MOODY'S INVESTORS SERVICE

REQUEST FOR COMMENT

General Principles for Assessing Environmental, Social and Governance Risks: Proposed Methodology Update – Regional and Local Governments Appendices

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Summary

In this Request for Comment, we propose to update the *General Principles for Assessing Environmental, Social and Governance Risks* cross-sector rating methodology with the addition of appendices that would provide more detailed information on the principal considerations for assigning Environmental, Social and Governance issuer profile scores (IPSs) and credit impact scores (CISs) for regional and local governments (RLGs) globally.[1]

The key proposed revisions to the current methodology are as follows:

» **Provide more details on the credit implications to regional and local governments of E, S and G considerations and how our assessment leads to the assignment of IPSs and CISs.** We would add an appendix that describes how we apply the general framework for determining E, S and G IPSs, as well as CISs, described in Appendices A and B of the methodology respectively, to regional and local governments. Our assessment of an RLG's exposure to ESG risks and benefits is similar in many respects to our approach for assigning IPSs and CISs to sovereigns. Our approach is based primarily on a qualitative assessment of E, S and G risks that may be informed by indicative quantitative metrics. These metrics may not be available for all rated RLGs and would typically vary in their details across different types of RLGs (e.g., US states, US local governments and RLGs outside the US). See proposed Appendix 1.

» **Provide more details on the qualitative considerations and quantitative metrics that may inform assignment of IPSs and CISs for RLGs in a companion document**. We propose to add a compendium document that would provide a description of the types of considerations and indicators that may be generally relevant across different types of RLGs (e.g., for US states or RLGs outside the US) for informing our assessment of some E, S and G risk categories and assigning IPSs for RLGs. In the compendium, we also propose to provide a description of the specific indicators that may inform our assessment of category scores for

[1] The issuers covered under this framework are governments below the level of the sovereign, such as states, regions, provinces, territories, counties and cities. The scope also includes entities that levy taxes to fund the activities for which they are responsible. These include public school districts, public utility districts and other special purpose districts. Public sector issuers that have business-like revenue raising capacity through the implementation of fees for service, such as municipal utilities, airports, toll roads, ports, mass transit enterprises, hospitals, housing agencies, and higher education institutions are covered under the framework for enterprises.

each type of RLG. Over time, we may broaden or adjust this compendium, for example, as more data become available or certain indicators become more or less relevant to our analysis. See proposed Appendix 2.

Following publication of the updated methodology, we would enhance transparency in our communication of E, S and G considerations, which we already incorporate into our credit analysis, by assigning IPSs and CISs to RLGs over time.

Impact on Ratings

If this cross-sector methodology is updated as proposed, we expect no changes to outstanding ratings for RLGs globally. In establishing E, S and G IPSs, we propose to use the general principles described in the existing methodology. The CIS is an output of the rating process that more transparently communicates our assessment of the impact of ESG considerations on assigned ratings in the context of other credit drivers. As such, our proposed publication of CISs will not change any ratings, currently or in the future.

This expected rating impact reflects only the methodological changes noted above and does not incorporate potential impact from other factors, including prevailing market conditions or factors specific to a particular issuer or transaction, such as financial metrics or qualitative considerations, that may be relevant to the rating analysis.

How to Submit Comments

In this Request for Comment, we are seeking feedback on our proposed addition of appendices to the *General Principles for Assessing Environmental, Social and Governance Risks* rating methodology. The proposed RLG appendices for the methodology follow. Prior to publication of the revised methodology, we may also consider other changes to the methodology as a result of the consultation process and our internal review.

We invite market participants to comment on the Request for Comment by March 22, 2021, no later than 11:59 p.m. US Eastern time, by submitting comments on the Request for Comment page at www.moodys.com. Upon appropriate consideration of received comments, we will adopt and publish a revised *General Principles for Assessing Environmental, Social and Governance Risks* rating methodology.

