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INVESTORS SERVICE

RATING METHODOLOGY

Local Government Financing Vehicles in China Methodology

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This rating methodology replaces the *Local Government Financing Vehicles in China* Methodology published in July 2020. This methodology update includes additional granularity in the Business Profile factor, with two sub-factors replacing the Proportion and Riskiness of Commercial Activities sub-factor, with increased weight given to these considerations, and the expansion of the Business Profile downward notching to up to four notches. We have also made minor edits in other sections of the methodology to clarify the most relevant considerations in our assessment of the different factors.

Introduction

In this rating methodology, we explain our general approach to assessing credit risk of local government financing vehicles (LGFVs) in China, including the qualitative and quantitative factors that are likely to affect rating outcomes in this sector.

We discuss the scorecard used for this sector. The scorecard[1] is a relatively simple reference tool that can be used in most cases to approximate credit profiles in this sector and to explain, in summary form, many of the factors that are generally most important in assigning ratings to issuers in this sector. The scorecard factors may be evaluated using historical or forward-looking data or both.

We also discuss other rating considerations, which are factors that are assessed outside the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. In addition, some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.[2] Furthermore, since ratings are forward-looking, we often incorporate directional views of risks and mitigants in a qualitative way.

As a result, the scorecard-indicated outcome is not expected to match the actual rating for each issuer.

THIS METHODOLOGY WAS UPDATED ON JUNE 9, 2022. WE HAVE REMOVED MARKUPS FROM PAGE 14.

1 In our methodologies and research, the terms "scorecard" and "grid" are used interchangeably.

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

Our presentation of this rating methodology proceeds with (i) the scope of this methodology; (ii) an overview of the sector and our overall rating approach; (iii) the scorecard framework; (iv) a discussion of the scorecard components and factors;

(v) other considerations not reflected in the scorecard; (vi) the assignment of issuer-level and instrument-level ratings; (vii) methodology assumptions; and (viii) limitations. In Appendix A, we describe how we use the scorecard to arrive at a scorecard-indicated outcome. Appendix B provides information about how we score the factors and sub-factors under the LGFV Characteristics Affecting Support component.

Scope

This methodology applies to local government financing vehicles in China. LGFVs are entities that are directly or indirectly fully owned[3] and effectively controlled by regional and local governments (RLGs) and that engage primarily in financing, investing in and operating public infrastructure and social welfare projects (public policy projects) on behalf of their owner RLGs.

Public policy projects are typically not meant to generate meaningful economic returns or cash flow. These projects are generally non-self-supporting and primarily rely on recurring financial support from their owner RLG such as grants, subsidies, prepayment, repurchase and procurement fees or other forms of financial assistance to support their capital expenditures, ongoing operations and other funding needs, including interest and debt repayment. Public policy projects are also typically carried out in the jurisdiction of the owner RLG.[4]

The majority of an LGFV's debt or ongoing capital expenditures are typically related to public policy projects. In turn, public policy projects usually account for a significant proportion of an LGFV's assets on the balance sheet. The assets can include inventories, construction-in-progress projects that an LGFV is developing for the government, land use rights or accounts receivable from the government entities.[5]

Due to their ownership and their public policy mandates, LGFVs have very close linkage to their owner RLGs, which usually exert tighter direct control and supervision over LGFVs than over other state-owned enterprises (SOEs). LGFVs have very limited autonomy in investment and financing decisions, and we expect the LGFV's key business, financial and personnel decisions to be approved by the owner RLG.

Typical public policy projects undertaken by LGFVs include urban infrastructure and upgrade[6] initiatives, primary land development,[7] affordable or resettlement housing, and various civic and utility services, such as mass transportation infrastructure and services, water, sewer, navigation infrastructure, public education, culture and sports, and health-care facilities. The scope of public policy projects can also include the provision of subsidized financing for public institutions that carry out public policy projects or financing for small to medium-sized enterprises to support local employment.

3 In some cases, LGFVs may be jointly owned by several RLGs and connected parties (e.g., an RLG's state-owned enterprise or government bureau) or be minority owner ed by the central government. In those cases, for the LGFV to be rated using this methodology, we expect a single RLG to exert control over the LGFV's investment and financing decisions. See the "Governmental Capacity to Support" appendix for more details on the determination of the controlling RLG.

4 We typically do not expect activities outside of the jurisdiction to benefit from the same level of support from the owner RLG.

5 In some cases, an LGFV's asset base may include a significant share of commercial activities that are linked to public policy projects. For example, an owner RLG may inject commercial assets or allow an LGFV to operate commercial activities aimed at providing stable cash flows or increasing its borrowing capacity to support mandated public policy projects. In these cases, we consider whether the debt or capital expenditures are predominantly related to public policy projects, including on a forward-looking basis.

6 Urban upgrade can include the replacement or renovation of older urban districts to meet urban development plans.

7 Primary land development involves the construction of basic infrastructure for industrial, commercial or residential use.

RLG-owned entities in China that primarily engage in self-sustainable public projects or commercial activities are rated using sector-specific methodologies in combination with the Joint Default Analysis (JDA), which is described in our methodology for government-related issuers.[8]

Overview of the Sector and the Overall Rating Approach

Because the purpose of LGFVs is meeting public policy objectives and providing public goods or services to the general public for free or at subsidized rates, they typically do not generate meaningful economic returns. As a result, LGFVs are typically highly leveraged owing to their mandate and to the mostly capital-intensive nature of their public policy projects.

Given their business nature and mandate and typically close integration with their owner RLGs, the financial linkages between LGFVs and their owner RLGs are also very important, and the RLG typically provides the majority of the LGFV's cash flow.

