceiling"

With a few exceptions, subnational governments are influenced by (and subject to) decisions of their central/federal government to such an extent that not only is the LRG rating capped by this rating (see Annex 1: Rating LRGs Above the Sovereign) but also the KRFs tend to be influenced by it.

Sovereign Rating Influences the Attributes

In addition to the rating ceiling applied at the end of the rating process for most countries, Fitch takes the sovereign IDR into consideration throughout the analytical process, in order to reflect how the drivers of the sovereign IDR feed into and influence the risk factors of the LRGs. Revenue structure is affected by central government decisions, not only in the payment of transfers but also in restrictions on tax autonomy. Expenditures are affected by devolution of responsibilities and the regulation of service standards or wage indices of civil servants. Debt is affected by borrowing limitations, prudential regulation, cash pooling at the national Treasury level, or the sovereign spread being the reference for the cost of new debt.

Unless justified by specific analysis (see Annex 1: Rating LRGs Above the Sovereign), each KRF attribute should reflect the risk that the sovereign interferes with, or drives, the characteristics of that KRF. For example, a subnational in a 'BBB' country would see its Revenue KRFs influenced by the role of the sovereign as a key stakeholder in the LRG's operations or by shared risk factors between the sovereign and its subjects. Such an LRG is very likely to be exposed to 'BBB' macroeconomic conditions on its own tax base and is exposed to 'BBB' counterparty risk on the transfers it receives from central government. Often, LRGs in this context face less stable intergovernmental relationships typical of midrange jurisdictions ('A'/'BBB' countries), where central government either needs to offload fiscal discipline or change the framework in order to manage its own fiscal constraints.

Sovereign IDRs do not therefore directly drive or cap the attributes but there is a high probability that mostly LRGs in 'AAA' or 'AA' countries will achieve Stronger attributes, and that LRGs in 'A' and 'BBB' countries will achieve Midrange attributes. Weaker assessment of KRFs' attributes would be typical for LRGs in 'BB' category and below countries.

How the Sovereign Rating Influences the Attribute

- Sovereign rated within 'BBB'/'BB' rating categories would tend to limit the KRF attributes to Midrange.
- Sovereign rated within 'B' rating category and below would limit the KRF attributes to 'Weaker'.

Importance of Government Level in the Rating

Fitch rates various tiers of government in various countries. The analytical significance of the administrative ranking of an LRG, whether a municipality or a state, can vary depending on the institutional framework. In some countries, an administrative or political hierarchy is in place so that lower tiers have less autonomy than higher tiers over the policy goals and means of executing them, and the upper tier of government plays a "deputy" sovereign role for the entities of lower rank. The considerations outlined above between sovereign and LRGs would partly apply between state and LRGs. Such frameworks, typically found in federal countries, are likely to result in KRFs and ultimately Risk Profile hierarchies in which municipalities in a state, region or province would typically carry lower assessment of Risk Profile than the relevant upper tier.

However, in frameworks where no such government hierarchy exists, typically found in unitary countries, LRG Risk Profiles would be independent of the administrative tier.

Key Risk Factors

Revenue

Fitch considers two risk dimensions in assessing the strength of an LRG's revenue structure: prospects for revenue stability and growth (robustness) and the LRG's legal ability to raise revenues (adjustability). The goal of this assessment is to establish expectations for the issuer's revenue system, incorporating both likely performance in the absence of policy action and the issuer's independent ability to make changes over time.

Revenue – Robustness (KRF$_{1.a}$)

The Robustness dimension of the Revenue system is assessed through a combination of volatility and growth. This feeds into the rating in two ways: historical patterns of growth and volatility (e.g. peak-to-trough) are reviewed in the process of establishing our rating scenario; the qualitative assessment embedded in the KRF would address possible deviations between the observed and the future performance (see Scenarios and Assumptions). Specific attention is paid to the potential for volatility of the economy to the extent it is relevant to the LRG's financial performance. This is addressed notably through the analysis of the link of revenues with the broader economy. The sovereign rating and its macroeconomic component can be a good indicator of macroeconomic instability.

The analysis of the revenue mix identifies the revenue drivers, establishing the links with the LRG's socio-economics profile (the base from which taxes and fees derive) and its dependence on intergovernmental transfers, which are the two main pillars of international LRGs.

This assessment is made without consideration of policy action an LRG could take to affect revenues, such as raising or cutting tax rates or asking for extraordinary transfers, which are addressed in the next key risk factor.

The most robust revenue systems are those that exhibit the following features: consistent growth[1] in line with or above the level of national economic growth in a context of high sovereign IDR ('AAA'-'A'); a degree of stability such that revenue is dynamic but not subject to severe cyclicality; or stability in transfers from a highly rated counterparty ('AAA'-'AA'). The macroeconomic background, which exposes the LRG to greater or lesser degrees of volatility and uncertainty, is assessed through the sovereign rating and its "macroeconomic" component.

Less robust revenue systems are those exhibiting declining performance beyond cyclical fluctuations, strong dependence on highly cyclical economic activities (such as housing or commodities) or unstable transfer frameworks.

Fitch analyses the underlying drivers of revenues and their dynamics. These mainly include the diversity of the economy, demographic trends and the structure of key industries. This analysis incorporates an assessment of the nature of tax and transfer revenues and the bases on which these flows are levied or calculated. Fitch does not score the economy in itself, but only evaluates it in the context of the issuer's future revenue performance. In most cases, a growing GDP and population will generally be seen as positive. For example, in a context of an LRG with

[1] The analysis will typically focus on the "real" growth rate of revenue compared to growth in real GDP. For that purpose, revenue figures are deflated by the relevant national GDP deflator.

a population growing much faster than the national average, a revenue system based on per-capita allocation would be positive. But if this issuer is operating in a system that simply indexes transfers with a nationwide growth rate, it would receive at best a midrange attribute.

For entities with a material share of transfers, the stability and financial equilibrium of the framework is a major input. Fitch deems that a history of vertical fiscal imbalances is largely credit negative. This situation creates room for structural funding gaps, in turn generating either mounting debts or a propensity to offload risks off-balance sheet. This situation may lead the sovereign to provide temporary support to a whole government tier or wide group of LRGs when these LRGs face acute episodes of fiscal gaps; examples include Brazil in 1989, 1993, and 1997, or Spain in 2012. Note that government support to individual distress cases would not be addressed in the KRF but rather in Step 6 (see Factors beyond the SCP).

Transfers can take many different forms and calculation methods and can be earmarked for specific programme expenditure or unrestricted. Credit is given to transfers that provide dynamic (for example incorporating GDP growth through the cycle) and protective (absorbing possible shocks) revenue sources.

LRGs do not usually benefit from full control of their revenue resources (limited tax autonomy) and their spending responsibilities (mandates). In compensation, they tend to be protected from external shocks by higher-level mechanisms in which transfers are more stable than underlying sovereign revenues and do not fall proportionately with tax proceeds. However, as budget consolidation is implemented, LRGs often see their transfers reduced (other than transfers reflecting shared taxes): the shock is therefore delayed and smoothed (as is the following recovery), but is not totally avoided. This dynamic is captured in the analysis of the revenue growth pattern. A smoother pattern than for GDP fluctuations is typically credit positive, provided the subsequent corrections are not disproportionate; when reviewing through the cycle, the cumulative average growth rate should be similar, not lower.

Revenue– Adjustability (KRF$_{1.b}$)

The second component of the revenue structure assessment is evaluating the government's independent ability to increase operating revenues. This involves considering the range of legal and practical limits on the government's autonomy in this area, including tax caps and requirements for approvals from voters or other levels of government. The degree of flexibility typically involves tax autonomy (through discretion over the rate, base and exemptions). It may also include discretion over user charges and fees levied for public services. Finally, revenue adjustability covers the degree to which transfers are provided without conditions or without discretion being exercised by the payer, such as automatic equalisation transfers which compensate for losses on other revenues.

Fitch considers an LRG to have independent legal revenue-raising ability as long as such power is encoded in the respective laws or regulation, even if a supermajority or other such requirements exist. Given the focus on incorporating only potential tax changes that are under the control of the government, tax caps that limit annual increases to specific economic metrics, such as inflation or population growth, are not considered a source of revenue-raising flexibility upon which the LRG can rely in a downturn.

Fitch stresses that the focus of this assessment is on the government's legal control over its revenue system. While noting that increasing taxes can be politically or practically difficult in many cases, Fitch believes the legal framework is a significant differentiating factor in assessing the ability to manage fiscal challenges. A government can be evaluated highly on this risk factor even if Fitch believes the issuer is unlikely to raise taxes under normal circumstances. Tax rates would generally be materially hiked only under stressed circumstances (such as looming default). Fitch assesses the issuer's ability to raise revenue under such a theoretical scenario of financial stress. In some frameworks, the issuer's constitution or an upper-tier government, represented by a central government prefect or commissioner, would oblige the issuer to raise tax rates to a level commensurate with the required revenue generation level at a time of distress. Such "balancing" rules, if credible, give more comfort to a 'Stronger' assessment.

Revenue adjustability is primarily assessed on own-source revenues – i.e. flexibility in raising taxes, fees and charges. It is measured quantitatively, calculated as the increase in additional revenues versus the reasonably expected decline in operating revenues.

The revenue adjustability headroom is assessed based on the LRG's discretionary leeway up to maximum rate and base. The maximum tax rate (or fee or user charge level) may be determined by legal limits. Absent a legal maximum, the KRF would be considered Stronger by default on this aspect. Credit will also be given to entities with large, saleable asset pools, typically those not restricted by public mission.

