Article Title: ARCHIVE | Guidance | Criteria | Governments | International Public Finance: Methodology For Rating Local And Regional Governments Outside Of The U.S. Data: (EDITOR'S NOTE: —This guidance document is no longer current. We moved relevant content into the criteria, "Methodology for Rating Local And Regional Governments Outside Of The U.S.," published July 15, 2019, without any substantive changes.) OVERVIEW AND SCOPE 1. This document provides additional information and quidance related to the application of S&P; Global Ratings' "Methodology For Rating Local And Regional Governments Outside Of The U.S.," published July 15, 2019. It is intended to be read in conjunction with those criteria. For further explanation on guidance documents, please see the description at the end of this article. GUIDANCE Overriding Factors And Caps 2. To complement the section on overriding factors and caps in table 2 of the LRG methodology, the following guidance applies. Key Publication Information Original publication date: July 15, 2019 This article is related to "Methodology For Rating Local And Regional Governments Outside Of The U.S.," published July 15, 2019. We may revise our guidance from time to time when market dynamics warrant reevaluating the variables and assumptions we generally use in our analysis. Debt and budgetary performance overrides 3. In the methodology (see the chart in the methodology article), we generally make changes to the anchor (see table 1 of the methodology) due to excessive debt or budgetary deficits after capital accounts. Specifically, we lower the anchor by one notch when tax-supported debt is generally more than 450% of consolidated operating revenues, or when the deficit after capital accounts is generally more than 25% of total adjusted revenues. Per the methodology, if an LRG has both very high debt and deficit levels, we generally lower the anchor by two notches. In some cases, we lower the anchor by just one notch if mitigating factors are present that indicate a stronger credit profile compared with peers that have similarly weak budgetary performance and debt ratios. Contingent liabilities override 4. In the methodology, we also lower the anchor by one notch when our expectation of the materialization of contingent risks is insufficiently reflected in the debt burden assessment. In particular, we do so when our debt burden assessment (before contingent liabilities) falls in the weakest category and a two-category adjustment is warranted for contingent liabilities. Rapidly rising or unexpected risks override 5. In the methodology, we lower the anchor by one or several notches when rapidly rising or unexpected risks are likely to significantly worsen an LRG's creditworthiness. We generally do so in cases of imminent and significant external and domestic political and other environmental (such as natural disasters), social, or governance risks, risks that large guarantees granted to a bank be called upon, and risks stemming from large pension-related costs. Institutional Framework 6. The following tables display what best describes the strongest, mid, and weakest points corresponding to institutional framework assessments of '1', '3', and '5'. Assessments of '2' and '4' fall in between the respective assessments, but they may also result from a combination of the characteristics listed in the tables. Table 1 Assessing The Predictability Of An LRG's Institutional Framework (AN LRG WOULD NEED TO EXHIBIT MOST OF THE CHARACTERISTICS LISTED IN A GIVEN CATEGORY TO ACHIEVE THAT ASSESSMENT.) 1 3 5 FREQUENCY AND EXTENT OF REFORMS AFFECTING THE INTERGOVERNMENTAL SYSTEM AND PREDICTABILITY OF THEIR OUTCOME: The system is mature and stable, with a limited number of reforms implemented gradually and with a predictable outcome. It provides very good visibility on the evolution of LRGs' revenue sources and responsibilities for at least the next five to seven years. The system is largely defined in the constitution and codified by law. The system is evolving with ongoing but no radical reforms, which are likely to affect only moderately LRGs' main revenues and responsibilities. It provides good visibility on the evolution of LRGs' revenue sources and responsibilities for at least the next three years. The system is governed by law but with some overlap and lack of clarity. The system is very volatile, with ongoing and ill-prepared large-scale transformations, which makes LRGs' main revenues and expenditures highly unpredictable. The visibility on the evolution of LRGs' revenue sources and responsibilities is inferior to one year. The system is not well defined, leading to disputes between governments and changing rules. The system might be subject to high political risks. ABILITY OF LRGS TO INFLUENCE OR OPPOSE REFORM AFFECTING THE INTERGOVERNMENTAL SYSTEM: LRGs have strong political power through a dedicated chamber in the national parliament, and they can veto unwanted changes. LRGs have sufficient political power to soften, but not block, the negative consequences of reforms. LRGs have weak institutional and political powers, with no power to block or influence unwanted changes. Table 2