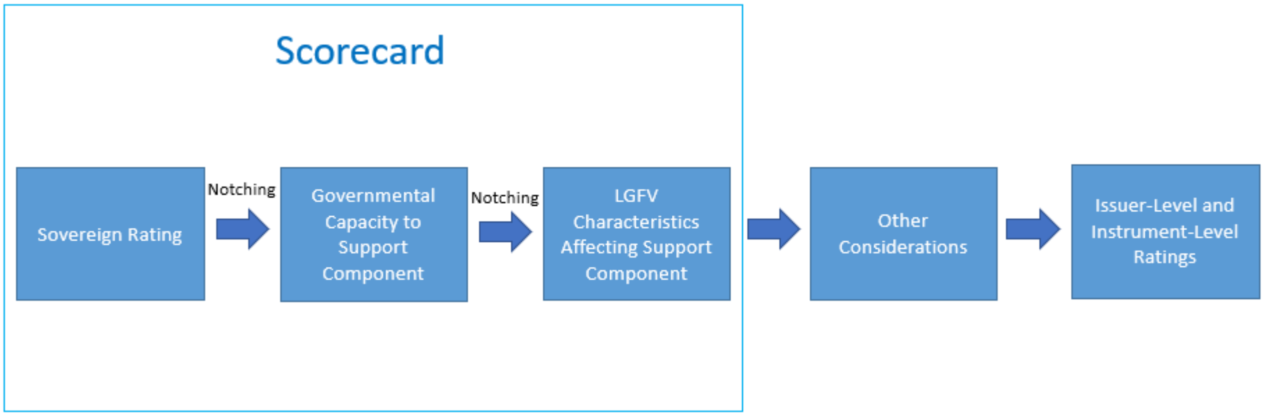
Changes in the regulatory environment are a key risk for LGFVs. Issuers in this sector have been affected by several rounds of regulatory changes directed by the central government. The objective has been to enhance oversight and tighten controls on LGFVs' large aggregate debt outstanding in order to mitigate the systemic risks that this leverage poses to RLGs' financial health and to China's economy. These regulatory changes can be positive or negative for LGFVs' creditors. For example, the central government may restrict access to certain sources of funding with a view to contain LGFVs' indebtedness, leading to refinancing challenges for some LGFVs. Alternatively, the central government may facilitate refinancing in periods of market turbulence by encouraging financial institutions to roll over LGFVs' maturing debt. Typically, an LGFV that has meaningful exposure to commercial activities is more susceptible to risks related to regulatory changes, because debt used to finance public policy projects typically benefits from greater funding support from policy banks and governments in China. An entity transitioning toward more commercially oriented activities, irrespective of the underlying business risk, generally needs to rely more on its own financial resources and benefits less from public support.

The overall framework for assessing an LGFV's credit profile has two main scorecard components: (i) the Governmental Capacity to Support component; and (ii) the LGFV Characteristics Affecting Support component, which are composed of several notching factors. Our overall approach is illustrated in Exhibit 1.

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

EXHIBIT 1

Overall Approach to Rating Local Government Financing Vehicles



Source: Moody's Investors Service

Please see Appendix A for general information about how we use the scorecard and for a discussion of scorecard mechanics. The scorecard does not include or address every factor that a rating committee may consider in assigning ratings in this sector. Please see the "Other Considerations" and "Limitations" sections.

Scorecard Framework

Our analytical approach for assessing LGFV creditworthiness reflects our view that support is the dominant credit consideration for an LGFV.

The analytical framework in this rating methodology comprises two components. The Governmental Capacity to Support component considers aspects that could influence a government's ability to provide support to an LGFV in a timely manner.

We combine this analysis with an assessment of the LGFV Characteristics Affecting Support component. This component is primarily based on LGFV-specific characteristics and is composed of four notching factors, themselves comprising several sub-factors that may result in downward or, more rarely, upward adjustments in whole notch increments to the Governmental Capacity to Support score. The result of this analysis is the scorecard-indicated outcome, which is constrained by the credit profile of the RLG.

EXHIBIT 2

Local Government Financing Vehicle Scorecard Illustrative Example

Governmental Capacity to Support Component

Central Government Rating	A1
Notching for Governmental Capacity to Support	-2
Governmental Capacity to Support Score	a3

LGFV Characteristics Affecting Support Component

LGFV Characteristics Affecting Support Notching (Downward Only)	Indicative Score	Indicative Notching	Final Notching
Business Profile		-1	-1
Business Position	Moderate		
Essentiality of Primary Public Activities	Moderate		
Proportion of Commercial Activities	Medium		
Riskiness of Commercial Activities	Low		
Integration, Control and Oversight		0	0
Debt Management	Strong		
Access to Funding	Moderate		
Predictability of Government Payments	Moderate		
Exposure to Contingent Risks	Low		
External Bailout Risk			0
LGFV Characteristics Affecting Support Notching (Upward Only)			
Exceptional Governmental Willingness to Support Characteristics			0
Notching for LGFV Characteristics Affecting Support Component			-1
Scorecard-Indicated Outcome			Baa1

Source: Moody's Investors Service

Discussion of the Scorecard Factors

In this section, we explain our general approach for assessing factors under each component of our top-down analytical approach, and we describe why they are meaningful as credit indicators.

Component: Governmental Capacity to Support

In this component, we establish a Governmental Capacity to Support score that acts as the foundation to our analysis. Our approach to arriving at a governmental support score starts with China's sovereign rating. The Governmental Capacity to Support score we establish for an LGFV is then based on the extent of separation between the sovereign and the controlling RLG, as well as the RLG's local economic, demographic and fiscal fundamentals. This approach is consistent with our observations that the first layer of support for failing LGFVs is their controlling RLG, while also recognizing the close linkages among different layers of governments in China.

Why It Matters

In cases where an LGFV is experiencing credit stress, support would typically be channeled through the direct RLG owner or controller.