The "reasonably expected operating revenue decline" is assessed as the impact on the revenue of a routine, cyclical economic downturn and reflects revenue peak-to-trough performance. This impact is observed by comparing the growth rate of revenue in periods of recession or cool-down compared to that of the general economy (GDP) and historical average (through-the-cycle) revenue growth. Where long series of LRG fiscal data are not available to observe actual peak-to-trough performance, Fitch instead uses national or peer proxies. Fitch would look at national economic cycles and performance of the LRG's resource base (transfers, tax bases of similar nature at national level or with peers) against such economic cycles.

The affordability of additional taxation is taken into account, which depends primarily on the burden of the local taxation and the additional weight of a tax increase on total household income. The gap between the current level of tax rates and the envisaged maximum is therefore addressed in the affordability assessment, when measuring the impact of the increase in proportion to the median or average household disposable income. For corporate taxes, the affordability of additional taxation is measured in reference to the proportion of the GDP or its subsets, when available. When data is scarce, the width and diversity of the tax base, as well as the level of economic activity reflected by local GDP or a similar per-capita indicator, is qualitatively assessed.

In some frameworks, revenue adjustability may derive from the transfer system. To be given credit in Fitch's analysis for flexibility, transfer mechanisms need to provide equalisation with balancing mechanisms that offset a loss of other revenues, notably tax proceeds. This is notably the case when transfers are calculated to achieve a standard of average "financial strength". The track record of such revenue equalisation schemes over time and its legal strength is an important factor.

Flexibility can also come from a high degree of cost pass-through. In this case, flexibility is meant as a form of automatic protection. Some systems allow for grants and transfers that directly reflect the costs incurred by the LRG, providing protection against rising costs. Credit is given in the analysis to the extent of the payer as counterparty (the upper tier of government providing the transfers): transfers coming from a 'BBB' sovereign, for example, cannot lift the risk factor for Revenue Adjustability to "Stronger".

Expenditure

The second risk pillar focuses on the sustainability and flexibility of government expenditure. Specifically, Fitch considers the pace of expected spending growth as well as the flexibility of an LRG's expenditures. Fitch thereby assesses how pressured an issuer is likely to be, based on the natural pattern of spending growth[2] and how well positioned it is to manage that growth throughout the economic cycle.

The analysis of the LRG's expenditure mix includes identifying drivers of responsibilities such as welfare costs, having also established the links with the socio-economic profile.

Expenditure – Sustainability (KRF$_{2.a}$)

After evaluating an issuer's spending responsibilities and policy positions, Fitch considers baseline trends in spending as compared to the pace in revenue growth.

This analysis relies on the main drivers of spending and is informed by Fitch's expectations for the issuer's economic trajectory. The demands of certain expenditure items could be in correlation with the pace of economic cycles, as many LRGs' policies are focused on mitigation of negative impact during economic slowdown. Expenditure items such as social support or welfare transfers tend to rise at times of economic deceleration and revenue decline. In some cases, LRGs may be

[2] In order to allow international comparisons in expenditure growth trends, expenditure figures are typically deflated by the relevant national GDP deflator. This neutralises differences in inflation contexts and focuses on the pure "volume" or "real" growth rate of expenditure.

required to adopt anti-cyclical measures focused on local economy support, notably through infrastructure stimulus, leading to increasing capital expenditure during times of economic stress.

Fitch also assesses the stability and predictability of LRGs' expenditure responsibilities. Therefore, the evolving nature of the national institutional framework, typical for countries rated in the 'BB' category and below, could lead to weak expenditure predictability and, hence, weak assessment of expenditure sustainability.

The expenditure sustainability assessment considers expected average performance over time. In this context, expenditure cyclicity is not considered a handicap in itself, as Fitch's scenarios take into account reasonably expected fluctuations. However, LRGs exposed to such policies have a greater risk of deviating from the expected spending trajectory (beyond rating case fluctuations) than those vested with missions implying very stable spending.

Aggressive off-loading of investments and borrowings also creates greater downside potential. Fitch considers the sustainability of the public investment policy: capital expenditure below the level required to adequately maintain facilities or that may be insufficient to accommodate demographic growth would likely lead to the need for future catch-up efforts.

Expenditure – Adjustability (KRF$_{2.b}$)

Fitch considers that effective budget balance rules create incentives to control expenditure, whether self-imposed or imposed by the upper level of government.

Fitch notes that some spending items are significantly easier to control than others. Fitch considers the inherent flexibility of each programme spending category that the LRG provides and the specifics of each LRG's situation, evaluating the practical as well as legal ability to reduce spending. This reflects Fitch's observation that there is generally a base level of services an LRG must provide that is often well above legal requirements, if any, for such services. This is informed by the analysis of institutional rules.

The outcomes of voter initiatives and court decisions may constrain an LRG's spending flexibility. In addition, inflexible statutory or constitutional operating limitations are potential credit risks, as they may constrain an issuer's ability to react to negative developments. Such limitations include the status of the issuer's administrative staff, with civil servants generally protected, making payroll costs inflexible. Fitch has observed that pensions and benefits can become a heavy burden for KRFs and a source of fiscal distress. When rated entities control

these expenditure items, consideration is paid to the drivers of their development, including demographics, funding and institutional arrangements.

The ability to reduce spending is key in response to shrinking revenue or increasing costs. Expenditure adjustability is assessed on the total expenditure excluding debt service, and on its two key components, ie operating and capital expenditure. It is measured quantitatively through the proportion of total expenditure that is considered fixed, representing mandatory or committed costs. The minimum level of services and spending may be determined by legal limits or, absent a legal minimum, by reference to the lowest spending per capita observed in an equivalent entity in the same legal framework.

Practically, inflexible expenditure is expressed as a percentage of expenditure as measured in the rating case, using the flexibility assessed by Fitch on the relevant constitutional and legal frameworks. In the absence of legal expenditure requirements, Fitch can assess the flexibility by benchmarking to most efficient peers (LRGs with similar responsibilities and lower unitary expenditure). This assessment is driven by the ratio of mandatory and committed expenditure to discretionary expenditure. A higher share of discretionary spending makes cuts easier. Flexibility in workforce management expressed in headcount and salary is a major driver for LRGs with labour-intensive missions. Most countries have rigid public employee labour laws and staff costs are assumed to be inflexible. Fitch estimates the share of workforce spending in total expenditure and the proportion that can be reduced, including outsourcing peripheral functions. Transfers to decentralised entities that fulfil an important public mission and that simultaneously support their employees' salaries are also considered.

The affordability of reductions is measured by considering the level of existing service or investment compared with immediate peers. Services set at a minimum level may give rise to acceptance or political issues. A good track record of past cuts is considered a proxy for acceptance.

Liabilities and Liquidity

Liability and Liquidity – Robustness (KRF$_{3.a}$)

Fitch first reviews the national framework for debt, risk and liquidity management, notably the presence of borrowing limits or restrictions on loan types, derivatives or transactions. Fitch views administrative or prudential regulations, such as debt or debt-servicing limits, as credit positive, subject to the overall effectiveness of liability and liquidity regulation and controls. Fitch assesses the degree of conservativeness in borrowing policies, including authorisation by an upper tier of government, eligibility of products, monitoring of risks, disclosure of debt quantities and properties, and the reporting of off-balance-sheet commitments. In developed markets where debt-management experience among LRGs is considerable, formal prudential regulations can be replaced by capital market discipline. However, in countries with an evolving regulatory framework or where responsibilities have recently been devolved to the LRG, prudential regulations can act as a control mechanism for responsible budgeting and debt accumulation.

Fitch also considers the presence of issuer-specific or self-imposed regulation, and notably the LRG's appetite for risk. Fitch believes LRGs have no economic rationale to engage in risky debt and liquidity management, as most have limited fiscal flexibility and need to retain sound financial standing to avoid aggressive risk-taking.

Fitch also analyses currency, interest rate or refinancing risk where it affects a substantial part of the LRG's capital profile, applying stress assumptions for costs and liquidity derived from historical patterns in the relevant debt market (see Scenarios and Assumptions). Whether debt instruments include financial or other covenants, if disclosed, can lead to an accelerated repayment and affect the issuer's relative capacity to manage that risk. Fitch also considers the proportion of unhedged floating-rate debt, unhedged FX debt and the debt amortisation profile.

Issuers exposed to material refinancing risk, particularly a highly sculptured and substantial proportion of deferred amortisation instruments, are typically viewed as structurally weaker from a credit perspective as they are exposed to greater uncertainty for both market access and the future cost of debt, unless mitigated by the creation of a sinking fund. Issuers exposed to floating-rate interest may mitigate rate exposure in full or in part through interest rate hedges. Fitch considers whether the unhedged portion of exposure, or refinancing exposure, would have a material impact on the issuer's debt sustainability under stressed interest-rate assumptions. Currency exposures are considered in a similar manner.

In its analysis, Fitch focuses on Fitch-adjusted debt (Adjusted Debt), which may include some reclassification of contingent debt or additions of third-party debts. All such debts reclassified are not considered in the KRF assessment (to avoid double counting). However, the KRF$_{3.a}$ qualitatively addresses the existence of risks not already captured by the (adjusted) credit metrics.