Proposed Appendix 1

Issuer Profile Scores and Credit Impact Scores for Regional and Local Governments Globally

In this appendix, we describe how we apply the general framework for determining E, S and G issuer profile scores (IPSs) and ESG credit impact scores (CISs), (described in Appendices A and B, respectively), to regional and local governments (RLGs) globally.

The issuers covered under this framework are governments below the level of the sovereign, such as states, regions, provinces, territories, counties and cities. The scope also includes entities that levy taxes to fund the activities for which they are responsible. These include public school districts, public utility districts and other special purpose districts. Non-financial public sector issuers that have business-like revenue raising capacity through the implementation of fees for service, such as municipal utilities, airports, toll roads, ports, mass transit enterprises, hospitals, housing agencies, and higher education institutions are covered under the framework for enterprises.[2]

In establishing E, S and G issuer category scores and overall IPSs for RLGs, we make a qualitative assessment of the issuer's exposure to the related risks. Our assessment of E, S and G focuses on credit-relevant considerations and the extent to which they are positive or negative for credit profiles. Issuer category scores reflect our assessment of the likelihood and magnitude of current and future credit exposures related to the category of risk, including their effect on economic growth, budget revenues and spending. These assessments are forward-looking but may also be informed by an entity's previous experience of these risks.

The IPS and category scores also incorporate meaningful mitigating or strengthening actions related to those specific exposures. These include actions taken at the issuer's own initiative or actions fostered or required by external parties (such as policies, regulations or international commitments).

Our assessment may be informed by metrics that are relevant to the risks, benefits and ESG-specific mitigants. These metrics are indicative and may not be available for all rated issuers. Metrics may also vary across different RLG types (e.g., US states and regional governments outside the US) reflecting differences in reporting standards and disclosure levels as well as varying relevance of particular metrics across RLG types. The metrics used in our assessment are typically sourced from governmental agencies or statistical offices, or in some cases from multilateral agencies or other third-party providers of ESG information. Where data are unavailable for a specific RLG, we may use the data of relevant higher-tier or lower-tier governments, with possible disaggregation or aggregation of that data. We may also consider scorecard factors or sub-factors in our sector methodologies, in particular for governance (e.g., an institutional framework factor or sub-factor score). We may also incorporate non-public information, including that obtained from issuers as part of the credit rating process. Please see Appendix 2 for examples of associated metrics for different types of RLGs. Over time, we may broaden or adjust our metrics, for example, as more data become available or certain indicators are viewed as more or less relevant to our analysis.

The E and S heat map sector category scores provide a useful general reference for an RLG's issuer profile analysis. For RLGs, we have defined two groups, each of which is broad and diverse: advanced

[2] In our sector heatmaps, we use private sector classifications for these entities.

economy RLGs and emerging market RLGs. As a result, an RLG's E and S category scores may vary, potentially significantly, from the heat map sector category scores. Heat map sector category scores also do not incorporate specific mitigants, which may result in an issuer category score that is better than the respective heat map sector category score.

Our assessment of an RLG's exposure to E and S may also be informed by the scores of corresponding higher-tier governments (e.g., referencing the E score of a sovereign when analyzing a region within that sovereign) and related lower-tier governments, where risk scores for these governments provide useful information. An RLG's exposure may be influenced by the policies set by higher-tier governments, such as the corresponding sovereign. In many cases, these policies or restrictions are largely out of the RLG's control, but may greatly influence, positively or negatively, its exposure to an E, S or G risk.

E, S and G risks may cross multiple categories. For example, risks pertaining to water (e.g., drought) could manifest in water management risk (e.g., consumption levels) or in natural capital (e.g., damage to water sources for an RLG). Legal, reputational and policy risks may arise in multiple categories. For example, insufficient or unreliable water supply could drive risks across other E, S and G categories (e.g., heighten social tensions, depress economic growth, result in greater oversight). When assigning an IPS, we consider the interplay and potential overlap among E, S or G categories to avoid overstating or understating the risks.