Although RLGs are prohibited to bail out or guarantee the debt issued by an LGFV, there are still some channels for RLGs to direct support to an LGFV, especially if a default on the LGFV's debt is expected to damage social and economic stability or to pose systemic and reputational risks to the regional or national financial system. We expect the controlling RLG to be the first provider of support in cases of distress. Typically, the RLG would mobilize locally available resources to support the LGFV. Support can come from the RLG owner or other state-owned entities, such as banks, and may take various forms. Typical emergency sources of support include a bailout by another LGFV or state-owned enterprise (SOE) or coordination with financial institutions to refinance or reschedule the LGFV's debt. Other channels of support, typically ongoing rather than extraordinary, may include injection of state-owned assets (subject to any restrictions in relevant policies), budget allocations or RLG's controlled bailout funds. The next higher tier local or regional government would typically expect to receive notification of the LGFV distress from the controlling RLG, and, in cases where the resources mobilized by the controlling RLG are insufficient to maintain the LGFV as a going concern, the next higher tier RLG would also work to mobilize the needed resources.

How We Assess It for the Scorecard

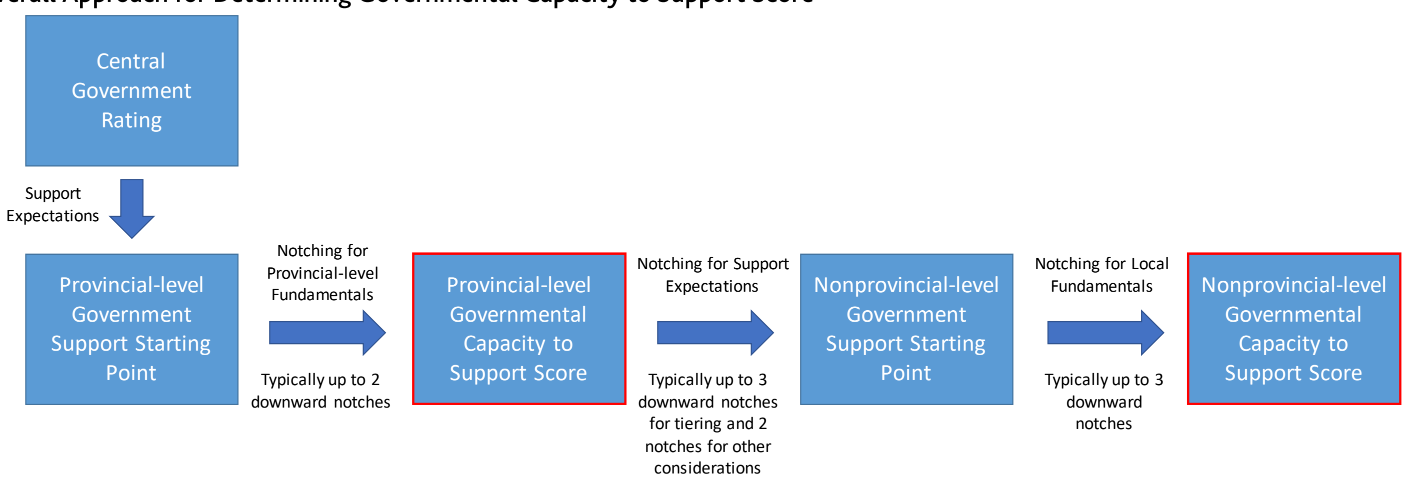
Our approach for assessing the governmental capacity to support incorporates the RLG's own economic and financial strength and other considerations that may lead to further differentiation in its capacity to mobilize sufficient resources to extend support in a timely manner.

In assessing governmental capacity to support, we distinguish between (i) provincial-level governments that essentially benefit from direct support (current and expected) from the central government, and (ii) nonprovincial-level governments, where the support provided is more likely to be channeled through provincial-level governments. For the latter, we typically notch down from the corresponding provincial-level government's capacity to support score, as described below.

In cases where the RLG controlling an LGFV is different from the actual owner, we focus our assessment on the controller, because it is expected to be the first provider of support. Indications for determining the controlling RLG include: the existence of dedicated allocations in the RLG's budget; the RLG is the key decision-maker and has strong oversight and presence in governance mechanisms; or there is large overlap in the management and workforce dedicated to the LGFV's projects with those of the RLG.

EXHIBIT 3

Overall Approach for Determining Governmental Capacity to Support Score



Source: Moody's Investors Service

Provincial-level Governments: Capacity to Support

Provincial-level Starting Point Reflects Central Government Support Expectations

Because of the highly centralized system of government in China and the tight institutional, financial and economic linkages between the different layers of government, we view support from the central government as a very important factor in assessing the capacity to support a Chinese RLG. Provincial-level governments,[9] along with centrally planned cities, in particular have very close fiscal and debt management links with the central government, and they are essentially the only layers of local

[9] We define provincial-level governments as including provinces, municipalities directly reporting to the central government and ethnic autonomous regions.

government in China allowed by the central government to access bond markets, highlighting their institutional importance. In addition, the central government would under most scenarios seek to protect provincial-level governments' access to bond markets and would perceive a vested interest in avoiding any spreading of systemic risks to other parts of the system were a province to face financial distress and risk defaulting on its obligations. Where we consider that the Chinese central government has a vested interest in maintaining the financial health of a province and we expect its support in case of distress at the provincial level to be essentially certain as well as timely and sufficient, we typically consider the provincial-level government support starting point to be aligned with the credit rating of the central government.

Provincial-level Fundamentals Are Additional Drivers of Capacity to Support

Even in cases where a provincial-level government benefits from near-certain support from the central government, its own capacity to support an entity within its jurisdiction may vary depending on local economic, demographic, fiscal and other fundamentals. Given the highly integrated nature of RLGs with local SOEs and banks, a typical avenue for an RLG to support a stressed entity is to orchestrate support through local SOEs and the local banking sector by using their balance sheets to support that entity (collectively, we refer to the provincial-level government and its SOEs and banking sector as the provincial system). The burden of support would often be shared across sectors at the local level, and differences in the economic fundamentals and credit health of these different sectors may indicate varying capacity to respond to shocks and mobilize sufficient resources in a timely manner before any support from the central government materializes.