Contingent liabilities such as agencies' or majority owned government-related entities' (GREs) debt, guarantees or pensions need to be analysed in details. Fitch looks at those off-balance-sheet liabilities with a risk-weighted approach. This means Fitch does not simply add off-balance-sheet commitments, because the likelihood of realisation of the liability may differ considerably between two different cases. Rather, a qualitative view needs to be taken. Some entities may have a wide web of dependent agencies and state-owned companies, or extend a large amount of guarantees. Nevertheless, the analysis focuses on the risk that these commitments are effectively triggered and migrate onto the entity's balance sheet. Guarantees extended to very safe sectors (eg sectors subject to strict oversight from the central government), such as regulated social housing, are less risky than weak, not self-sustainable GREs, even without guarantees. These obligations remain contingent and are not adjusted (see second row of the *Reclassification of Contingent Liabilities* table).

In cases where the contingent risk is not remote but likely to be realised by the LRG, Fitch would proceed to adjustments under "Other Fitch-classified debt" (see third row of the *Reclassification of Contingent Liabilities* table).

Data (Un)Availability

Under-reporting of contingent liabilities may be a material limitation to the analysis of the liabilities and liquidity framework.

When data is available and comprehensive, Fitch applies the analysis and reclassification as described in this section.

When data is limited, Fitch would perform consistency checks, searches in news flows and media articles.

If these searches suggest there are risks but no sufficient data is available to assess them, Fitch may assign a Weaker attribute to the KRF or apply asymmetric risk. In some extreme cases, Fitch may decline to rate the issuer.

Fitch also adjusts for "under-reported" debts. For purposes of liability analysis, Fitch classifies as LRG's Adjusted Debt third-party obligations when the LRG is the actual payer irrespective of any conditionality and contracts with associated debt that would become the obligation of the LRG if it failed to comply with the ongoing contractual payment terms. Examples include capitalised payments for public-private partnership (PPP) transactions, the payment of instalments in build-and-transfer schemes, or ongoing transfers to debtors to cover their principal debt service. If the risk is ascertained but such data required for a reclassification is not available, Fitch makes an analytical adjustment. All debts of this kind (see fourth row of the *Reclassification of Contingent Liabilities* table) would also be added to "Other Fitch-classified debt" and be captured in the Adjusted Debt.

Fitch views the detailed disclosure of all debt obligations of the entity, including direct bank placements and other obligations, to be best practice. Fitch includes all such obligations, including the impact of any covenants they may contain such as acceleration clauses, in its analysis.

Reclassification of Contingent Liabilities

How is contingent debt repaid?	Treatment by Fitch	Examples
The debtor (GRE) has its own, robust, market revenue flow (fees, charges, rents etc.)	Not included in the LRG analysis and debt aggregates	Self-sustaining utility, robust financial or development agency
The debtor (GRE) benefits from a guarantee, it is less likely than not to crystallise	Pure contingent debt; not aggregated in Adjusted Debt	Solid social housing benefiting from a guarantee
The debtor (GRE) has its own revenue flow (e.g. fees, charges and rents) but this flow is more likely than not to be insufficient and the debt (guaranteed or not) is to crystallise as a liability for the LRG	Other Fitch-classified debt; aggregated in Adjusted Debt	Distressed social housing benefiting from a guarantee
The debtor's debt was raised to build a facility on behalf of the LRG and is primarily paid by LRG	Other Fitch-classified debt; aggregated in Adjusted Debt	Availability-based PPP (completed and operating); urban development state-owned company

Source: Fitch Ratings

Fitch's analysis of a government's unfunded or net pension liability burden considers defined-benefit pension plans only. Defined-contribution plans are a predictable annual commitment and considered in the assessment of an issuer's expenditure framework. In practice, very few countries hold their LRGs liable for defined-benefit pension plans. Those countries tend to use actuarial valuations from reputable actuaries, which Fitch will use in its analysis. If an LRG carries the unfunded liability associated with employment-related pensions, Fitch assesses the nature and materiality of the benefit obligation, the assumptions underlying the obligation, and the actual and potential contribution burden on the rated entity. If such pensions represent, in Fitch's view, a material risk to its assessment of a rated entity's liability position, it could be reflected as an asymmetric risk factor (Asymmetric Additive Risk Considerations).

Fitch distinguishes, for the purpose of its Debt Sustainability analysis, the debt owed to other tiers of government if this debt offers flexibility in its terms from traditional debt. All debt types are included in the debt sustainability metrics that inform the SCP. If relevant, a supplementary ratio is calculated, excluding intergovernmental debt offering concessionary terms, which informs an "enhanced debt sustainability ratio". This is used to estimate the uplift between the SCP and IDR.

In some countries, LRGs may have recourse to GREs to fulfil some policy missions. When these GREs simply raise debt to execute projects paid by the LRG, their debt is reclassified as explained above. But the GREs may combine commercial activities, with their own revenue flow, and some policy missions (paid by LRGs) that represent material risks for the LRG. When it is difficult to precisely evaluate the GRE debt that must be reclassified as Adjusted Debt, Fitch assesses the Debt Sustainability score on a broader aggregate of debt, called Net Overall Debt,

PPP-Related Debt Adjustments

Under certain circumstances, Fitch includes liabilities related to PPP arrangements in an LRG's Adjusted Debt calculations. These adjustments are most commonly related to availability-based PPP arrangements, which requires certain, quantified and multi-year payments by a government over the life of the contract.

To include these PPP-related liabilities in an LRG's Adjusted Debt figures, Fitch assesses the project implementation status and includes obligations for completed and operating facilities or when payments related to the project are inevitable.

Availability-based PPP arrangements are distinct from demand-based PPPs (also known as concessions), which are funded from tolls or other user charges rather than ongoing government payments. Fitch does not include debt associated with such demand-based PPPs in an LRG's Adjusted Debt calculations, except for PPPs where the government provides a minimum revenue guarantee and where the guarantee is more likely than not to be triggered.

which includes all the reported GRE debt (see Metrics to Assess Debt Sustainability). In such a case and in order not to double count the same risk, the KRF attribute does not include the presence of off-balance-sheet risk, since the latter are conservatively added to the debt metric that is taken into account in the quantitative analysis.

Liability and Liquidity – Flexibility (KRF$_{3.b}$)

This assessment addresses only the "stock" dimension of total liquidity, i.e., liquidity that is not subject to uncertainty other than counterparty risk from liquidity providers, which, if present, serves as a cap for the amount of credit in the attribute. This assessment does not aim to capture all the sources of liquidity, which would include cash-flow generation, addressed separately in the scenario and financial analysis step. Instead, to evaluate the "stock" dimension of liquidity, Fitch considers both a government's liquidity needs and its internal and external liquidity resources. The analysis focuses on liquid resources that are expected to be available to a government in a downturn, when liquidity is most likely to be strained, to close a budget gap of any origin or to redeem maturing debt.

Fitch recognises that LRGs in the strongest position are those not reliant on external borrowing for cash flow needs, even in economic down-cycles. However, liquidity, when committed by creditworthy external counterparties, such as banks, upper tiers of government

or special government-sponsored lenders such as the Public Works Loan Board in the United Kingdom, is the typical source of financial flexibility for most LRGs.

The analysis starts with the provisions in the institutional framework that address emergency liquidity support, if any, from upper tiers. Some countries have legal provisions that allow LRGs to access emergency liquidity such as contingency funds, Treasury open facilities, pooled cash or mutual lending among peers. However, consideration is given for the counterparty risk associated with the liquidity provider and may be limited by that provider's rating. For example, the attribute could not be Stronger if the government extending emergency liquidity is rated 'BBB'. Moreover, such liquidity arrangements may be subject to political risk; for example, Treasury facilities such as Spain's Fondo de Liquidez Autonomico may require a high degree of cooperation between the LRG and the liquidity provider. In addition to legal analysis, Fitch studies the track record and effectiveness of these schemes.

At the issuer level, Fitch looks at unrestricted cash and committed liquidity available under various forms. Indeed, an LRG facing an unexpected budget gap would likely mobilise committed credit lines first. Counterparty risk on committed liquidity lines, reflected by banks' ratings, is assessed, and liquidity lines with ratings one full rating category or more below the issuer's Standalone Credit Profile are ignored. Available liquidity, retaining only counterparties commensurate with the corresponding attribute level, is measured as a percentage of rating case debt service.

Risk Profile Assessment

After each of the six KRFs have been assessed with an attribute, the committee decides a final overall risk profile assessment based on the attributes and the relative importance of each KRF, so that the overall risk of the issuer is scaled.

The risk profile assessment would therefore address:

1. Risk that cash flow shrinks; and
2. Risk that debt service requirements unexpectedly increase (for reasons other than the accumulation of deficits, which is already captured in the risk that cash flow shrinks, above).

Aggregating KRF Assessments: Tackling the Interplay of Risk Sources and Corresponding Risk Mitigants

When synthesising the six assessments into the risk profile, KRFs do not have specific weights. Overall Risk Profile assessments consider the relative importance of each KRF on an entity-specific basis. The blend will generally reflect the interplay between robustness and adjustability for each entity with more importance given to robustness KRFs. Adjustability may be relatively lower when robustness is strong, since the former addresses weaknesses of the latter. A lower need to face shocks/downturns would be captured in higher robustness assessments. A Midrange revenue adjustability assessment would not preclude the overall risk profile from being assessed as Stronger if the three Robustness KRFs are assessed as Stronger. One Weaker KRF would not preclude the overall risk profile from being assessed as Midrange if the three Robustness KRFs are assessed as Midrange.

The table below provides typical guidance for combining the KRFs into an overall risk profile.