Assessing The Revenue And Expenditure Balance Of An LRG's Institutional Framework (AN LRG WOULD NEED TO EXHIBIT MOST OF THE CHARACTERISTICS LISTED IN A GIVEN CATEGORY TO ACHIEVE THAT ASSESSMENT.) 1 3 5 OVERALL ADEQUACY OF REVENUES TO COVER EXPENDITURES NEEDS WITH STATE TRANSFERS AND/OR SUFFICIENT AUTONOMY: The government provides LRGs with adequate resources to cover essential services and infrastructure needs. Transfers are predictable and allocated evenly throughout the financial year. OR LRGs have sufficient autonomy to manage their own revenues and responsibilities efficiently despite possible temporary imbalances during economic downturns. Operating spending of most LRGs is covered by state transfers or own revenues, but meaningful differences can exist between the strongest and the weakest entities. Capital projects generally require moderate recourse to debt. Central government transfers are relatively predictable and timely. Central government transfers and LRGs' own revenues are not sufficient to cover essential services and infrastructure needs, resulting in large financing requirements or infrastructure gaps. Transfers are based on political relationships and in-year negotiations and come with delays. FISCAL POLICY FRAMEWORK: A prudent fiscal policy is defined at the national level, aiming to reduce deficit and debt levels in the LRG sector over the medium to long term. Noncompliance with restrictions is penalized. Prudent restrictions on LRGs' debt and liquidity management limit their exposure to market risks. A prudent fiscal policy framework is self-imposed at the LRG level. OR Prudent restrictions on LRGs' fiscal policy exist at the national level, but they were introduced recently, or do not prevent fast debt accumulation. Restrictions on LRGs debt and liquidity management are loose. Restrictions on public deficits and debt are inexistent or inappropriate, leading to excessive debt accumulation, directly or through government-related entities (GREs) or other off-budget financing. Monitoring of LRGs' financials is lax. Restrictions on debt and liquidity management are inexistent or inappropriate. EXCEPTIONAL SUPPORT: Strong track record of systemwide, consistent exceptional support that enables LRGs to balance their revenues and expenditures in exceptional situations. The system provides some exceptional support to the LRG sector in exceptional situations, but there is no established framework and the track record is irregular. No risk of negative intervention. The system provides limited exceptional support, mostly politically driven, to the LRG sector for major infrastructure projects or natural catastrophes. OR The system is exposed to the risk of negative legal or financial intervention from the sovereign (or a higher level of the government). Table 3 Assessing The Transparency And Accountability Of An LRG's Institutional Framework (AN LRG WOULD NEED TO EXHIBIT MOST OF THE CHARACTERISTICS LISTED IN A GIVEN CATEGORY TO ACHIEVE THAT ASSESSMENT.) 1 3 5 TRANSPARENCY AND INSTITUTIONALIZATION OF BUDGETARY PROCESSES: Roles and responsibilities, between elected officials setting priorities and managers implementing them, are clearly defined. The delineation of roles and responsibilities is relatively clear, with elected officials setting priorities implemented by managers. Delineation in the legislation of the relations between elected officials and managers is not clear, leading to potentially significant imbalances and frequent turnover of the administrative staff after each election. DISCLOSURE AND ACCOUNTING STANDARDS FOR PUBLIC FINANCE INFORMATION: Nationally established transparent accounting standards exist, as well as a full accrual accounting system. Best practices and legal requirements are in place regarding public disclosure, comprehensive and timely information on LRGs' budget execution, historical data, and financial planning, including the GRE sector. Accounting standards are generally transparent but not fully harmonized, leaving room for interpretation. Legal requirements or common practice on financial reports and budgets disclosure are solid but not very detailed, especially regarding the GRE sector. Accounting standards are weak and inconsistent. Reporting requirements for financial statements and budgets are limited to basic information. CONTROL LEVELS AND RELIABILITY OF INFORMATION: The timely audit of financial statements, in compliance with national law, by an independent private company or public body is mandatory. The external audit, in compliance with national law, by a public body is mandatory but is not always very detailed or timely. The external audit is not mandatory and state agencies' overseeing of legal compliance is limited to basic information. GRE--Government-related entity. 7. We then apply weights, as described in the institutional framework section of the methodology, to these three key factors (predictability, revenue and expenditure balance,

and transparency and accountability). The resulting weighted-average assessment is then converted to