For provincial-level governments, we may apply downward notching, generally up to two notches, in whole notch increments, to the provincial-level government support starting point where there are particular weaknesses, relative to peers, in the economic and financial health of the provincial system.

Our assessment of the financial health of a provincial system is qualitative but is informed by quantitative metrics. We consider three dimensions: (i) the economic and financial health of the provincial-level government compared with peers; (ii) the provincial-level government's footprint in the provincial economy through SOEs, including LGFVs, and their financial health; and (iii) the size and health of the regional banks and, more broadly, the regional financial system. Provincial-level governments that exhibit weaker profiles in one or more of these dimensions may be in a weaker position to mobilize sufficient resources in a timely manner to address systemic or large idiosyncratic risks.

In assessing the financial health of the provincial-level government, we typically consider economic and financial indicators such as GDP per capita as a percentage of national GDP per capita, industrial diversification, the province's fiscal performance[10] and its debt burden.

Relevant indicators for assessing the provincial-level government's footprint in the local economy through SOEs include considerations related to both the size of the SOEs (e.g., net asset size) and to their overall financial health. Indicators of financial health include measures of the indebtedness of local SOEs (including LGFVs) relative to RLG revenue, overall leverage of SOEs, and the profitability of SOEs as a proxy for the underlying riskiness of their activities and the risk of failure. RLGs operating in an environment with stronger and less-indebted SOEs are more likely to be able to mobilize and direct sufficient resources from these entities to help other entities undergoing financial stress.

Similar to our assessment of the provincial-level government's footprint in the local economy through SOEs, we typically consider indications of weaknesses in the local financial sector that may limit the

[10] In assessing fiscal performance, we typically consider fiscal metrics that may include general budgetary revenue, government fund revenue and transfer payment.

access to resources or increase the risk of systemic shock. These include financial health indicators such as non-performing loans, the relative size of the banking sector, outstanding loans and the share of shadow banking activities in the local economy relative to total financing activities.

In our peer comparison, we focus not only on absolute levels of metrics, including high-frequency indicators such as land sales and fixed asset investment, but typically also incorporate qualitative~~ly~~ considerations, including the drivers for the changes in data, as well as relevant complementary metrics[11] that may indicate a clear positive or negative trend compared to similar tiers of RLGs.

The extent to which we may notch down from the provincial-level government's support starting point to arrive at its Capacity to Support score is based on peer analysis. We typically rank order Chinese provincial-level governments based on each of the three dimensions described above to assess regional risks and each province's ability to orchestrate support. Provinces with greater regional risk and weaker ability to orchestrate support would generally receive a two-notch adjustment. In applying notching, we may consider additional relevant information that could supplement our view of the province's capacity to support as well as any data limitations.

The result of any notching from the support starting point is the provincial-level Governmental Capacity to Support score, expressed as an alphanumeric, and, for LGFVs owned or controlled by provincial-level governments, this score serves as the foundation for our support-based approach for assessing an LGFV's credit profile. For LGFVs owned or controlled by nonprovincial-level governments, there are additional steps in our analysis described below.

Nonprovincial-level Governments: Capacity to Support

In assessing a nonprovincial government's capacity to support, we start with the provincial-level capacity to support and consider: (i) government tiering; (ii) other characteristics of the nonprovincial government that affect its relative importance; and (iii) local fundamentals, including the economic and financial profile.

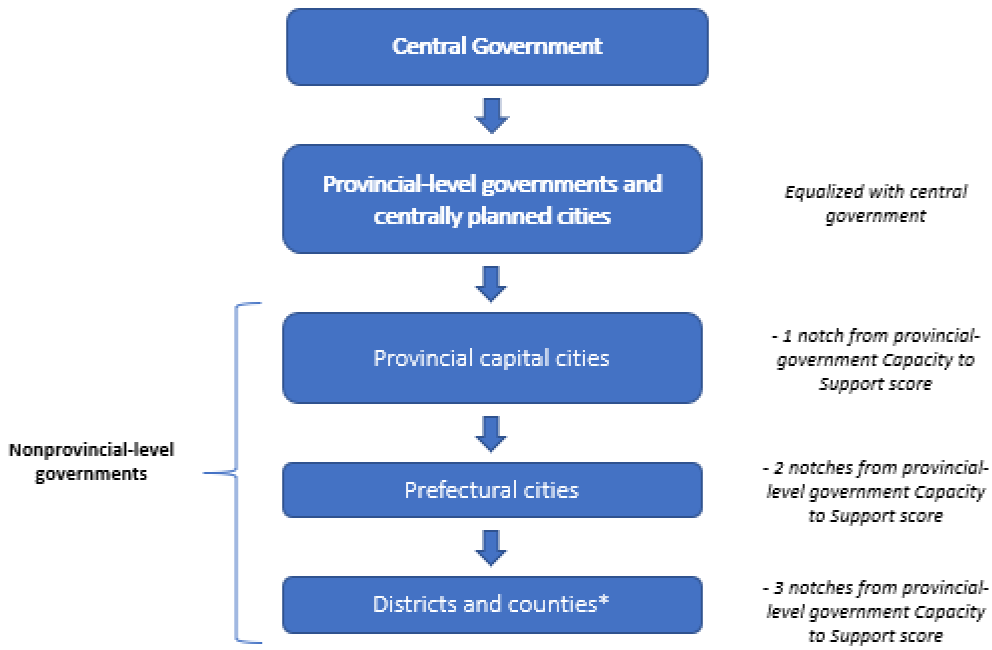
Government Tiering Drives Support Expectations

In contrast to provincial-level governments that are very closely linked to the central government, RLGs below the provincial level have looser ties with the central government because they are layers away in the administrative hierarchy and therefore farther away from central government decision-makers. RLGs in lower layers such as provincial capitals, prefectural cities, districts and counties have varying levels of linkages to their respective provincial-level governments.