As discussed in Appendix B, the CIS helps to explain the impact of ESG considerations in the context of the issuer's other credit drivers that are material to a given rating.[3]

Issuer Profiles

Environmental Issuer Profile

Vulnerability to environmental risks for RLGs can vary significantly depending on the RLG's geography, economic base, population and the maturity of its institutions. Exposure to environmental risks can increase an RLG's operating costs and capital expenditures. For example, environmental hazards, such as hurricanes, can result in an immediate adverse impact on economic activity and result in revenue disruption, while longer-term environmental trends such as rising sea levels can cause more prolonged pressure on budgeting and spending priorities.

RLGs may derive some benefit from one or more environmental categories. In principle, an RLG could have an IPS of E-1 if it significantly benefited from environmental considerations. For example, an RLG may have a clear and lasting advantage in terms of economic growth and revenue generation because entities firmly rooted in its jurisdiction are involved in the production of environment-related technological innovation. This case is expected to be unusual. Moreover, E risks are pervasive and do not offset one another. As a result, assigning an overall IPS of E-1 to an RLG is highly unusual.

In the sections below, we also describe the principal credit implications from environmental considerations for RLGs.

CARBON TRANSITION:

A global shift away from the consumption of hydrocarbons can pose risks for RLGs, particularly those whose economies and finances are heavily dependent on the non-renewable energy sector. Decreasing

[3] For the CIS, the reference rating for sub-sovereigns outside the US is the issuer rating or senior unsecured rating. For US public finance, the reference rating is the issuer rating, where available. If the entity does not have an issuer rating, the reference rating is the senior-most unenhanced, uncollateralized full faith and credit obligation of the entity, or in the absence of such a rating, the senior-most unenhanced, uncollateralized revenue debt rating.

investment or disinvestment in this sector can negatively affect economic growth and the base from which the RLG collects revenue.

For an RLG, addressing the effects of the underlying economy's transition to a lower carbon future may include efforts to reduce the reliance on revenues linked to non-renewable resources, for example, by attracting investments that diversify its economy.

Some RLGs may enact policies, either self-driven or imposed by third-parties, that are environmentally beneficial, but could in the long run be costly to the RLG. Some examples may include the phase out of gasoline-powered vehicle sales in the RLG's jurisdiction or restrictions on the use of gas utilities in newly developed areas, which could contribute to loss of revenue or population over the long term.

We make a qualitative assessment of the exposure to carbon transition risk of an RLG's major economic sectors and the share of RLG revenue generated from them. Our assessment would also include considerations of economic vibrancy resulting from sectors that benefit from carbon transition.

PHYSICAL CLIMATE RISK:

An RLG's exposure to heat stress, water stress or extreme weather events (e.g., hurricanes, floods or wildfires), is driven in great part by its geographic location.[4] The severity and frequency of these events have increased in recent decades, in some cases causing significant economic losses, hazards for the local population and environmental damage.

The sensitivity to physical climate risk of an RLG also depends on the share of weather-dependent economic activities (e.g., agriculture and tourism), exposed physical assets (e.g., utilities or housing located in flood plains) and RLG infrastructure assets (e.g., bridges, tunnels, subways) that can be impacted meaningfully by these events.

Weather events such as floods and hurricanes can damage the RLG's revenue base, temporarily or over a longer period. As a consequence, RLGs might face budgetary pressures to repair damaged infrastructure or to invest in the hardening or relocation of existing infrastructure that is subject to physical climate risk. Where the impact of severe weather events is increasing, this trend will also likely weigh on investment and economic growth.

In general, long-term environmental trends can also hurt an RLG's economic activity and infrastructure. Considerations such as the share of the population living close to sea level and the susceptibility of an area to droughts or wildfires contribute to an RLG's sensitivity to physical climate risk. Heat stress and water stress can also negatively affect economic growth, for example, by causing losses in productivity and decreases in agricultural production, burdening health care systems and increasing energy demand.