Risk Profile Guidance Table

Risk profile	Typical minimum sovereign IDR[a]	Blend of KRF attributes
Stronger	AA-	A vast majority of Stronger, unless one KRF overrules[b] the others; no Weaker
High midrange	A-	A combination of Stronger and Midrange, no Weaker
Midrange	BBB-	A balanced combination of Stronger, Midrange and Weaker attributes
Low midrange	BB-	A combination of attributes with a majority of Midrange and some Weaker
Weaker	B-	A majority of Weaker (including 3 Weaker and 3 Midrange)
Vulnerable	C	A majority of Weaker, in countries rated in B category or below

[a] In a few cases, the Risk Profile could be better than the Minimum Sovereign IDR, if the LRG is materially stronger, from an institutional and economic perspective, than what the sovereign reflects as an "average"
[b] A KRF overrules the others when it makes them irrelevant. An example is when there is an automatic and unlimited revenue equalisation, aimed at matching the expenditure burden over the short or medium term
Source: Fitch Ratings

Risk Profile

Risk Profile reflects the risk associated with unexpected weakening of LRGs' ability to cover their debt service needs over the scenario horizon.

This factors in unexpected cash flow declines due to revenue drops, expenditure hikes and debt service increases driven by the debt structure (e.g. foreign-currency exposure) or cost of debt increases (e.g. floating rate debt) in the context of the macroeconomic environment. The latter is mainly assessed through the respective sovereign rating.

Associated risk could vary from very high for 'Vulnerable' risk profiles to negligible for 'Stronger' risk profiles (see *Risk Profile Guidance Table*) and factored in to the scenario analysis, leading to higher magnitude of stress for LRGs with low risk profile assessments.

Debt Sustainability and Scenarios

A major part of the analysis is addressed in the risk profile above, where the issuer's ability to service its obligations is determined by its ability to maintain or restore a robust cash flow and stable debt service with adequate liquidity. Drivers of this ability are captured in the KRFs and their assessment. The only element not yet tackled is the magnitude of financial obligations.

Scenarios and Assumptions

Scenario analysis considers potential performance under a common set of assumptions, thereby illustrating how cycles or reasonable downturns affect individual LRGs differently.

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. Fitch 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. Scenario analysis helps 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.

Once general expectations for the issuer's performance through the cycle are established, a rating would change only when performance is outside of these expectations. For example, deterioration of the issuer's financial cushion during a downturn would not trigger a rating change as long as the cushion remains above minimum expectations for that point in the cycle, adjustments are under way if that threshold is approaching, and Fitch expects the cushion to be rebuilt to higher levels in a recovery.

The institutional framework analysis aims at using a common set of assumptions, such as GDP growth or national government transfer indexation, for the relevant peer group (credits operating in the same framework, such as regions in a given country). This is a key step to ensure consistent approach in the formation of rating scenarios (see below).

Base Case

Fitch will evaluate a cash flow scenario that serves as the agency's expected, or base, case in the current macroeconomic environment. Fitch's base case is the starting point of rating case scenario and sensitivity analysis. The base case scenario reflects the trend of the LRG's historical performance subject to: relevant macroeconomic assumptions; and changes in revenue and expenditure frameworks.

Macroeconomic assumptions used in the base case are primarily derived from Fitch's economic data (notably *Global Economic Outlook*) and Fitch sovereign reports; in the absence of such data, Fitch would use other reputable research and economic institutions.

Shifts in the framework could affect revenue/expenditure dynamics irrespective of the economic fundamentals. Examples include country-specific changes in tax allocations, expenditure responsibilities, or issuer-specific factors that should be considered in the scenario. These adjustments are usually factored in the first projection year (i.e., year 1 of the scenario). The base case scenario development for the remaining years (years 2-5) usually follows national economic trends.

Rating Case

The rating case will consist of a through-the-cycle scenario that incorporates a combination of revenue, cost or financial risk stresses as described below. These stresses are formed typically by reference to historical events, peer analysis, and Fitch's expectations for the future. These may incorporate a particular scenario of events to which the issuer is particularly vulnerable, such as the loss of a key taxpayer, a sector downturn, such as in real estate, or currency, interest rate or refinancing risk. Statistical analysis of the historical data may be used to measure volatility, subject to the availability of sufficient data that is comparable.

The rating case will reveal levels and shifts in key revenue, expenditure and debt structure metrics, and consequentially in the debt sustainability and liquidity metrics, in contrast to the base case. Since the rating will be positioned based on the rating case, these levels and shifts are consistent with a stable rating through that stress. In other words, the rating would not be downgraded if the metrics were to deteriorate or be expected to deteriorate from the base-case levels down to rating-case levels.

In those cases where the LRG is not subject to cyclicality in revenues or expenditures, the rating case and the base case will be closely aligned. For an entity with base case financial profile indicating an SCP of 'b' or below, the base case analysis alone may be sufficient to evaluate the risk of default and transition for the debt.

The assumptions used to determine the amount of stress included in the rating case are based on KRF assessments. A Stronger Revenue Robustness assessment would suggest a lower expected level of stress on revenues than a Midrange assessment. Some assumptions can be common to all credits belonging to a similar tier in a given country. Some will be specific, adapted to the individual risk profile.

Net Adjusted Debt

In its analysis Fitch focuses on Fitch-adjusted debt (Adjusted Debt), that includes all financial long-term and short-term debt, and other liabilities classified as "Other Fitch-classified debt" where Fitch deems the additional risk to the issuer to be material. The latter could include principal of financial leasing, unfunded pension liabilities, fixed payments for PPPs, Build and Transfer instalments, subsidies-in-annuity (see Liabilities and Liquidity).

Unrestricted cash and cash equivalents (e.g. liquid deposits), and readily available reserve funds are deducted from the Adjusted debt to come up with Net Adjusted Debt.

In some cases, such as China, where proper reclassification of contingent liabilities is not possible, analysts can use Net Overall Debt, instead of Net Adjusted Debt for debt sustainability metrics calculation.

Additional Sensitivities

Sensitivities on Single Variables

In order to assess the vulnerability of an issuer to a specific risk, where relevant, analysts may simulate the effect of a change in a single variable beyond the stress applied in the rating case. Typical magnitudes of stress could be dimensioned on previous episodes of crises experienced in the same country or elsewhere. For example, a real estate market crisis, with its consequences on property transfer duty, would be a good sensitivity for LRGs where such revenues are important. The same sensitivity (such as a decline in property market values) would be applied to comparable peers, possibly yielding different rating impacts and therefore suggesting different rating outcomes.

Break-Evens

If an LRG is particularly exposed to a single risk driver, analysts may also use the LRG's cash flows to test a breakeven scenario that determines the maximum level stress that can be applied to a single variable without a default on a rated instrument. Break-even scenarios could apply on tax base contraction, an interest rate hike, currency depreciation or an expenditure increase. These scenarios will be compared to historical troughs and can be added to the peer analysis, which will help analysts form a view on the headroom available at the envisaged rating level.

Metrics to Assess Debt Sustainability

Fitch assesses debt sustainability using a combination of credit metrics, focusing on those that are best adapted to the rated entity, according to its obligations and flexibility to face them.

The most relevant credit metrics used to assess the financial performance of LRGs are determined based on the institutional rules, notably on the classification between two main types of subnational governments. These types will drive which metrics are most relevant to evaluating debt sustainability in the rating guidance and peer group. They are defined as follows.

Type A: Countries/tiers with the ability to incur structural deficits (sovereign-like features). These are typically state-level LRGs in federal arrangements, which share with the central government some key attributes of sovereignty and are often in charge of supporting policies or missions, resulting in fiscal deficits during economic downturns and possibly beyond. Typically, Type A governments collectively have the following traits:

1. Provide key public services such as healthcare, education or social services.
2. Represent a material share of the general government expenditure and debt (above 30%).
3. Display high vertical fiscal imbalances[3] and tax-sharing arrangements with the central government.

These features are not binding or exclusive and analysts should analyse these quasi-sovereign entities with a broader perspective to make a final decision, based on LRGs' intrinsic responsibilities to absorb negative shocks together with the central government, and looking at LRGs' ability to mobilise resources beyond their current resource base, as expressed by GDP, and to tap various liquidity sources when needed, such as bank lines, commercial paper, trade credit or inter-governmental facilities.

Type B: Countries/tiers with requirements to cover debt service from cash flow on an annual basis. For such governments, the LRG is subject to requirements imposed and enforced by upper-tier or national legislation, although some flexibility may be observed.

[3] A vertical fiscal imbalance is the discrepancy between the federal/national government's extensive capacity to raise revenue and the responsibility of the states/LRGs to provide most public services, such as physical infrastructure, health care, or education, despite having only limited capacity to raise its own revenue.

The Following Primary Metrics Are Assessed

Economic Liability Burden [Augmented Debt (Net Adjusted Debt + a Pro-Rata Share of Central Government Debt) / Local GDP] measures the size of debt in proportion of the GDP. As for sovereign entities, GDP is used as a proxy of potential resources of the LRG: not only its current resources, but more broadly the economic base that could be taxed in order to service the debt. For the numerator, Fitch augments the debt figure by adding a share of the central government debt to the LRG's debt. This reflects the overlap of tax burden: the entity may be able to raise additional tax, but will take into account the existing burden on the taxpayers, who generally need to service federal debt from the same resource base. This ratio is best adapted to Type A credits as defined above.