To arrive at the support starting point of a nonprovincial-level RLG, we thus first typically notch down from the provincial-level government's Capacity to Support score based on the tiering of government and distance away from the central government. As shown in Exhibit 4, we typically apply a one-notch downward adjustment to provincial capital cities, two notches for prefectural cities, and three notches for districts and counties.

11 For example, the volatility of real estate prices or the performance of land auctions can be useful complementary metrics to land sales.

EXHIBIT 4
Indicative Notching Based on Government Tiering



* For a district linked to a municipality reporting directly to the central government or linked to a centrally planned city, we typically apply a two-notch downward adjustment from the capacity to support score of that municipality or centrally planned city.

Source: Moody's Investors Service

In addition to notching for administrative hierarchy, we may include other qualitative considerations in our assessment of a nonprovincial-level RLG's capacity to support. These may include our view that the RLG is more or less important than its hierarchy implies, for example as indicated by reporting lines, including in terms of budget administration, into a tier higher than the tier immediately above. We typically only consider that an RLG has a different hierarchy than the standard administrative hierarchy where an RLG has special characteristics that clearly distinguish it from other RLGs in the same tier. This may result in a one- or two-notch adjustment upward or downward.

Our assessment may include additional considerations that are less common but may carry greater importance, or may be important only under certain circumstances or for a subset of issuers. Such factors could include other governance considerations, including financial controls, the quality of reporting, as well as assessments of environmental and social considerations. The result is the nonprovincial-level government support starting point.

Local Fundamentals Also Drive Capacity to Support

All else being equal, LGFVs owned by RLGs with strong economic and financial profiles have a higher likelihood of receiving timely extraordinary support. These RLGs have more discretionary financial resources to support their LGFVs in a timely manner, due to their lower reliance on funds allocated from higher-tier governments.

To assess a non-provincial-level RLG's ability to support its LGFVs, we consider similar dimensions to those discussed above for assessing regional risks across provincial-level governments and also relevant peer RLGs within the province and across provinces. This may lead us to make an adjustment to arrive at the governmental capacity to support its own LGFVs. We may also apply an additional downward notch to reflect risks related to opacity or limited data disclosure. In rare cases, very limited disclosure of data or concerns on its robustness may lead us to greater downward notching.

The outcome of this notching is the Governmental Capacity to Support score for nonprovincial-level governments, which is expressed as an alphanumeric.

Component: LGFV Characteristics Affecting Support

In this component, we consider LGFV-specific characteristics that may affect the RLG's propensity to support the LGFV, which may result in downward notching from the Governmental Capacity to Support Score and, in some rare cases, upward notching.

Why It Matters

Beyond an RLG's capacity to support, the LGFV's own characteristics are an important determinant of the RLG's propensity to support and of the likelihood that it will extend timely support when needed.

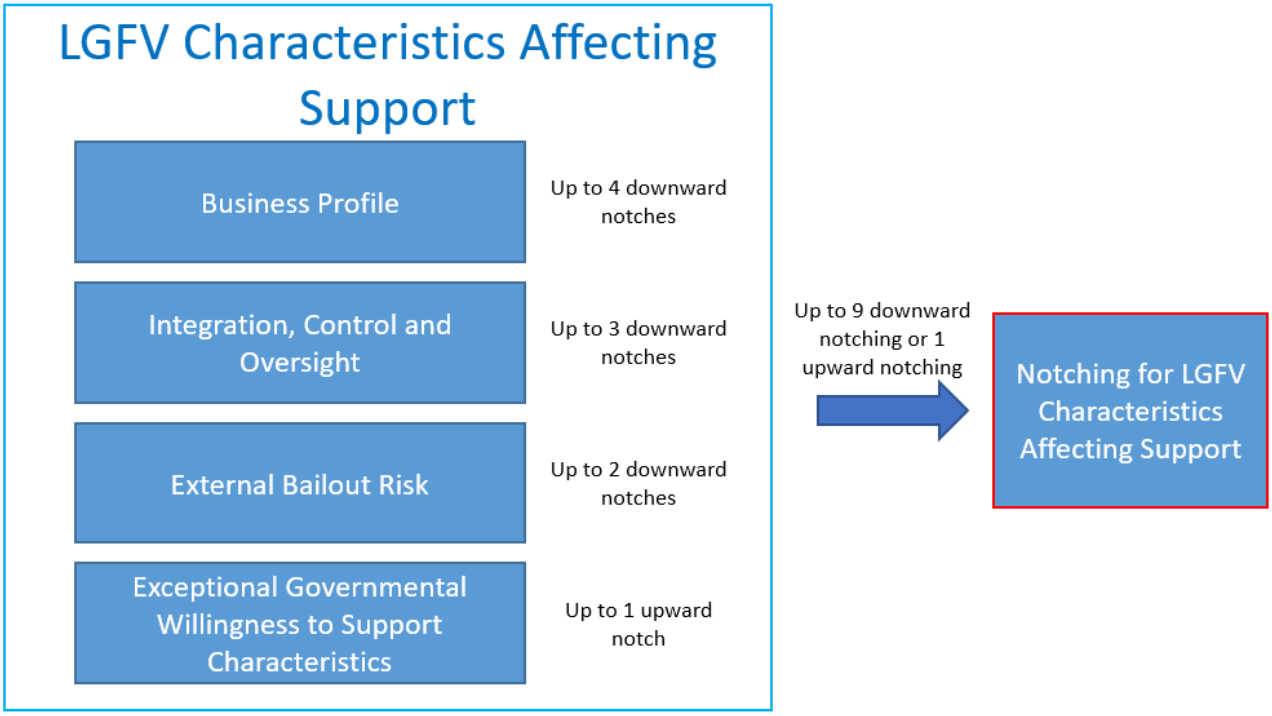
How We Assess It for the Scorecard

As shown in Exhibit 5, this component includes four notching factors. The Business Profile factor and the Integration, Control and Oversight factor can lead to a downward adjustment of up to four and three notches respectively. The External Bailout Risk factor can lead to a downward adjustment of up to two notches. The Exceptional Governmental Willingness to Support Characteristics factor can lead to a one-notch upward adjustment. The first two factors comprise a number of sub-factors that are scored under a three-point scale (strong, moderate, weak). The combination of the sub-factor scores under each of these two factors provides an indicative notching for the factor.[12] We then establish a final factor score,[13] with notching that may be different from the indicative score. To determine the overall notching under this component, we sum the scores (in notches) from the individual factors. In aggregate, LGFV Characteristics Affecting Support notching factors can result in up to a nine -notch downward adjustment or up to a one-notch upward adjustment to the Governmental Capacity to Support Score.