RLGs may mitigate the effects of physical climate risks, for example through the provision of dedicated funds to prepare for and respond to such events.[5]

Indicators that may inform our assessment include metrics such as exposure to heat stress, water stress, flooding and extreme precipitation, hurricanes and typhoons, and sea level rise, such as those provided by Four Twenty Seven Inc. (427).

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4 The physical climate risks category excludes geophysical risks, such as earthquakes, volcanoes and tsunamis.

5 Mitigating support from an external party, such as a higher tier government, is considered in the CIS.

WATER MANAGEMENT:

This category focuses on the management and governance of water resources. This includes, for example, water consumption, availability, efficiency and access, quality, treatment and pollution, all of which may affect an RLG's economy and finances. Because water is a vital resource for all economic activity, water shortages can destabilize an RLG's revenue and expenditures and affect its overall economic and political stability. RLGs that have economies largely based in water-intensive industries like mining, pulp and paper, textile and agriculture are more exposed. Climate change considerations, such as drought or changing rainfall patterns that could affect water supply are covered under our physical climate risk category.

RLGs can mitigate their exposure to water management through the implementation of effective policies and strategies, including through oversight of RLG-owned water and wastewater utilities, for demand reduction and water and wastewater treatment, as well as building an integrated water management system that may result in more diverse water sources for the RLG.

In our qualitative assessment of water management, we may consider an RLG's trend of water availability and consumption and the actions an RLG is taking to manage its water-related risks. We also consider whether an RLG's abundance of sustainable water resources is a material advantage.

WASTE AND POLLUTION:

Hazardous waste and nonhazardous waste from residential, commercial and industrial activities, including municipal solid waste, can have a material negative economic, social and financial impact on an RLG. For many RLGs, efforts to prevent or address the effects of these risks on the population and ecosystem, such as the implementation of recycling programs or the cleanup of hazardous waste sites, may lead to significant costs.

RLGs can, in part, reduce their exposure with long-term waste-management planning and with regulation to reduce or treat waste and pollution of the industries that compose their economy. To reduce pollution, some RLGs have also put in place congestion pricing for vehicles entering their city centers. However, some areas of regulation may not be in the RLG's control, and ineffective regulation by a higher tier of government may leave the RLG exposed to the effects of pollution, while an overly restrictive policy by a higher tier of government may negatively affect the RLG's economy and ability to attract investment.

In our qualitative assessment of waste and pollution, we may consider the amount of municipal waste per capita generated in the jurisdiction and indicators of air pollution. We may also consider the extent to which air and land-based pollution or related regulations are material risks for the population and the major industries in an RLG's economy.

NATURAL CAPITAL:

An RLG with an economy based in sectors that provide goods and services derived from natural capital, such as agricultural products, raw materials or other products derived from plants or animals or ecotourism, has an elevated exposure to natural capital. Damage to an RLG's environment caused by government action or a failure to protect natural systems, be it from human causes or natural erosion, can lead to a loss of economic activity and revenue for an RLG. For example, for an RLG whose natural capital drives a significant tourism sector, a deterioration of its natural landscape and the accompanying loss of visitors over time will result in lowering the revenue and growth in the sector.

RLGs can implement policies and regulation to sustainably manage natural assets or mitigate their potential deterioration, while maintaining economic growth priorities.

In our qualitative assessment, we consider the extent of an RLG's dependence on revenue from industries that are directly exposed to or reliant on the natural environment and whether there is potential damage to its natural capital that can adversely affect the RLG's economic and revenue stability. An RLG that places significant emphasis on preserving its natural landscape and biodiversity can derive material economic benefits.

Arriving at the E IPS

We make a qualitative assessment of the overall environmental issuer exposure, taking into account the scores assigned for each category. For environmental categories for which we have good availability of data, we typically normalize[6] the data for each metric in a category, and take the average of these normalized metrics (the normalized category metric). We then rank the RLGs, which gives us a starting point to our assessment of a given category score. The actual category score incorporates qualitative judgment.