Payback Ratio [Net Adjusted Debt / Operating Balance[4]] is a measure of the ability of an entity to pay down its debt from its own recurring resources, before any policy action is taken, such as tax or fee hike, cost cutting, asset sales or other measures. It is therefore a hard measure of debt sustainability. A negative operating balance, carried through the cycle, would mean the entity is unable to service its debt with recurring resources. This would flag medium-term risk of insolvency, absent corrective measures. This ratio is particularly adapted to credits that need to service their debt with their own resources, rather than new borrowing, and that have limited legal leeway in taking policy actions (Type B as defined above). It is the ratio most adapted for basic local governments with hard budget constraints.

The primary metric for Type A issuers is the economic liability burden, whereas for Type B entities the payback ratio is the main metric. For Type A issuers, the payback ratio is a useful secondary measure of debt sustainability and could justify a higher (when the payback is structurally strong) or lower debt sustainability score than a suggested outcome derived from the Economic Liability Burden.

For all Entities, the Following Secondary Ratios Are Considered

Coverage: Synthetic Debt Service Coverage SDSCR [Operating Balance / Mortgage-Style Debt Annuity[5]]: Coverage of debt service is measured by a synthetic indicator, which assumes a mortgage-style amortisation over 15 years, normalised over the most frequently seen amortisation maturity, using the average cost of debt[6] of the entity. This allows for comparing entities that may make different choices of debt management, such as straight amortisation, bullet debt, or back-ended structures.

Coverage: Actual Debt Service Coverage ADSCR [Operating Balance / Debt service, including short-term debt maturities in the current year]: For issuers with a high proportion of short-term debt or in countries where the typical maturity of debt cannot reach the 15 years used in the synthetic DSCR as above, the actual DSCR will be used instead. This allows capture of the actual risk of not covering debt service with internal resources.

Fiscal Debt Burden [Net Adjusted Debt / Operating Revenue] is an indication of the size of debt in proportion to the fiscal capacity in the form of recurring resources. It compares entities with similar scopes of responsibility but is less adapted to compare debt burden across jurisdictions or tiers with different scopes of responsibility, as the scope of responsibility will drive the size of both revenue and expenditure. The Fiscal Debt Burden metric has less weight for the Debt Sustainability score assessment than Coverage, and is used primarily for notch-specific positioning of the SCP.

Based on the combination of relevant ratios, Fitch determines a category-specific Debt Sustainability Score based on the *Debt Sustainability Score* table. The primary and secondary metrics considered are taken from the Fitch Rating Case forward-looking scenario. The positioning of the metrics is considered over the five-year scenario horizon under the rating

Augmented Debt

Augmented debt is used in calculation of Economic Liability Burden – primary metrics for Type A LRGs. It is the sum of the LRG's net adjusted debt and its pro-rata share of the central government's debt. This acknowledges that the GDP of the LRG will also be mobilised to service central government debt, which may be considered "senior" in the economic and political waterfall.

Where Fitch deems the additional risk to the issuer to be material, pro-rata share of social security system debt can be added to the pro-rata share of central government debt.

[4] Operating Revenue less Operating Expenditure. Both aggregates are excluding one-off items such as asset investments, asset sales or extraordinary support transfers (classified as "capital").

[5] Mortgage-Style Debt Annuity: maturity = 15 years, interest rate= average cost of debt, debt outstanding = net adjusted debt.

[6] Apparent cost of debt [actual interest paid/direct debt] could be used as a proxy of average cost of debt in most cases, if apparent cost of debt is not meaningful, ie when the LRG does not have any outstanding debt, cost of debt of similar peers should be used.

case to best reflect the risk associated with the entity. Usually, this positioning is weighted towards the end of the scenario horizon using, for example, the final year or a blend of the last two or three years.

The rating committee will opine on debt sustainability by combining the relevant primary and secondary metrics. The score suggested by the primary metric will act as a cap. Secondary metrics (typically coverage) of a weaker level could drive a lower outcome if they reveal a real additional weakness. The influence of the secondary metric on the debt sustainability final outcome would be one category, if applied. This adjustment, when applicable, would work asymmetrically, only downwards.

Debt Sustainability Score

	Primary metrics		Secondary metrics	
	Type A eco. liability burden (%)	Type B payback ratio (x)	Coverage (x)	Fiscal debt burden (%)
aaa	X ≤40	X ≤5	X ≥ 4	X ≤ 50
aa	40< X ≤70	5< X ≤9	2≤ X <4	50 < X ≤ 100
a	70< X ≤100	9< X ≤13	1.5≤ X <2	100 < X ≤ 150
bbb	100< X ≤140	13< X ≤18	1.2≤ X <1.5	150 < X ≤ 200
bb	140< X ≤180	18< X ≤25	1≤ X <1.2	200 < X ≤ 250
b	X >180	X >25	X <1	X > 250

Source: Fitch Ratings

Standalone Credit Profile (SCP) Derivation

SCP Positioning

The Risk Profile and Debt Sustainability score assessments are combined in a global *SCP Positioning Table* that provides typical ranges of debt sustainability based on differences in the risk profile. This table provides a suggested analytical outcome for the category-specific SCP. Notch-specific SCP derivation is primarily based on peer analysis, which includes analysis of the positioning of an entity's Risk Profile, primary and secondary debt sustainability metrics in the *Debt Sustainability Score* table.

SCP Positioning Table

Risk profile	Debt sustainability score					
Stronger	aaa or aa	a	bbb	bb	b	
High midrange	aaa	aa	a	bbb	bb	b
Midrange		aaa	aa	a	bbb	bb or below
Low midrange			aaa	aa	a	bbb or below
Weaker				aaa	aa	a or below
Vulnerable					aaa	aa or below
Suggested analytical outcome	**aaa**	**aa**	**a**	**bbb**	**bb**	**b**

Source: Fitch Ratings

Differentiation between SCPs in 'b' category and lower assessments are significantly affected by sovereign- and issuer-specific factors, such as the circumstances of distress in economic and financial environments, and the already weak relative positioning of an LRG assessed at these levels compared with peers.

For these reasons, SCPs of 'ccc' or below have not been incorporated into the table above. In these cases, the nuances are defined as follows.

LRGs with SCPs at 'ccc' indicate that default is a real possibility and typically would have exposure to significant refinancing needs and high liquidity risk accompanied by weak debt coverage metrics. If necessary, SCPs may be further differentiated in the 'ccc' category via the use of “+” or “-” modifiers by comparing qualitative factors and quantitative metrics against similar peers.

Further transitions to SCP assessments of ‘cc’ means that the credit has a very high level of credit risk and a default of some kind appears probable, particularly if there are indications that a default or a distressed debt exchange is likely to occur in the next 12 months.

An SCP would be lowered to ‘c’ when a default or default-like process has begun, or the issuer is in a formal payment standstill period, or payment capacity is otherwise irrevocably impaired.

Peer Analysis

The peer-analysis is a tool in the process of establishing the final outcome for notch-specific SCP. It is informed by the rating positioning table, and then the consistency and nuanced rating are established at this level – except any factors outside the SCP, such as governance.

Where information on appropriate rated peers is available to Fitch, as is typically the case for the same country/tier, for a country or tier alone, or for a role in government systems, this information will be used for comparative analysis of individual qualitative and quantitative risk factors or in establishing the rating with respect to the peer group. Peer selection considers the various components of the rating outcome, including risk profile, debt sustainability metrics, support factors, and ceilings.

Peer analysis is likely to play a more important role in countries where the portfolio of ratings is more developed. When the portfolio is limited, the scope of comparable credits is broadened; the comparability is less direct and is therefore less informative. Fitch uses standard metrics, normalising assumptions and using uniform definitions to ensure comparability. Under this approach, rating cases in a given country/tier will rely on common macro assumptions, and assumptions across countries are compared and benchmarked.

Finally, all subnational ratings are positioned paying attention to the “rating distance” to their respective sovereign.

From SCP to IDR: Factors Beyond the SCP

Bailout Mechanisms – Supported Ratings

The limitation to LRGs’ fiscal autonomy, which often results in a sovereign rating ceiling (see Capped Ratings), is often balanced by protection or rescue mechanisms provided by the upper tier of government.

Upper-Tier Support Captured in KRFs – Impact on SCP

When the rated entity is the lower-tier government, Fitch gives credit to the support mechanisms in the appropriate KRF. When funding is under the form of extraordinary transfers, such as Sonderzuweisung in Germany or Subvention exceptionnelle in France, this mechanism is captured in the Revenue Adjustability KRF. When support comes in the form of emergency liquidity, such as the Fondo de Liquidez Autonomico in Spain, such support is captured in the Liquidity Flexibility KRF. When this form of support is permanently available, it is embedded in the KRF attribute, and naturally enhances the rating. This cannot be disentangled from other aspects of the credit.

Support not Already Reflected in KRFs and Financials – Impact Beyond the SCP

When the support is discretionary or not based on robust legislation, it will not be included in the KRF (and hence, in the SCP). This support would be assessed and reflected in the IDR, not in the SCP.

Various instruments are used in practice by governments to convey support.

1. Budget loans, typically derived from intergovernmental financing, are one form through which the distressed entity may receive financing to close its budget gap or refinance maturing debt. Such loans are usually junior to commercial debt and offer considerable flexibility. The actual exposure to default on the ordinary financial debt (see Default and Rating Definition) is therefore lowered and reflected by a higher IDR.

2. Ad hoc support by the central government may also be provided. Such support may consist of adjustments to equalisation, access to tax revenues that ordinarily would flow to the higher level of government, direct transfers for operations, capital needs, or debt service, or other resource shifts, whether on a one-time or a multi-year basis. Being ad hoc and not necessarily enshrined in the institutional framework, this type of support is not included in the KRF assessments.