[12] For more details on the scorecard mechanics, please see Appendix A.

[13] For more details, see the Assigning Final Notching sections of these two factors.

EXHIBIT 5
Overall Approach for Notching for LGFV Characteristics Affecting Support



Source: Moody's Investors Service

Factor: Business Profile

Why It Matters

An LGFV's business profile is an important determinant of how the local government owner will prioritize its resources to support that LGFV among all of the RLG's state-owned enterprises. The relative importance of the types of an LGFV's public activities or an LGFV's departure from the public mandate, for example toward more commercially oriented activities, can affect the sufficiency or timeliness of the RLG's support.

How We Assess It for the Scorecard

Our assessment of this factor is qualitative and based on four sub-factors: the LGFV's business position, the essentiality of its primary public activities, the LGFV's exposure to commercial activities and the riskiness of these activities.

This notching factor can result in a downward adjustment of up to four notches.

Business Position Sub-factor

Why It Matters

The predominance of an LGFV in its RLG controller's administrative area is a key indicator of likelihood of support. An LGFV that is highly visible at local, provincial or national levels due to its scale or its role as the predominant provider of an activity in a region is more likely to receive support from its RLG owner or higher-tier governments. An interruption or substantial impairment of these activities as a result of the LGFV's default or financial distress, in the absence of a readily available alternative provider, has the potential to create reputational risk for the RLG.

How We Assess It for the Scorecard

We assess this sub-factor qualitatively, considering the LGFV's position relative to peers in the RLG perimeter and the ability of other entities to assume its public service mandate should it fail. Important considerations include: (i) whether it has a dominant position or if there are multiple platforms performing similar activities (i.e., potential for substitution); (ii) the scale of the LGFV's operations; (iii) the degree of complexity of the activities performed; and (iv) the expertise the LGFV demonstrates in performing its activities.

Entities that score strong under this sub-factor typically have low or very low risk of substitution, and the RLG tends to prioritize its financial resources to support these LGFVs. They often are one of a few most important platforms in a provincial-level government or provincial capital city or the sole or single dominant platform in other tiers of RLGs. We typically consider an LGFV to be a dominant platform where it owns the overwhelming majority of assets in a specific functional area. There is an absence of an alternative provider of the activity, or the cost of replacement, should the LGFV fail, would be very high. A failure would likely be highly visible and cause reputational risk and social disruption to the RLG.

Entities that score moderate typically exhibit a less dominant role and higher risk of substitution, but these LGFVs are still important platforms for their RLG owners. An LGFV in this case may be one of the several largest platforms performing similar activities in a lower-tier RLG's perimeter, or it may be a sizable platform in a provincial-level government or provincial capital city's perimeter, but not among the largest platforms. A failure of these LGFVs would typically be more manageable for the RLG and higher-tier governments and would cause lower systemic disruption or reputational damage.

Entities that play a much less important role and have a high risk of substitution or being shut down typically score as weak under this sub-factor. They are typically ranked toward the lower end of the spectrum of SOEs owned by an RLG, in terms of their assets or equity bases. The impact of the failure of these entities, including reputationally, would be limited to the owner RLG.

Essentiality of Primary Public Activities Sub-factor

Why It Matters

The scope of LGFVs' public projects is wide, and their relative importance can be different from the perspective of the Chinese central government. The nature of these activities is important, because RLGs will typically prioritize their support to those LGFVs whose primary activities focus on public policy projects that have higher importance, consistent with national and regional policy goals.

How We Assess It for the Scorecard

Our assessment of the importance of an LGFV's primary activities is qualitative and typically based on a comparison with LGFV peers. Important considerations include: (i) essentiality of public policy projects to the functioning of the area's economy and people's daily life; and (ii) importance to regional or national economic growth, social stability or public security. In general, primary activities that benefit larger populations or geographic areas and those that are under national policy priorities are more important.

We recognize that public importance is dynamic and that it essentially falls on a continuum; thus, our qualitative classification of the essentiality of activities is also dynamic, reflecting our understanding of government policies and priorities. Because an LGFV can engage in a variety of public projects, our assessment typically focuses on primary activities that account for a significant portion of its assets, debt or investments.

Entities that score strong under this sub-factor typically have primary activities that align closely to national policies; i.e., they have a high level of importance to the central government. Examples of activities with national importance include essential public services for major metropolitan areas, national new areas that are highly important to the central government,[14] or critical public infrastructure (such as backbone lines in the national highway or rail networks, major ports and airports, key water conservation projects for a major river basin, or metro lines/network in a major city).

The primary activities of an entity that scores moderate under this sub-factor are typically related to its role as the provider of essential regional services. Such essential services include developing or managing regional or local urban infrastructure projects, basic or fundamental social and utility services, and affordable housing projects.

We typically score an entity's primary activities as weak if (i) such activities are not essential, such as land development or property projects with strong commercial elements; tourism, culture, sports or industrial-related investment which, if suspended, will not immediately impact people's daily lives or the operations of the controlling RLG, or (ii) they only benefit a small population or geographic area.