To arrive at the environmental IPS, we consider the highest and average risk exposure and generally place more emphasis on the highest exposure as conveyed by the quantitative metrics, for categories where they are available, and our qualitative judgment.

The severity of the highest risk matters because environmental risks do not offset one another. In general, where risks are additive and the mitigants are insufficient to lower a single risk or aggregate risks, we may assign an IPS at or near the worst risk category. Average exposure (as indicated by category scores) also provides meaningful information, because an RLG highly exposed to several sources of risks faces more severe environmental risk than an RLG highly exposed to one risk category only. Furthermore, the E-IPS could be better than the worst category score and closer to the average score for all categories because we qualitatively consider the overall exposure.

We score an RLG's environmental IPS on a scale of E-1 (Positive) to E-5 (Very Highly Negative).

Social Issuer Profile

An RLG is exposed to a wide variety of social issues related to the sometimes very specific characteristics and structure of its society. The exposure of an RLG to social risks depends greatly on the particular responsibilities of the RLG, which may vary across jurisdictions.

In the sections below, we also describe the principal credit implications from social considerations for RLGs.

DEMOGRAPHICS:

Population growth partly drives an RLG's capacity to generate revenue from sources such as income taxes, sales taxes, property taxes and, in some cases, transfers from higher-tier governments. Inversely, an aging population, lower birth rates or negative net migration weigh on population growth and may diminish an RLG's revenue generation capacity.

6 For each metric, we calculate the average and the standard deviation across all rated RLGs. Each RLG's normalized metric is equal to the metric value minus the average metric value, divided by the standard deviation.

Where demographics are shifting toward an older population, an RLG may face an increase in demand for related social services and healthcare spending. Some RLGs are also responsible for social security benefits for their citizens, in addition to pensions or healthcare.

Population growth is typically positive for RLGs, but may present challenges, including increased demand for employment, housing, healthcare and infrastructure. Similarly, inward migration, be it local or international, may present benefits by attracting a younger or skilled population, but may also raise costs and create social tensions. Outward migration, on the other hand, can lead to a depletion of a younger or educated workforce.

RLGs can employ different strategies that may encourage positive demographic trends, for example, by providing high-quality infrastructure and amenities or a low tax environment. Some RLGs may implement policies that encourage household formation and higher birth rates.

Indicators that may inform our assessment include those related to population growth, age composition of the population (e.g., working age compared to non-working age), birth and mortality rates, net migration and related trends.

LABOR AND INCOME:

Employment levels and income inequality affect an RLG's economy, finances, social cohesion and political risk. High unemployment or weak employment prospects can exacerbate income inequality, and negatively pressure an RLG's revenue base. Some RLGs also have large informal economies, which constrain tax revenue. Income inequality may, on its own, contribute to high crime rates and political risks, or it may drive spending for social programs such as affordable housing.

Within a country, regional inequalities including those related to wealth, income, employment and infrastructure can also drive internal migration, which can exacerbate the social risks of the different regions. An RLG relying on a weaker tax base may need to spend a relatively higher portion of its budget on the provision of services than its wealthier counterparts.

There is typically some scope for RLGs to manage labor and income risks. Policies aimed at attracting a wide range of businesses, offering jobs in different sectors and at different skill levels can mitigate some of these risks. Some RLGs can also implement policies to promote good working conditions and benefits. Also, the presence of large, vibrant higher education, healthcare and high-tech sectors may contribute to employment stability or growth.

Indicators that may inform our assessment include labor force participation, employment, unemployment, income levels, and income inequality and related trends.

EDUCATION:

Education is a key responsibility of many RLGs. The education level of an RLG's citizens influences social cohesion, income levels, workforce and business development, which are all characteristics that may directly affect an RLG's growth potential and revenue raising ability.

Vast differences in access to education may exist across RLGs due to differences in resources, investment, or the physical capacity or quality of schools.