Fitch calculates enhanced primary debt sustainability metrics when governmental support mechanisms are considered, and assesses the subsequent improvement in the DS Score table it would have given, had the SCP been calculated on that basis. In countries where such form of support does not have a well-established record, the influence on the final outcome (IDR) would be at a maximum of one rating category. In countries with established precedents of subordination of budget loans, the uplift could go to two categories. In any case, the uplift could not lead beyond the lending government's rating.

The Following Enhanced Metrics Are Assessed

Enhanced Payback Ratio [Net Adjusted Debt Excluding Intergovernmental Debt / Operating Balance] is the same as the payback ratio above but considers only debt owed to non-governmental lenders. If ad hoc support is justified, the expected reasonable magnitude of this support may be used to calculate enhanced payback. In contrast to the ratios above, this ratio is not used to derive SCPs, but rather to evaluate the effect of extraordinary support, when relevant. It is applicable to countries where the central government or one of its agencies lends money to the LRG with the clear objective of alleviating financing pressure on the LRG, typically by offering some flexibility on debt servicing terms. This debt is considered junior by Fitch, as a delay or moratorium likely would not be considered a default (see Default and Rating Definition). As a result, debt sustainability using the enhanced payback ratio would appear stronger than with the payback ratio, and would be a better indication of the actual default risk. However, Fitch would not ignore the payback ratio, including financial debt owed to other government tiers, as this remains an indication of the overall fiscal tension. Arrears or restructuring on intergovernmental debt would flag financial distress. Therefore, the enhanced payback ratio would be used exclusively in the assessment of potential uplift from SCP to IDR.

Similarly, Enhanced Economic Liability Burden Ratio, Enhanced Fiscal Debt Burden and Enhance Coverage Ratios would be calculated by removing the debt owed to governmental lenders from the relevant LRG aggregate debt. These ratios would be considered to compare to the "normal ratios", and therefore assess the maximum potential benefit that the LRG would display if the governmental lenders were to write-off or indefinitely defer the payment of their debt.

Rating Floors

When support mechanisms are unconditional, unlimited and timely, the support could result in a rating on par with the supporting entity, such as German Laender backed mutually and by the sovereign. When support mechanisms have some limitation or conditionality, but Fitch believes the supporting government has a "target" rating for its LRGs to maintain a given borrower credit standing, Fitch could use a rating floor at a level lower than the rating of the sponsor. Such a rating floor can be static (the floor level would not be affected by a change in the sovereign LT LC IDR), or moving in sync with the sovereign rating. The continued existence of a ratings floor is reviewed regularly to ensure that the elements that existed at the time the floor was introduced are still valid. Any changes to the equalisation funding mechanism, liquidity back-up or view of the likelihood of government support could result in the change in the floor or its elimination. A rating floor can only be applied when the sponsor government has the ability and the willingness to provide the expected support.

Asymmetric Additive Risk Considerations

The analysis will consider whether certain additional risk factors may affect the rating conclusion. These additional risk factors work asymmetrically, where only below-standard features are factored into the final rating levels, while more credit-positive features are expected to be the rule, and would have a neutral impact on the rating. These risk factors include accounting policies, reporting and transparency, management and governance and pension liabilities[7]. In applying these additional risk assessments, it will be noted how the assessment has affected the rating positioning suggested when assessing the issuer's financial profile.

Accounting Policies, Reporting and Transparency

The accounting and reporting policies adopted by LRGs vary by jurisdiction. The quality of the accounting and reporting is generally captured through the assessment of the Liabilities Robustness KRF, since a weaker framework may correspond with under-reported liabilities. However, this factor is generally asymmetric, as a weaker assessment would lead to a lower rating. For peers with higher-quality accounting and reporting, this factor would not positively affect the rating, since it would not improve the ability to repay debt.

LRGs are usually mandated to comply with national accounting standards; very few countries implement IPSAS norms. Fitch therefore makes analytical adjustments to improve comparability internationally, as presented in *Annex 2: Main Analytical Adjustments*.

Attributes: Accounting Policies, Reporting and Transparency

Neutral to the rating	Data from actual operation; regular updates; independently validated; forecast supported by significance or error range statistic; no history of material data errors; detailed cash flow — receipts and disbursements; audited financial data; significant amount of public information available
Negative to rating	Substantially based on assumptions; extrapolated; subject to material caveats; data often subject to delay; history of revisions or errors; limited scope

Source: Fitch Ratings

Management and Governance

The quality of governance and management is an important consideration when assessing the potential performance of an LRG. These considerations generally affect the KRFs, with many possible credit implications captured in the attributes, for example in the liability and liquidity robustness KRF.

However, some additional considerations may apply beyond the KRFs and are addressed separately. Fitch considers these factors to be asymmetric. Weak governance and management may cause the rating to be lower, all other things being equal. In contrast, the presence of adequate governance and management will be assumed when evaluating the impact of stress scenarios and the ability of an issuer to manage through those stresses.

The effectiveness of governance and management is an important factor in assessing an entity's creditworthiness, as management's decisions and initiatives – subject to the oversight and strategic direction of the governing body, such as a regional parliament or city council – can ultimately determine an entity's long-term financial viability. Fitch generally focuses its commentary on management and governance practices if their effectiveness materially influences the rating decision.

Governance: With the level of analysis tailored to the structural characteristics of the institutional framework Country/Tier, Fitch reviews the effectiveness of the governing body in establishing and implementing the organisation's policies and principles. Fitch's assessment may involve developing an understanding of the issuer's missions and strategy, structure, composition, interaction with and oversight by management, knowledge of industry issues where relevant, and performance standards.

Management: Fitch also examines the track record of senior administration in implementing the government's policies and providing day-to-day management. Fitch's analysis is qualitative in nature. When evaluating rating-case stress scenarios, Fitch considers management's history of meeting the goals defined in a strategic plan and adjustments historically made when encountering changes to the operating environment. Fitch also considers management's

[7] Pension liabilities are normally addressed in Expenditure framework as well as Liability and liquidity framework. However, in cases of insufficient data reporting or valuation of unfunded pension liabilities, Fitch may consider adding an asymmetric risk factor.

explanation of significant deviations from its planned, expected or budgeted results and its formulation of contingency plans.

Management effectiveness may also be judged through a review of planning processes. The most effective leadership teams are those that possess a strong understanding of their missions and capabilities, effectively articulate goals and objectives and are organised to operate consistent with best practices.

Attributes: Management and Governance

Neutral to rating	• Management and governing body with extensive experience in the sector • Generally stable management team and leadership with modest turnover • Transparency and strong communication between management and governing body • In the case of affiliated entities or group member, coordinated efforts among members and the governing body • Well-developed and documented policies and procedures that are consistently adhered to • Resource management plans, forecasts of demand and management policies that generally reflect current economic, system and political conditions
Negative to rating	• Lack of experience and depth at the issuer • Repeated failure to adopt budgets on a timely basis due to absence of consensus in governing body or resistance of key stakeholders • Failure to maintain open communications between the issuer and any relevant governing body, which may reveal itself in unexpected operating changes • Weak or lack of forecasts and resource management plans • Limited or lack of policies and procedures, or policies not adhered to • Official allegations of substantial corruption or breach of financial reporting law or regulation that affects financial operations

Source: Fitch Ratings

Pensions Liabilities

As noted earlier, employee pensions and benefits can become a potential source of fiscal distress, affecting the liability position or expenditures of LRGs. Where material, Fitch's analysis starts by assessing the nature of the LRG's financial commitment to its retirees, incorporating the varying legal, fiscal, administrative and accounting frameworks of pension obligations from one country to another. In many countries, the LRG's commitment to retirees is limited or non-existent, because systems for supporting retirees are the responsibility of the sovereign, while in others the obligation to support retirees is shared with or falls entirely on the LRG.

Due to their long-term nature and uncertain timing and amount, Fitch views a commitment to pay pensions as a liability, regardless of how pensions are structured and accounted for in financial reporting. Where robust liability, contribution and benefit data is present, Fitch incorporates unfunded liabilities and the current spending burden of pensions into its KRF assessments. To the extent some or all data is not reported or available, Fitch may not view pensions as a debt obligation for the purpose of computing leverage metrics, instead focusing on the impact on the LRG's expenditure. However, in such cases, evidence that the unstated obligation to retirees is material, rising or difficult to change may be reflected as an asymmetric risk factor.

Attributes: Pensions Liabilities

Neutral to rating	• Immaterial or fully or largely prefunded pensions or those with long sufficiency periods, with liabilities based on conservative assumptions • LRG consistently funding the contributions in a timely manner, and contributions represent a limited burden on overall finances • Flexibility of benefits or assumptions, and history of active pension reforms implemented in recent years
Negative to rating	• Pensions systems with little or no prefunding of benefits, and liabilities based on favorable assumptions • Lack of actuarial studies or sufficient information to assess the pensions' liability burden • Little indication of commitment to prefund benefits, or benefits funded by ad hoc transfers to the pensions; evidence that the current funding demands and contribution practices may hurt the LRG's operating balance performance • Little ability or history of active pension reforms

Source: Fitch Ratings

Capped Ratings

Subnational governments are influenced to such a degree by, and subject to, decisions of their central/federal government that the LRG's ratings are generally capped by the ratings of the sovereign in which the LRG is located in recognition of a certain degree of interdependence between national and subnational finances, even under the most decentralised frameworks of intergovernmental relations. Even in cases where a subnational enjoys the highest degree of autonomy on taxation and freedom to access financial resources, the relationship between the LRG and central government's finances is more diverse, subtle and far-reaching than suggested by immediate budgetary flows.