a six-point scale (as per table 4) to determine the institutional framework assessment. Table 4 Institutional Framework WEIGHTED AVERAGE OF THREE FACTORS DESCRIPTION ASSESSMENT 1-1.5 Extremely predictable and supportive 1 1.75-2.25 Very predictable and well-balanced 2 2.5-3 Evolving but balanced 3 3.25-3.75 Evolving and unbalanced 4 4-4.25 Volatile and unbalanced 5 4.5-5 Very volatile and underfunded 6 Linkages between the institutional framework assessments and sovereign ratings 8. The institutional framework assessments generally have a strong link with the credit quality of the related sovereign, or with the credit quality of a higher level of government that has jurisdiction over the LRG, if this is more relevant. As a result, we expect that LRGs operating in investment-grade-rated sovereigns will generally have associated institutional framework assessments from '1' to '4'. And LRGs operating in speculative-grade-rated sovereigns will generally have associated institutional framework assessments from '5' to '6', and in any case be capped at '4'. Economy 9. We apply table 5 to assess an LRG's economy. Table 5 Economic growth prospects 10. In sovereigns where the national growth average is on par with that of sovereign peers in the same GDP-per-capita category, a positive or negative adjustment of typically one assessment category primarily reflects the comparisons with domestic peers. 11. If we consider the national average growth as well above the average of sovereigns in the same GDP-per-capita category, then we may improve the LRG's initial economic assessment by one category when the LRG's real economic growth is more or less in line with the national average. If the LRG significantly outperforms the already strong national average growth, we may adjust the initial economic assessment upward by two categories. However, if the LRG posts weaker growth than the national average, we may either not adjust at all, or adjust by one category down, depending on how significantly local growth departs from national growth. 12. Conversely, if the national average is well below the average of sovereigns in the same GDP-per-capita category, then an LRG performing in line with that national average is likely to receive a one-category downward adjustment. If the LRG significantly underperforms that already weak national average in an international comparison, we may adjust the LRG's initial economic assessment downward by two categories. In the same scenario of national growth well below the average of sovereigns in the same GDP-per-capita category, if the LRG posts stronger growth than the national average, we may either not adjust the initial economic assessment or even improve it by one category, depending on how significantly local growth departs from national growth. Socioeconomic profiles 13. When an LRG has features that may have a materially negative impact on revenue growth and/or expenditure needs, we generally apply a negative adjustment. These include, among other indicators, lower local GDP per capita, higher unemployment rates, a larger proportion of income support and welfare recipients, and infrastructure gaps compared with the national average. On the other hand, we could apply a positive adjustment if an LRG displays higher local GDP per capita or stronger socioeconomic indicators than the national average, implying lower spending pressure or stronger revenue generation capacity compared with the national average (depending on the availability of relevant information). Financial Management 14. Table 6 displays what best describes very strong, satisfactory, and very weak financial management assessments. Strong and weak assessments fall in between the respective assessments, but they may also result from a combination of the characteristics listed in the table. Table 6 Financial Management Assessment POLITICAL AND MANAGERIAL STRENGTH FINANCIAL PLANNING AND IMPLEMENTATION LIQUIDITY, DEBT, AND CONTINGENT LIABILITY MANAGEMENT 1. Very strong There is broad political consensus on fiscal policies, enabling the government to enact structural reforms, pass budgets, and make unpopular decisions, when necessary. Highly experienced financial team. Management accountability is very strong and there is an implicit agreement among political and managerial teams to respect each respective sphere of influence to achieve fiscal sustainability. Well- defined, documented, and credible long-term financial plan (generally extending beyond five years) that supports financial discipline and stability. Multiyear track record of accurate budget forecasting, with robust control over revenue and expenditures, formalized budgetary procedures (including consolidation of relevant related entities), an advanced control system in place, and negligible overspending. Solid track record of budgets being approved before the start of the fiscal year. Strict adherence to advanced accounting principles, and comprehensive, reliable, and timely reporting. No related pension risks. Formal liquidity policy with stipulated minimum and desired levels of cash and equivalents, generally centralized cash