Where educational attainment is low, in particular for primary and secondary education, the relevant RLG(s) may face pressures to invest in basic needs such as teachers and educational facilities. RLGs may also implement a range of policies to improve educational access and affordability. For example, RLGs may regulate the tuition at a university or offer grants to encourage access to education.

Indicators that may inform our assessment include literacy rates and the share of the RLG's population with secondary and post-secondary education.

HOUSING:

Rising housing costs and the lack of affordable housing can curb economic growth and decrease an RLG's revenue base. They also put pressure on the government to increase spending on housing quality, access and availability. RLGs can implement a range of programs to support housing, such as providing rental benefits or constructing affordable housing. A lack of affordable housing can lead to increased social tensions stemming, for example, from homelessness or the health and safety issues associated with overcrowding, and can raise political risk.

Strong demographic trends can boost housing markets; however, very rapid growth can also contribute to less affordable housing.

Indicators that may inform our assessment include those related to housing access and affordability.

HEALTH AND SAFETY:

Health and safety issues, including healthcare access and availability, personal safety and food security, can impinge on economic growth, in particular when they affect health outcomes throughout a person's life. A challenging health and safety environment may also deter investment and result in a loss of population and employment, while pressuring an RLG's spending on healthcare, social services, and public safety. The prevalence of crime or unequal access to healthcare also increases political risk.

Indicators that may inform our assessment include life expectancy, the proportion of an RLG's population that has health insurance, and measures of violent crime, such as the homicide rate.

ACCESS TO BASIC SERVICES:

Access to basic services including utilities, transportation, internet and financial services supports productivity and fosters economic growth. On the other hand, the failure to provide adequate access to these basic services not only can thwart economic expansion and revenue growth, but also can generate discontent and lead to social protests.

Population and economic growth are typically accompanied by demand for spending on basic services. Governments that do not invest in basic services or infrastructure when needed, either directly or through partnerships with the private sector or arrangements with other governments, may have lower leverage and a stronger financial performance in the near-term. Over time, however, a lack of investment may require substantial spending and may drive private sector disinvestment or population loss.

Indicators that may inform our assessment include an RLG's capital spending per capita and various measures of a population's access to basic services, such as broadband access.

Arriving at the S IPS

We use essentially the same approach to arrive at the social IPS as we use for the environmental IPS. For social categories for which we have good availability of data, we typically normalize[7] the data for each metric in a category, and take the average of these normalized metrics (the normalized category metric). We then rank the RLGs, which gives us a starting point to our assessment of a given category score. The actual category score incorporates qualitative judgment.

To arrive at the social IPS, we consider the highest and average risk exposure and generally place more emphasis on the highest exposure as conveyed by the quantitative metrics, for categories where they are available, and our qualitative judgment.

We score an RLG's social IPS on a scale of S-1 (Positive) to S-5 (Very Highly Negative).

Governance Issuer Profile

Governance is a key driver of an RLG's credit quality. Governance practices can also mitigate or exacerbate environmental or social risks, in addition to having positive or negative influences on other fundamental aspects of an issuer's credit profile.

Some governance considerations are explicitly incorporated as scorecard factors or sub-factors into our sector methodologies for rating the different types of RLGs globally.[8] For some types of RLGs, we use the corresponding sector methodology scorecard factor or sub-factors to arrive at the governance IPS.

In the sections below, we also describe the principal credit implications from governance considerations for RLGs.

INSTITUTIONAL STRUCTURE:

The quality of institutional structure is a core element of public-sector governance and can signal the likely effectiveness of policy decisions and the predictability of government decisions. The transparency, stability, predictability and accountability embedded in an RLG's institutional structure, the flexibility it affords to government decision-makers, the ability to alter the structure in response to changing needs, and the way in which changes are managed provide an indication of the institutional structure's effectiveness and of the strength of governance qualities.