Proportion of Commercial Activities Sub-factor

Why It Matters

In general, sizable exposure to commercial activities indicates a departure from the LGFV's public policy mandate. It is generally more difficult for RLGs to use their resources to support the repayment of an LGFV's debt that is associated with commercial activities than to support debt associated with public policy projects, given the enhanced regulatory framework that seeks to separate LGFVs' debt obligations from their RLG owners, and more disciplined use of fiscal budgetary funds in China. Thus, all else being equal, the larger the exposure to commercial activities, the lower the likelihood of support.

How We Assess It for the Scorecard

We assess this sub-factor qualitatively based on a forward-looking assessment of the share of commercial activities,[15] typically reflected by the percentage of debt, capital investments or assets related to commercial projects, relative to the LGFV's total debt, capital investments or assets.

Entities that receive a score of low for this sub-factor (i.e., the best score) typically have small exposure to commercial activities, usually below 15%, currently and on a forward-looking basis.

We typically assign a score of medium to LGFVs that have material commercial activities, usually 15%-30% of total debt, capital investments and assets, on a current or forward-looking basis.

We typically assign a score of high (i.e., the worst score) in cases where an LGFV has a large (> 30%) or rapidly increasing share of commercial activities.

14 In determining its importance to the central government's policy, we typically consider the political, economic and social importance of its policy mandate (e.g., whether it is included the national Five-Year Plan, the policy privileges it benefits from, as well as the actual economic and social contribution of the national new areas to China).

15 We define commercial activities as activities that fall outside of the public policy mandate of an LGFV. They are typically profit-driven and are subject to competition. For more on public policy projects, see the "Scope" section.

Riskiness of Commercial Activities Sub-factor

Why It Matters

The riskiness of an LGFV's commercial activities is important because higher-risk activities increase the likelihood of being exposed to financial difficulties that would hinder the LGFV's capacity to fulfill its public policy mandate or limit its access to funding or secure needed resources. In these cases, government support to the LGFV would become less likely because the RLG may be reluctant to channel public resources to support a LGFV in financial distress due to its engagement in commercial activities.

How We Assess It for the Scorecard

We assess this sub-factor qualitatively considering the potential financial drag caused by commercial activities, i.e., the overall likelihood that the LGFV will need to allocate financial resources to support commercial activities whose funding needs are unlikely to be provided by RLGs.

In our assessment of the sub-factor, we consider whether the LGFV's commercial activities are self-sustaining cash-generating activities and whether the government will backstop financial resources needed to support those commercial activities, on an ongoing basis or an extraordinary basis if required.

Commercial activities that are self-sustaining, and cash-generating or that are very likely to receive sufficient government funds in lieu of financial support from the LGFV typically fall on the lower end of the risk spectrum. For example, commercial activities linked to public policy projects are generally more likely to benefit from ongoing or extraordinary government support, limiting the need for funding by the LGFV.

Commercial activities that are expected to require material financial support from an LGFV on an ongoing or on an extraordinary basis typically score poorly in our assessment. We typically consider that the financial support from LGFVs is material if the amount of an LGFV's own cash flow that is directed, or risks being directed, to commercial activities could undermine the LGFV's capacity to fulfil its public policy mandate, hamper the LGFV's access to funding[16] or limit its capacity to secure resources needed for public policy projects.

In assessing the risk of a financial drag caused by commercial activities, we also consider the business risk inherent to these activities as well as their overall financial standing. Business risk varies depending on the nature and operations of commercial activities. Activities that exhibit greater levels of cyclicality, market volatility or competition are typically more financially risky. For instance, the leasing of government buildings usually entails lower risk than other commercial property investments.

Entities that receive a score of low for this sub-factor (i.e., the best score) typically have commercial activities that have meaningful positive contributions or are unlikely to create any material drag on the LGFV's financial resources, either because of the very low risks of these activities or because governments are expected to provide financial or other form of support when needed.

We typically assign a score of medium to LGFVs whose commercial activities are a drag or could become a drag on the LGFV's financial resources, either because of the inherent risks of these activities or because governments may not provide financial or other form of support when needed.

[16] The presence of cross default provision in LGFVs' debt documents is also a source of risk.

We typically assign a score of high (i.e., the worst score) in cases where an LGFV has commercial activities that exhibit a clear and material drag, or the risk of a clear and material drag, on the LGFV's financial resources and such activities are unlikely to receive government support.

Business Profile Factor: Assigning Final Notching

The combined scoring of the three sub-factors described above leads to the indicative downward notching for the Business Profile factor.[17] In unusual cases, we may decide on notching for this factor that is different from the indicative notching, because the issuer's characteristics as captured by the sub-factors do not fully reflect our overall view of the business profile. For example, we may place more emphasis on the score for exposure to commercial activities when it represents close to half of its activities or where these activities carry an outsize risk for the financial sustainability of the LGFV.

Factor: Integration, Control and Oversight

Why It Matters

Given the close linkage between LGFVs and their owner RLGs, an LGFV's financial profile largely reflects the direction, control and oversight of the RLG, in addition to the LGFV's own management and public policy mandate. Due in part to expectations of consistent support from RLGs, LGFVs have been able to operate and maintain access to credit markets with significantly higher leverage than most private sector entities. However, a very weak financial profile, especially where it results from lax debt management or a loss in access to funding or where there are issues with the sufficiency or timeliness of payments from the controlling RLG, often signals a higher likelihood that the LGFV will experience financial distress and require extraordinary support. It may also signal relatively lower propensity of the RLG to provide timely support to the entity. Similarly, indirect ownership of an LGFV by an RLG controller could diminish the integration, control and oversight exerted.

How We Assess It for the Scorecard

Our assessment of this notching factor is qualitative and based on four main sub-factors: the LGFV's debt management; its access to funding; the predictability of government payments; and its exposure to contingent risks, which may arise from guarantee for third parties or lending to other entities.

This notching factor can result in a downward adjustment of up to three notches.