management for all government units. Detailed annual cash planning with actual cash flows close to the plan and tight monitoring. Formal debt management policy with long-term debt used for capital expenditure and not operating costs. Comprehensive financial plans for all GREs, linked to the LRG's financial strategy. Detailed assessment and adequate provisioning of other contingent risks including social and environmental risks and off-budget infrastructure funding. 3. Satisfactory There is generally a consensus to implement needed reforms. Political disagreements may delay important fiscal decisions. Distinction between political and managerial responsibilities may, at times, be unclear. Financial management team has adequate expertise, as well as adequate accountability, which has been maintained throughout changes of administration, ensuring prudent fiscal policies over the years. Relatively prudent medium-term financial planning, which covers the next two-to-three years but is not as detailed as in stronger managements. Clear budgetary procedures, with moderate budget revisions during the year. Adequate capacity to forecast operating revenues and identify overspending. Some capacity to take corrective actions but less than stronger managements. Budget approval may encounter some delays. Adherence to sound accounting principles and satisfactory standards of financial disclosure and reporting. Mitigated pension risks. Informal, but prudent liquidity policy, which ensures adequate coverage of cash fluctuations. Adequate, but not detailed cash flow planning. Moderate exposure to foreign-exchange and interest risks. Some assessment, but limited provisioning of other contingent liabilities including social and environmental risks and off-balance-sheet liabilities. Some control over GREs that partly align with LRG policy goals. 5. Very weak LRG is unable to implement unpopular or needed reforms. Political stability is weak and the government faces challenges to implement policies. Management team is understaffed and lacks relevant skills, qualifications, and experience. There is no distinction between political and managerial responsibilities, and there is no accountability for the public policy decisions likely to put at risk fiscal sustainability in the short to medium term. There is no medium- and long-term financial planning. May be aggressive budgeting based on unrealistic assumptions and no clear financial targets. Purely incremental budgetary approach and not results-oriented. Substantial budget revisions may occur during the year. Low predictability of revenue collection and unreliable cost-control measures. Very weak accounting and disclosure standards. Unaddressed pension risks. Numerous and decentralized cash accounts. Debt and liquidity policies are not formal, high reliance on short-term debt, and no cash planning. Assessment and provision for other contingent liabilities (including social, environmental, and off-budget risks) are insufficient. GREs lack a clear rationale, with weak controls for LRGs. GREs--Government-related entities. Budgetary Performance 15. We apply table 7 to assess an LRG's budgetary performance. Table 7 Strong or limited flexibility 16. Strong or limited flexibility is an adjustment to the budgetary performance assessment, when warranted. We compare an LRG with domestic and international peers typically with the same institutional framework assessment (focusing on similar revenue and expenditure balance assessments). The adjustment for flexibility applies when we consider that the entity has relatively strong or limited budgetary headroom through the potential implementation of a combination of policies--on top of what we already reflect in our base-case scenario. 17. Our measure of flexibility takes into account policy mix because we think that a combination of policies that leverages both current and capital revenue and expenditure indicates that an LRG has capacity and willingness to influence its financial leeway. Because capital revenue and expenditure are nonrecurrent items and have a one-time impact, we generally weight them less than operating revenue and expenditure. 18. Typically, an LRG's flexibility depends on its ability to raise taxes, fees, or tariffs, as well as on the political considerations and economic limits that could curb the use of this flexibility. 19. Revenue flexibility also occurs in the form of additional revenue generated by asset sales, provided they can be realistically liquidated and the government is willing to sell or has a track record of selling such assets. 20. When assessing an LRG's expenditure flexibility, we consider its willingness and ability to cut expenditures, which mostly depends on its core responsibilities, the type of expenditure, and potential limitations to budget cuts. Assessment of pensions 21. We consider pension-related risks in our financial management assessment. Also, based on our assessment of how underfunding pensions may pressure an LRG's budgetary stance, we could apply a negative adjustment to the budgetary performance assessment. In extreme situations, we may lower the anchor by one or several notches by using the overriding factor for rapidly rising and unexpected risks. 22.