Relationships among the various levels of government play a key role in determining an RLG's powers and responsibilities, its revenue-raising flexibility and its ability to adjust spending as needed. Accordingly, the institutional structure of RLGs is affected by institutional strengths and challenges of governments at other levels within a country and can vary meaningfully across RLGs in different countries.

POLICY CREDIBILITY AND EFFECTIVENESS:

The ability to effectively develop and implement transparent and meaningful fiscal, economic and social policies is critical to governing and is necessary to maintain economic stability, foster growth and deliver adequate and stable or improving living standards. Some features of policy credibility may

[7] For each metric, we calculate the average and the standard deviation across all rated RLGs. Each RLG's normalized metric is equal to the metric value minus the average metric value, divided by the standard deviation.

[8] A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

be found in local law, others in institutional practices and political traditions that have developed over time.

The quality of public administration is key to the formulation and implementation of government policy. An administration that is operating with limited resources typically constrains the effectiveness of government policy.

We consider an RLG's quality of internal controls and financial planning, and its track record of adhering to policies and of executing them.

TRANSPARENCY AND DISCLOSURE:

The ability of governments to produce timely, accurate and transparent financial statements and to disclose other relevant data or information are important governance considerations because transparency and consistency help to establish predictability and accountability, which in turn supports effectiveness.

Infrequent and limited data reporting and major revisions may indicate a weak institutional setting. In addition, gaps in data availability and quality may impair policymaking and hinder an RLG's accountability. As an extreme case, fraudulent financial statements are a direct blow to transparency and disclosure, and may result in large penalties, costs or legal or regulatory sanctions that could destabilize an RLG's financial stability.

Strong transparency and disclosure is characterized by institutionalized best practices that include multiyear financial plans, monthly financial status reports, debt affordability projections and periodic budgetary revisions.

BUDGET MANAGEMENT:

Budget management is distinguished by an ability to consistently achieve fiscal targets and by a degree of fiscal flexibility that allows an RLG to adjust taxes and spending when needed to restore fiscal balance. A government's ability to consistently produce accurate revenue and expenditure forecasts, monitor its budget execution and avoid large fiscal imbalances on a regular basis is a key consideration.

Multiyear planning for operating and capital spending and experience in accessing external funding sources are indicative of sound budget management practices. In some cases, higher-tier governments require a certain level of budgetary planning and execution.

Arriving at the G IPS

We use governance-related scorecard factors and sub-factors in relevant sector methodologies for RLGs globally to arrive at the governance IPS.

For US states, the Governance scorecard factor score in the sector methodology is mapped to an indicative score for the G IPS based on the following mapping: Aaa through Aa to G-1; A to G-2; Baa to G-3; Ba to G-4; and B and below to G-5. Our assessment of the governance risk categories is heavily influenced by the overall G IPS.

For US local governments we use the Institutional Framework factor or sub-factor score as a reference point for our assessment of the G IPS. Our overall IPS assessment incorporates the differences in governance among local governments within a state, which in some cases are meaningful. Differences in scores between risk categories and the G IPS reflect an issuer's sensitivity to specific exposures.

To arrive at the G IPS for regional and local governments outside the US, we combine the Institutional Framework and the Governance and Management factor scores from the sector methodology and map the result to an indicative G IPS.[9] Our governance issuer category scores follow a similar mapping approach based on certain factor and sub-factor scores.[10] We may assign a different G-IPS or different category scores than those indicated by the mapping, based on other considerations in the sector methodology not captured in these factor or sub-factor scores.

We score an RLG's governance IPSs on a scale of G-1 (Positive) to G-5 (Very Highly Negative).

Assessing the Credit Impact Score

As discussed in Appendix B, the CIS explains the impact of ESG considerations in the context of the other credit drivers that are material to the issuer's rating.

Assessing the credit impact of ESG exposure requires an assessment of other features of an RLG's credit profile that may create resilience to the ESG exposure or exacerbate the exposure.