LRGs are generally subject to the sovereign's decisions on funding, borrowing rules and responsibilities. Sovereign discretionary power may therefore undermine the predictability of the LRGs' budgets, whose strength may be temporary or contingent on a favourable allocation of taxes that may not survive changes in electoral cycles. The highly adverse economic and financial environments in which a sovereign might default would severely affect LRGs' budgets.

In these cases, the SCP would show the intrinsic strength of the subnational, but its IDR would be capped at the level of the sovereign rating. The few exceptions to this rule are found when LRGs enjoy a high degree of autonomy on taxation, scope of responsibilities, freedom to access financial resources, and institutional recognition. See details and conditions of exceptions in Annex 1: Rating LRGs Above the Sovereign. The rating cap (floor) is applied after all other factors beyond the SCP mentioned in this section.

Lower Speculative Grade

The rating for an issuer or issue where the existing or proposed IDR is 'B' category or below suggests that such an issuer will have little capacity to navigate adverse economic conditions. Given the limited number of defaults in the local public finance sector, metrics are less useful for scaling ratings from ''CCC' to 'C'. Fitch will make a qualitative assessment of the level of default risk and the extent of any remaining margin of safety indicated by the issuer's overall operating and financial risk profile. In this respect, the Fitch rating definitions associated with rating categories from 'B' to 'C' provide guidance.

Rating Assumption Sensitivity

Revenue: Ratings will be sensitive to changes in attributes of Revenue. Changes in Robustness or in Adjustability can change the final assessment. An example would be the devolution to an LRG (by way of an institutional reform decided by the central government) of additional tax-raising capacity.

Expenditure: Ratings will be sensitive to changes in attributes of Expenditure. Changes in Sustainability or in Adjustability can change the final assessment. An example would be the decision of an LRG to engage in a plan to sustainably reduce its expenditure in a material responsibility field.

Liabilities and Liquidity: Ratings will be sensitive to changes in attributes of Liabilities and Liquidity. Changes in Robustness or in Flexibility can change the final assessment. An example would be the material change of the debt structure, with significantly more foreign-currency denominated debt.

Debt Sustainability: Ratings will be sensitive to changes in debt sustainability that result in a different rating positioning in the analytical guidance table, which is category-specific only, not notch-specific. Changes could also occur at notch-specific level, as a result of a change in the fine peer positioning based on metrics.

Surveillance Analysis

The criteria are applied with no difference between new rating analysis and surveillance analysis.

Default and Rating Definitions

LRG Default Definitions

Default/Non-Default Events

Default event (resulting in 'D' or 'RD' rating)	Non-default event
Missed coupon or principal repayment on a public debt security issued by the LRG	Arrears on payments to suppliers or reported failure to pay out under an LRG "guaranteed" contract, bilateral loan or similar commitment that falls short of an unequivocal, irrevocable and unconditional guarantee by the LRG
Missed coupon or principal repayment on a public debt security benefiting from an unequivocal, irrevocable and unconditional guarantee provided by the LRG	Failure to pay on a swap instrument if this is due to legal dispute over the terms of the contract
Reported failure to pay unrated debt obligations owed to private creditors by the LRG provided Fitch opines that a default event has occurred	Default by a wholly government-owned and/or controlled issuer, even if it occurs as a direct result of actions by the LRG
On completion of a distressed debt exchange on a public debt security issued by the LRG	Reported failure to pay debt owed to the upper tier of government, notably the sovereign, and official creditors by the LRG, including multilateral development banks such as the European Investment Bank or EBRD

Source: Fitch Ratings

Rationale/Conditionality

LRGs have a wide range of financial relationships with resident and non-resident entities. The IDR, however, only relates to the probability of default on debt owed to private creditors. The table above distinguishes between events that may result in the LRG's IDR being lowered to 'D' or 'RD' (left-hand column) and those that would not be considered a default event (right-hand column), although they could have negative rating implications for the LRG.

Official Sector Debt – Intergovernmental Lending

Although reported failure to repay debt owed to the official sector, including an upper tier of government or the sovereign, would not be judged a default event, reflecting the opacity of financial relations between governments and the influence of political and non-financial factors, if arrears to official creditors indicate growing financial distress and/or a lack of willingness to pay, the LRG rating may be adversely affected.

Fitch is also aware that LRGs would likely prioritise payments of multilateral or international official creditors' debt, such as multilateral development banks, since a default on that debt may create spillover effects on other government layers, notably for the sovereign[8].

[8] Except when the multilateral development banks have a political or statutory mandate to lend in the country and where an LRG default would not impair the lending of such official creditor to other public authorities.

Issuer Default Ratings

Ratings under these master criteria are, in most cases, IDRs. An IDR generally reflects all of an issuer's financial obligations, whether or not they have distinguishing security features. In assigning an instrument rating, Fitch considers the issuer's entire liability structure to form a view on risk of insolvency, and then takes into account any security features that may reduce the risk of default associated with the specific instrument. Public finance issue ratings and IDRs are default ratings and do not incorporate any assessment of recovery prospects.

International-scale senior unsecured instrument ratings are usually equalised with the relevant IDR.

National Scale Ratings

The rating levels discussed in these master criteria relate to Fitch's international rating scale. For issuers and debt instruments in local markets that require national-scale ratings, Fitch will apply the National Scale Ratings Criteria in conjunction with these master criteria. National-scale senior unsecured instrument ratings are usually equalised with the relevant national scale rating.

National-scale ratings for securities or counterparty obligations in a PPP transaction issued by LRGs in emerging-market countries and supported by pledged revenues of these issuers are assessed by applying the Emerging Market Countries' Local and Regional Governments' Specific Securities Rating Criteria in conjunction with these master criteria.

Short-Term Ratings

Short-Term IDRs reflect an issuer's vulnerability to default in the short term. For LRGs, the "short term" typically means up to 13 months. Short-Term IDRs are assigned to all LRGs that have Long-Term IDRs, except where an issuer does not have, and is not expected to have, material short-term obligations. In some circumstances, the issuer may be assigned only a Short-Term IDR if it does not have any long-term securities outstanding.

Short-Term IDRs are related to Long-Term IDRs as shown in the Rating Correspondence table. Both Short-Term Local-Currency (LC) and Foreign-Currency (FC) IDRs are rated on Fitch's short-term rating scale. Short-Term FC IDRs are determined from Long-Term FC IDRs, and Short-Term LC IDRs are determined from Long-Term LC IDRs. Fitch does not envision a circumstance under which it would assign Short-Term IDRs differently than the mapping suggests. However, the higher of the two short-term ratings may be assigned at the cusp, in circumstances where there are strong structural features supporting the repayment of the debt.

The three basic types of short-term analysis relate to cash available for debt repayment on a specific repayment date, market access for long-term debt and continuously available liquid resources. After evaluating the long-term credit characteristics, Fitch focuses on factors that affect each of these repayment structures.

Therefore, the higher Short-Term IDR of the two would be chosen when the issuer shows relatively[9] stronger features on the following items (at least two of three):

Thresholds for Higher-Rated Short-Term IDR

Higher Short-Term IDR	Liquidity coverage ratio[a] (x)	Liability and liquidity robustness (KRF3a)	Liability and liquidity flexibility (KRF3b)
A+/F1+	>1.8	Stronger	Stronger
A/F1+	>2.0	Stronger	Stronger
A-/F1	>1.4	Midrange	Midrange
BBB+/F1	>1.6	Midrange	Midrange

Rating Correspondence

Long-Term IDR	Short-Term IDR
From AAA to AA−	F1+
A+	F1 or F1+
A	F1 or F1+
A−	F2 or F1
BBB+	F2 or F1
BBB	F3 or F2
BBB−	F3
From BB+ to B−	B
From CCC to C	C
RD	RD
D	D

Source: Fitch Ratings

[9] "Relatively" means here in relation to the typical attributes found for the LT rating category.

Thresholds for Higher-Rated Short-Term IDR (Cont.)

Higher Short-Term IDR	Liquidity coverage ratio[a] (x)	Liability and liquidity robustness (KRF3a)	Liability and liquidity flexibility (KRF3b)
BBB/F2	>1.3	Midrange	Midrange

[a] Liquidity Coverage ratio computed as (Operating Balance + Unrestricted Cash)/(Interest & Principal Payment in current year)
Source: Fitch Ratings

The coverage ratio considered in the ST rating positioning is slightly different from those used for the Debt Sustainability score because it has to take into account the liquidity available for debt servicing (unrestricted cash).

Distressed Debt Exchange

When an exchange or tender offer that Fitch considers to be distressed is announced, the IDR will typically be downgraded to 'C' and, for bond issues, the instrument ratings will typically be downgraded to the 'C'-'CCC' range. Completion of the distressed debt exchange (DDE) typically results in an IDR being downgraded to 'RD'. Affected instrument ratings will be changed according to Fitch's rating scale. Shortly after the DDE is completed, an IDR or instrument will be re-rated, usually still low speculative grade.

Data Sources

Fitch's analysis and rating decisions are based on relevant information available. The sources are the issuer, the arranger, financial advisory consultants, third-party engineers or consultants, and the public domain. This includes publicly available information on the issuer, such as audited and unaudited or interim financial statements and regulatory filings. The rating process can incorporate information provided by other third-party sources. If this information is material to the rating, the specific rating action will disclose the relevant source. These criteria were designed using sources mostly from Fitch's rated credits portfolio. Reference was also made to public and credible sources of data and information, such as the IMF, the World Bank, the OECD and similar institutions.