When annual contributions are not sufficient to cover future pension benefits, this can result in the accumulation of significant unfunded liabilities. Unfunded pension plans are frequent occurrences, but we have observed only some instances where LRGs issue debt to cover the gap. Many times, this has sharpened fiscal pressures through accelerated contributions. A historical lack of funding may even turn pension plans into de facto "pay-as-you-go" systems, whereby LRGs pay directly out of their budgeted annual pension-related expenses. 23. We generally consider pay-as-you-go systems as riskier than pension plans. This is because pay-as-you-go systems are characterized by a lack of safety nets (that is, no or very small reserves) that may lead an LRG that is facing acute fiscal pressures to prioritize mandatory pension payments over other expenses, such as debt service. By comparison, long-term reserves established under pension plans--even underfunded--allow an LRG that is facing acute fiscal pressures to temporarily postpone or lower annual pension contributions without putting its debt obligations at risk. 24. Mitigating factors may, however, alleviate risks related to pay-as-you-go systems and, more generally, to underfunding. These factors typically include: A lack of materiality (that is, pension-related costs account for a limited proportion of the budget); Our assessment that a tight institutional or fiscal framework prevents an LRG from prioritizing pensions over debt obligations; and An encompassing policy mix aimed at addressing pension-related risks and prioritizing debt service payments. 25. We consider mitigating factors in both our budgetary performance and financial management assessments. 26. When considering whether underfunding pensions should warrant a negative adjustment to the budgetary performance assessment, we may compare the present value of the projected retirement benefits earned by employees in a given year (that is, the theoretical, annual contribution an LRG should make to the pension plan, as indicated in actuarial statements) with the actual amount spent in the given year as recorded in the budget. When available, we consider the actuarial assessment of the annual contribution (or equivalent if there is no actuarial assessment) as a given because this is the translation of the pension benefits that the LRG has committed to under the pension plan. This is based on and regularly adjusted for evolving assumptions, including revised benefits, mortality tables, discount rate, and amortization method. 27. When relevant for pension plans, our assessment may also take into account annual amortization that is or will be needed to cover unfunded pension liabilities. We do not necessarily consider 100% funding as needed, but rather rely on local or national regulations, or even requirements specific to pension plans that set the expected level of funding. Underestimated spending 28. We may apply this adjustment when we assess that there is significant underspending on public services or infrastructure, large unpaid debt to suppliers, or off-budget financing through public companies or leasing schemes. Specifically, off-budget financing may lead to underestimating spending in a sense that if capital expenditure had been carried out in a more conventional way (i.e., on budget), it would have negatively affected the balance after capex. We take into consideration any mitigating factors (such as risk transfer, legal contracts, the jurisdiction's legal framework, delivery methods, etc.) when determining whether this adjustment should apply. Liquidity Initial liquidity assessment 29. We apply table 8 to assess an LRG's initial liquidity. Table 8 30. DSCR. The debt service coverage ratio (DSCR) measures how much total free cash (with and without contracted funding) covers the debt service over the next 12 months. We calculate DSCRs at the beginning of the fiscal year. Depending on the review date, the initial liquidity assessment is derived from the DSCRs for the current and the next fiscal year on a pro rata basis, 31. Total free cash typically consists of adjusted cash, liquid assets, balance after capital accounts (to which we add back interest), onlending (when relevant), and already contracted short- and long-term funding. 32. Adjusted cash. Adjusted cash includes reported cash at the beginning of the fiscal year, adjusted for any amount that is not fully available for debt service within the next 12 months and for any amount that we expect to fund spending or debt repayment beyond the next 12 months. For instance, we deduct: Borrowings whose proceeds will be used beyond the next 12 months; Transfers that are earmarked for capital expenditures and that are to be cashed out beyond the next 12 months; and Sinking funds or term deposits earmarked for debt maturing beyond the next 12 months with no possible temporary use. 33. Liquid assets. Liquid assets include unrestricted assets that are available to cover debt service over the next 12 months. That is, they exclude sellable assets that have already been taken into account as capital revenues in our forward-looking balance after capital accounts. Specifically, we count highly liquid and immediately sellable assets (usually investment-grade government/agency bonds and