An RLG's resilience determines its capacity to respond to environmental hazards or social demands, among other challenges. Typical determinants of an RLG's resilience include its intrinsic fiscal and governance strength, income levels of the population and support that might be provided by a higher-tier government or other third parties (external support). Our assessment of resilience is largely qualitative, although it may be informed by quantitative metrics or factor or sub-factor scores in the corresponding sector methodologies for the various types of RLGs globally. We also consider other material credit issues that are relevant to arriving at a rating to assess the credit impact of ESG.

High income levels of a population typically provide a large revenue base for an RLG to tap into when responding to E and S risks. For example, higher income populations have more private resources to rebuild after a weather event, and thus may require less financial support from the RLG. Higher incomes can therefore increase the economic resilience of an RLG in the aftermath of a natural disaster or counterbalance a falling share of an active working population and the related pension costs. Our sector methodologies for the various types of RLGs typically include one or more metrics related to income and wealth.

Strong fiscal capacity is also key to resilience. An RLG that maintains strong unrestricted reserves relative to its budget is more prepared to meet increased costs from environmental and social risks than one that maintains a smaller amount relative to its budget. Moreover, an RLG that has good access to credit and the capital markets can tap additional financial resources to prepare for or respond to these risks. Under our sector methodologies for the various types of RLGs, we consider an RLG's liquidity and reserve levels as part of our assessment of an RLG's financial flexibility.

9 We apply proportional weights to the Institutional Framework and the Governance and Management factor scores, based on their respective weights in the sector methodology. The resulting scores are mapped to indicative G IPS based on the following mapping: ≤2 to G-1; 2 – 5 to G-2; 5 – 6.9 to G-3; 6.9 - 7.9 to G4; and > 7.9 to G-5.

10 The indicative score for the Institutional Structure category is mapped from the numeric Institutional Framework factor score based on the following mapping: factor score ≤3 to category score 1; 3 - 5 to 2; 5 - 6 to 3; 6 – 8 to 4; and >8 to 5. The indicative scores for the categories Policy Credibility and Effectiveness, Transparency and Disclosure, and Budget Management are mapped from the numeric sub-factor scores for Management Policies and Practices, Quality of Information, and Quality of Internal Controls and Planning, respectively, based on the following mapping: sub-factor score 1 to category score 1, 5 to 2, 9 to 4.

Governance typically plays an important role in determining an RLG's resilience, or the absence of resilience. RLGs that demonstrate sound governance practices tend to show better capacity to manage environmental risks and to address social demand pressures. Governance also shapes the effectiveness of the policy response to all types of crises or shocks, influencing the resilience of an RLG to these events. Weak governance practices, marked, for example, by a track record of not adhering to policies and procedures, weak pension funding, frequent budget imbalances or debt funding of operating deficits would weigh negatively on our assessment of ESG risks and the CIS.

External support, typically from a higher-tier government but potentially also from supranational entities, can take various forms including direct assistance (e.g., providing emergency services or reconstruction following an extreme weather event, such as a hurricane) or financial assistance to the RLG or its residents. A higher level of external support confers resilience and tends to lower the credit impact of environmental and social exposures and of governance risks.

Other credit considerations may also play a role in our assessment of the credit impact of ESG risks for specific RLGs. In addition, the expected time horizon of the E, S or G exposure may mute the effect on the rating, as explained in Appendix B. Many RLGs have meaningful exposure to risks that are expected to become material over a relatively long time frame; however, an RLG may have sufficient time and financial strength to adapt as needed to meet its ESG challenges.

Proposed Appendix 2 – RLG Compendium

Please click here to access a compendium document that provides a description of the indicators that may be generally relevant for different types of RLGs (e.g., for US states or RLGs outside the US) for informing our assessment of some E, S and G risk categories and assigning IPSs for RLGs.

Moody's Related Publications

Cross-sector credit rating methodologies are typically applied in tandem with sector credit rating methodologies, but in certain circumstances may be the basis for assigning credit ratings. A list of sector and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to Rating Symbols and Definitions, which is available here.

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