Limitations

Ratings, including Rating Watches and Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Ratings Definitions and available at https://www.fitchratings.com/site/definitions.

Variations from Criteria

Fitch's criteria are designed to be used in conjunction with experienced analytical judgement exercised through a committee process. The combination of transparent criteria, analytical judgement applied on a transaction-by-transaction or issuer-by-issuer basis, and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind our ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific transaction or entity. Such adjustments are called variations. All variations will be disclosed in the respective Rating Action Commentaries, 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 included within the scope of the criteria, but where the analysis described in the criteria requires modification to address factors specific to the particular transaction or entity.

Criteria Disclosure

The following elements are included in Fitch's Rating Action Commentaries and issuer research reports:

- A Rating Derivation section, which explains the positioning of the issuer's rating against its peers and the rating positioning table thresholds and describes additional considerations impacting the rating not included in the table. These include in particular cross-sector criteria considerations such as the Country Ceiling.
- A description of those drivers most relevant to the individual rating action.
- A brief description of the main rating case assumptions.
- A description of the major institutional rules influencing the assessment of the KRFs.
- Any analytical adjustment made to the debt figure to reflect contingent liabilities where detailed data was not available. This will include a description of the key assumptions underlying the adjustment.
- Whether the rated entity has been classified as Type A or Type B.
- Where applicable, the presence of any rating floors and caps.
- Any variation from criteria.
- Information provided by other third-party sources, if this information is material to the rating.

Annex 1: Rating LRGs Above the Sovereign

General Approach

Sovereign ratings are usually a ceiling for LRGs' ratings, but under certain circumstances (see Conditions for Subnational Rating Above the Sovereign) LRGs can be rated above the sovereign. Despite a sovereign's generally higher powers of taxation, LRGs can remain current on financial obligations even in the event of sovereign default, particularly those with low reliance on central government transfers. This applies to both the Long-Term Foreign-Currency (LT FC) IDR and the LT LC IDR of an LRG. The Country Ceiling will serve as a rating ceiling for the LT FC IDR of the LRG.

The respective Short-Term IDR is derived as described in the relevant section of this criteria report (see Short-Term Ratings) and therefore could also be above the sovereign's Short-Term IDR.

In the countries with sovereign LT IDR below 'B' category, different rating dynamics for LRGs may apply (see Other Rating Implications).

Conditions for Subnational Rating Above the Sovereign

Fitch may rate an LRG above the sovereign LT IDR when its finances are shielded from the kind of sovereign interferences that may lead to unilateral changes of funding and responsibilities, and when it does not rely on national grants or transfers to give it strong credit fundamentals. Resilience of revenues to adverse economic cycles gives an LRG the potential to outperform even in cases of severe sovereign stress or default, while a clear sense of political independence may generate confidence in the strong willingness of an LRG to meet its financial obligations even in the event of sovereign default.

Factors that could allow a subnational to be rated above its sovereign are:

- institutional recognition;
- financial and fiscal autonomy.

Generally, both the above conditions have to be met for a subnational to be rated above the sovereign LT IDR.

Institutional Recognition

For an LRG to be able to be rated above the LT IDR of the sovereign, the LRG must have some form of constitutional or legal protection that would prevent the central government from unilaterally interfering in the subnational's fiscal and final operations without a constitutional change or other legal provision amendments. This protection may result either from legal recognition of an LRG's unique status compared to national peers or from a protective institutional framework at the national level.

The recognition of unique status can be through a special mention in the constitution of the LRG's unique independent status within the national framework or by way of a separate legal declaration that recognises the entity's status.

Financial and Fiscal Autonomy

Sovereigns can deliberately interfere with or indirectly influence the finances of most LRGs, for example by changing the tax base or tax rates, or transferring expenditure responsibilities without adequate funding. LRGs in centralised countries benefit from financial and institutional proximity to the sovereign. This feature enables them to obtain financial support if and when the need arises. However, as a consequence, these LRGs may not be rated above the sovereign; when the latter faces financial stress, attempts at subsequent budgetary consolidation measures usually translate into the imposition of revenue compression and constraints and/or pressures on LRG spending without consultation.

Fitch analyses intergovernmental arrangements to assess whether the national government can unilaterally change the mix of an LRG's power of taxation, funding, ability to borrow and expenditure responsibilities. If the LRG's consent for such changes is required by the country's constitution, and the sovereign is thereby prevented from making unilateral decisions that might alter the LRG's finances, the latter's performance may have a high degree of visibility over time and be partly de-linked from the performance of the national government.

The abilities of a subnational to meet its obligations without relying on central government transfers and, in case of need, to pass at least some revenue-strengthening measures are the clearest evidence of an LRG's capacity to de-link to some extent its finances from those of the national government. It is highly likely that a national government under stress would be tempted to impair the finances of its LRGs by reducing transfers to the latter in an attempt to bolster its own budget.

If local taxes and non-tax revenue directly levied and collected by the LRGs represent the overwhelming majority of revenue, this may make their budgets more resilient to external shocks affecting the national government. Some LRGs with specific constitutional arrangements directly collect taxes generated in their territories; in these cases, the weakening (strengthening) of the budgetary performance that corresponds with economic downturn (upturn) is attributable to economic fundamentals rather than sovereign actions or stress. Where LRGs control the tax payment system, provided there is no obligation to forward these tax receipts to the sovereign government, they are more likely to be able to insulate themselves from a sovereign's severe stress or collapse as taxpayers make payments directly to the LRG.

Rating Leeway

As a general guideline, Fitch derives an indication of the leeway that a rating can be raised above the sovereign rating from the difference between the LRG's SCP and the sovereign LT IDR as defined in the *Rating Leeway Correspondence Table* below.

Rating Leeway Correspondence Table

Issuer's SCP	Suggested Leeway for Issuer's LT IDR
6 notches or more above the Sovereign LT IDR	3 notches above the sovereign LT IDR
4 or 5 notches above the Sovereign LT IDR	2 notches above the sovereign LT IDR
Up to 3 notches above the Sovereign LT IDR	1 notch above the sovereign LT IDR

Source: Fitch Ratings

The suggested notch leeway could be reduced by one notch if additional weaknesses are revealed. Reasons justifying a lower leeway could reflect the following:

- The LRG has a large budget comparable to the central budget and a close relationship with the central government, which could lead to the ability and incentive to support the central budget by the LRG in case of sovereign distress to maintain the financial stability of the national public sector;
- Risks related to the sovereign could put pressure on the LRG's ability to repay its debt. This is most common among low investment-grade or speculative-grade sovereign ratings, which typically have more volatile and less predictable environments than more highly rated, investment-grade sovereigns.

Other Rating Implications

When a sovereign is rated below 'B−', it is possible that an LRG in that country could remain current on its financial obligations. In such a case, the LRG could still be rated above the sovereign and up to 'B−' for both FC and LC IDRs if Fitch was confident of its capacity to withstand a sovereign default. Fitch would assess each such case on its merits. However, the LRG would need to maintain a strong budget, have no need to undertake external refinancing of debt over the following one or two years, and have sufficient liquidity available for it not to face an imminent default. The Country Ceiling will continue to serve as a rating ceiling for the LT FC IDR of the LRG.

When LRGs rated above the LT IDR of the sovereign take over the latter's responsibility for financing and monitoring the constituent municipalities, Fitch considers that the former's rating, rather than that of the sovereign, serves as a ceiling for the other local authorities in the region's territory – although this does not ultimately imply a rating equalisation between the LRGs.

Annex 2: Main Analytical Adjustments

Where available, Fitch uses accrual-based accounts and adjusts such accounts to a modified accrual basis to better reflect cash flow by removing non-cash items[10].

Liabilities are adjusted to encompass known obligations matching the economic definition of debt, including all identified long-term, certain and quantifiable obligations that will be serviced from fiscal resources. In countries using simplified cash flow basis reporting, a comprehensive balance sheet may be lacking even if reported long-term financial liabilities is generally correct. Fitch makes adjustments to reflect the reclassification of some liabilities under “Other Fitch-classified debt” (see Reclassification of Contingent Liabilities table); these will include availability-based PPPs, unfunded pensions or debt of companies that raised debt on behalf of the LRG. In such cases, the transfers and payments paid by the LRG for the debt servicing would be deducted from the LRG operating expenditure and classified as capital expenditure, which would result in positively adjusting the operating balance.

Cash is adjusted to reflect only the unrestricted amount not pledged or earmarked to offset payables. The assessment of working capital, notably payables, may be difficult when no proper balance sheet is disclosed. In such cases, Fitch may prudently consider the available cash as “restricted” and does not deduct it from liabilities in the calculation of Net Adjusted Debt.

Fitch also reallocates revenue/expenditure items between operating and capital items where allocations are not reported.

External audits are rare and timelines of public audits, such as Court of Accounts, can sometimes lag by a number of years. The use of such reports is asymmetric, with the absence of a negative report being the norm, while alerts weigh on the assessment and ultimately on the rating. The quality of the overall oversight system is captured in the Liability and Liquidity Adjustability KRF.

In addition to the above adjustments, Fitch may detail specific adjustments required by a national framework, notably by accounting rules, which need to be consistently applied to all issuers subject to the same institutional framework.

[10] E.g. depreciation (few countries have assets appraised at market values with offsetting depreciation) or uncollectible taxes that may be inflating fiscal revenues.

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