short-term liquid assets such as 'A-1+' rated money market instruments, cash, cash equivalents, and bank deposits) and typically apply a 50% discount for other securities, such as speculative-grade nongovernment bonds; non-fixed-income "risk assets," such as listed equities and exchange-traded funds; and unrated bonds. For other types of fixed-income securities, we typically apply an intermediate discount of 25%. These typically include investment-grade nongovernment bonds (e.g., those issued by financial or nonfinancial corporates) and asset-backed securities, as well as speculative-grade government/agency bonds. 34. Balance after capital accounts. Balance after capital accounts (to which we add back interest) is taken from the base-case scenario. 35. Onlending. When relevant, we also include onlending in the DSCR. In a few countries, onlending (generally coming from upper tiers of government and flowing to lower tiers of government or GREs) may represent important financial flows. Taking them into account in the numerator of the DSCR is a way of giving credit to the onlending entity for annual principal and interest repayments that will eventually flow back and help with the entity's own debt repayment. When onlending is covered by borrowing, we do not account for the outflow as cash is not affected. We only consider cash inflows when we believe that onlent entities have the ability and willingness to timely pay back interest and principal to the onlending entity. When onlending is covered by cash, we add the outflows net of the inflows to the numerator of our DSCR. 36. Short- and long-term funding. We include short- and long-term funding-irrespective of whether it comes from capital markets, commercial banks, or multilateral institutions--in the DSCR as long as it is already firmly contracted or already cashed-in after the beginning of the fiscal year. For long-term funding, when it is earmarked for capital expenditures, we include the maximum amount of funding corresponding to the capital expenditures that we account for in the base-case scenario. If we assess that a portion of capital expenditures is not eligible to be paid out of the contracted funding, we deduct the latter accordingly. For short-term funding, we generally do not include commercial paper (CP) programs in the numerator of the DSCR because it typically represents uncommitted funding until effectively placed; however, when the entity draws down on its CP program, upcoming maturities are accounted for in the denominator. Also, we include the average available amount of liquidity lines or short-term debt in the numerator of the DSCR only when we consider that its refinancing is not an issue, which is typically the case when LRGs' access to external funding is satisfactory or above. For entities with access to external financing below satisfactory, we generally do not take the liquidity lines or short-term debt into account in the numerator and denominator of the DSCR. Moreover, if no other sources of funding are available (when a lack of access to external funding is not offset by large cash and/or already contracted long-term funding), we typically apply a negative adjustment for underfunding because the drawn liquidity lines are unlikely to be refinanced. Finally, irrespective of our assessment of the LRG's access to external funding, we typically apply a negative adjustment for underfunding when we assess that the entity relies on a very large or increasing amount of credit lines or short-term debt, which denotes a stretched or deteriorating liquidity position. Access to external liquidity 37. Table 9 describes the five assessments for LRGs' access to external liquidity. Table 9 Final liquidity assessment 38. We combine our adjusted initial liquidity assessment (based on table 8) and our assessment of access to external liquidity (based on table 9) to derive the final liquidity assessment per table 10. Table 10 An LRG Liquidity Assessment ACCESS TO EXTERNAL LIQUIDITY ASSESSMENT ADJUSTED INITIAL LIQUIDITY ASSESSMENT EXCEPTIONAL STRONG* SATISFACTORY LIMITED UNCERTAIN 1 1 1 1 1 2 2 1 1 2 3 4 3 1 1 or 2 3 4 5 4 1 2 or 3 4 5 5 5 2 3 or 4 4 5 5 *When two options are possible, we typically choose the better assessment when either the two conditions described in table 9 are met or one of the two is met in an especially strong manner. Debt Burden 39. We apply table 11 to assess an LRG's debt burden. Table 11 Exceptionally high operating balance 40. We generally apply a positive adjustment for a high operating balance when direct debt typically represents less than five years of operating margin. More specifically, we typically apply the adjustment when average operating surplus is more than about 15% of operating revenue and when five years of operating surplus covers other obligations included in tax-supported debt and contingent liabilities. Direct debt versus tax-supported debt 41. In rare instances, a government-related entity's (GRE) revenues may be disproportionally large compared with those of the LRG and, therefore, could dilute the debt burden measure on a consolidated level. In this case, we use the government's direct debt as a share of its direct operating revenues to derive the initial assessment. We consider the risk of these GREs in our contingent

liabilities assessment. Composition of direct debt 42. We add financial capitalized lease obligations to direct debt and, when material, capitalized operating lease obligations. 43. We also add the debt obligations of large PPP projects to the sponsoring LRG's direct debt when we assess that the LRG's primary motivation is to achieve off-balance-sheet treatment and when no significant risk transfer to the private sector is apparent, making the PPP payment more akin to debt payment. 44. In our opinion, in the case of availability-based projects, the government is contractually obligated to make regular payments to the private-sector participant and assumes most volume risk. Non-cancelable obligations are a form of long-term, near-debt-like obligations, and therefore we generally add them to the LRG's direct debt measures. 45. In practice, we generally add to a government's balance sheet the net present value of the string of annual capital payments that a government has made to compensate the private partner for building the asset. 46. The approach we use for PPPs also applies to an LRG's securitization of existing credits or future revenues (taxes, fees, or transfers). If an LRG executes a securitization simply to raise debt off balance sheet, we consolidate it in the LRG's direct debt. We treat other securitization deals as contingent liabilities. 47. If a debt sinking fund is not already taken into account in the adjusted cash for the purpose of calculating the DSCR, we may deduct it from the LRG's direct debt under specific circumstances--for instance, for a sinking fund that is strictly dedicated to the LRG's direct debt repayment, is not exposed to adverse economic and financial conditions, and can be relied on in the medium to long term, and for which assets accumulation in the fund does not incur further risks to the financial standing of the entity. We apply haircuts to the fund as per our haircut principles discussed above. Composition of tax-supported debt 48. Nonfinancial GREs.To assess whether a GRE's debt ultimately relies on an LRG's consolidated operating revenues, and therefore is included in tax-supported debt, we first look at the likelihood that the LRG will support the GRE in case of need. When our assessment is equivalent to a likelihood of support of very high or above, as per our GRE methodology, and when we believe the GRE needs, or we expect it to need, financial support in the foreseeable future, either to operate or to honor its financial obligations, then we generally include the GRE's debt and own-source revenues in the tax-supported debt ratio. 49. Financial GREs. Although a bank may benefit from an at least very high likelihood of support from a LRG, we do not include banks' debt in the LRG tax-supported debt because banks are, by their nature, leveraged, which would distort our measure of the LRG's debt. However, we consider the potential recapitalization cost in our contingent liabilities assessment. Composition of the contingent liabilities 50. Nonfinancial GREs.Nonfinancial GREs that are not already reflected in tax-supported debt (including the GREs' guaranteed debt) and whose likelihood of support by the LRG is typically not in the lowest categories are usually reflected in contingent liabilities. 51. Financial GREs. When LRGs own, control, or quarantee a financial institution, we seek to assess the maximum risk that the institution could represent for the LRG. When possible, we quantify this risk using our risk-adjusted capital framework model (see Related Criteria). Specifically, we estimate stress-case losses over a three-year period under a substantial, 'A', stress scenario and calculate the ensuing hypothetical recapitalization cost. When such analysis is not possible, we assume a standard recapitalization cost equivalent to 8% of total assets, and other potential liquidity support, when relevant. The 8% standard is based on our observation of cases of bailout of banks by central or local governments in the eurozone after the 2008 financial crisis. 52. PPPs.Even though a PPP's legal documentation may state that associated private debt is nonrecourse to the LRG, we have observed that the LRG may, nevertheless, aid a given PPP project for political or economic reasons. Therefore, we view these arrangements as presenting contingent liability risks potentially affecting our view of the LRG's budgetary performance, debt, and liquidity. 53. In addition, even in the case of availability-based projects, we typically treat cancelable PPP obligations as contingent liabilities only during the construction phase. The existence of termination provisions written into a typical PPP agreement potentially gives an LRG the option of walking away from its contractual obligation, subject to the financial compensation of the equity sponsors and bondholders. 54. Litigation.LRGs might face a variety of litigation linked, for instance, to expropriations or environmental considerations. We may view such litigation as a contingent liability. This risk is difficult to evaluate because the liability depends on court decisions. As a result, we generally assess litigation risk through discussions with an LRG's senior management and by reviewing the LRG's track record of annual payments relative to total outstanding claims and the LRG's budget size. 55. Other common

types of contingent liabilities. If an LRG takes part in a joint-and-several-guarantee mechanism at the benefit of a third-party entity, we generally consider only the LRG's exposure to the third-party entity. In the case of public-sector funding agencies (PSFAs) that boast such guarantee mechanisms, we consider the exposure for LRGs forming the group of supporting entities, and we may also consider it for LRGs outside of the group of supporting entities, as per our PSFA criteria (see Related Criteria). 56. Other types of contingent liabilities include extraordinary support to lower levels of government. Contingent liabilities ratio calculation 57. To assess an LRG's exposure to contingent liabilities, we calculate a contingent liabilities ratio as follows: We sum the debt of the nonfinancial GREs that is not consolidated with the other contingent liabilities (such as PPPs, securitizations, guarantees to non-GREs, or litigation) and, if relevant, the expected recapitalization cost or other potential liquidity support expected to be provided to the financial GREs; and We compare the aggregated amount to the LRG's consolidated operating revenues. 58. When we believe that the risk would be borne by several entities, we consider only the portion of the obligations that we believe the LRG would likely assume in a case of distress. We generally consider the same portion of the own-source revenues in the LRG's consolidated operating revenues. 59. We then evaluate the impact of the contingent liabilities assessment on the initial debt burden assessment based on table 12. Deciding how much to adjust the initial debt assessment, if at all, reflects our view of the risk that the contingent liabilities will materialize. (For example, our adjustment could be by one or two categories if the contingent liabilities ratio is above 60%.) Table 12 Contingent Liabilities Exposure As A Percentage Of Consolidated Operating Revenues Contingent liabilities exposure as a percentage of consolidated operating revenues <60% >60% Adjustment based on risk of materialization 0/1 1/2 60. We assess the risk of the materialization of the contingent liabilities depending on: Our view of the likelihood that the contingent liabilities could affect the LRG's budgetary, debt, or liquidity profile at some point; and Our view of the LRG's propensity to financially support the related contingent liabilities. REVISIONS AND UPDATES This article was originally published on July, 19 2019. Changes introduced after original publication: On June 1, 2022, we republished this guidance article to make nonmaterial changes. In the "Budgetary Performance" section, we added a paragraph on underspending to clarify the analytical treatment of leasing schemes. In the "Liquidity" section, we clarified the application of haircuts to liquid assets, as well as how short-term debt is accounted for in the debt service coverage ratio. In the "Debt" section, we adjusted table 11 to align it with paragraph 62 of the criteria; we also clarified when the positive adjustment for an exceptionally high operating balance applies and clarified under which circumstances, when not already accounted for in the debt service coverage ratio, debt sinking funds are deducted from the stock of debt. In addition, we updated the contact information. On Aug. 1, 2022, we republished this guidance article to correct a misstatement of debt thresholds in table 11 that was made when we republished the guidance on June 1, 2022. RELATED PUBLICATIONS Related Criteria Methodology For Rating Local And Regional Governments Outside Of The U.S., July 15, 2019 Public-Sector Funding Agencies: Methodology And Assumptions, May 22, 2018 Risk-Adjusted Capital Framework Methodology, July 20, 2017 Related Research Criteria And Guidance: Understanding The Difference, Dec. 15, 2017