Debt Management Sub-factor

Why It Matters

While LGFVs usually have high leverage owing to large investment mandates from the controlling RLG, most RLGs have an incentive and ability to maintain LGFVs' debt loads at a sustainable level. Continued access to low-cost debt financing is important to LGFVs' ability to fulfill policy mandates. A loss of confidence by lenders, for example resulting from an LGFV's unsustainable debt burden, would likely cause distress, prompt the need for extraordinary support measures and create potential reputational risk for the RLG and local officials. A default by an LGFV could also cause other SOEs in the region to experience higher borrowing costs or more difficulty in obtaining financing.

How We Assess It for the Scorecard

We make a qualitative assessment of the overall prudence of debt management, rather than focusing on absolute debt level or leverage metrics. Considerations typically include the pace of an LGFV's debt growth, the purpose of its new debt, and how the LGFV's operating and budgetary plans demonstrate

17 Please see Appendix A for more information about how we use the scorecard to arrive at an indicative notching and a scorecard-indicated outcome.

an ability to service existing and incremental debt, including the extent of coordination with the RLG in establishing these plans.

We score as strong LGFVs that exhibit prudent debt management. These entities typically demonstrate: (i) debt growth not materially higher than local economic growth and infrastructure investment needs over the medium-term; (ii) an established plan or mechanism to access RLG financial resources (e.g., bond proceeds, reserve fund) that can be used for capital expenditure or LGFV debt repayment; and (iii) incurrence of debt resulting from investment in areas of high importance to the central or regional government rather than simply covering operating needs or financing commercial activities. We expect the debt used on highly important public policy activities will be more likely to get government funding support and refinancing from banks and the capital market. LGFVs scored as strong may have different rates of debt growth, in part because LGFVs in geographic areas with higher GDP or fiscal income growth have a greater ability to service growing debt than LGFVs in slower-growing areas.

We typically assign a score of moderate to LGFVs that exhibit the following characteristics: (i) aggressive debt growth, i.e., materially higher than local economic growth and infrastructure and investment needs over the medium-term; ii) capacity to access some RLG financial resources for capital expenditure or debt repayment but absence of a clear plan; and iii) increasing use of debt for investments for which the RLG may have no clear funding support channel.

Entities that score weak typically exhibit the following characteristics: i) very aggressive debt growth relative to local economic growth and infrastructure and investment needs over the medium-term; ii) absence of a plan and very limited capacity to access RLG financial resources for capital expenditures or debt repayment; iii) cash flows that are typically insufficient to cover interest payments; or iv) most incremental debt finances investments in risky commercial activities.

Our forward-looking assessment is typically based on historical data and trends. In some cases, recent events or trends signal a materially different risk than indicated by historical observations.

Access to Funding Sub-factor

Why It Matters

Maintaining an LGFV's access to funding is a key indication of the effectiveness of the RLG's oversight, as well as its ability to sustain the LGFV as a going concern and to prevent liquidity stress at the LGFV.

How We Assess It for the Scorecard

Our assessment is qualitative and mainly based on our view of the quality and diversity of funding channels.

We typically assign a score of strong to LGFVs that have strong banking relationships and robust access to high-quality debt funding. Typically, the primary funding sources are competitively priced loans from major Chinese policy banks or commercial banks, or debt issued in the Chinese public bond market. These LGFVs are typically frequent issuers in the public bond market. They typically have no or insignificant exposure to shadow banking channels, such as trusts, wealth management products, financial leasing or peer-to-peer (P2P) lending. Funding from shadow banking channels is generally less reliable and normally carries higher costs and refinancing risk than funding from major banks and the public bond market, especially when relevant policy changes or credit markets tighten.

LGFVs scored as moderate under this sub-factor typically have meaningful exposure to funding sources that are viewed as less reliable, including from shadow bank channels. Additionally, their banking relationships are not very strong; e.g., no or limited credit facilities from large state or shareholding banks, bank facilities mainly provided by small to medium-sized banks and facilities are concentrated in a few banks. Limited public bond market access characterized by some sensitivity to liquidity conditions in the public bond market or a high percentage of loans from small regional banks are also typically an indicator of moderate access to funding. For this assessment, small regional banks include urban or rural commercial banks with a small capital base, and banks with poor capital adequacy or stressed liquidity.

Entities with a weak score have large exposure to shadow banking funding and weak access to other debt funding, which may imply challenges in refinancing their maturing debt. These LGFVs typically rely heavily on shadow banking channels and have limited alternative channels of funding.

Predictability of Government Payments Sub-factor

Why It Matters

Predictability in the receipt of payments from the controlling RLG is also an important indicator of RLG's recurring support for the LGFV and of its willingness to maintain the LGFV as going concern and provide extraordinary support if needed.

Payments from the controlling RLG is typically the most important source of funding for an LGFV to maintain its operations, fund new capex and investment, and pay debt service. These cash payments may take various forms, such as capital injections, subsidies, rebates, prepayment, repurchase or payment of procurement fees to the LGFV for its public policy projects. LGFVs often have an arrangement with RLGs for the services or goods they provide. Nonetheless, an RLG usually has substantial discretion regarding the timing and amount of its payment to LGFVs. Even if there is a contract between parties, the RLG is in a strong position to put into place any contract amendment it deems necessary.

How We Assess It for the Scorecard

Our assessment of the predictability of government payments sub-factor is qualitative and forward-looking. We typically consider the track record of government payments, the form and strength of contractual or fiscal transfer arrangements between the RLG and the LGFV and adherence to those arrangements.

LGFVs that exhibit strong predictability of government payments are typically characterized by clear contractual arrangements or payment mechanisms and a good track record of timely, sufficient and recurrent payments. There are typically clear arrangements between the RLG and LGFV that cannot be unilaterally changed by the RLG, well proven payment mechanisms and evidence of dedicated budget allocations, all pointing to continued predictability in the payment stream.

We assign a moderate score to entities that demonstrate a generally good payment track record from the RLG, but with less predictability of government payments. Typical characteristics include arrangements that are vague or uncertain or can be unilaterally changed by the RLG, untested payment mechanisms, a lack of dedicated budget allocation or a track record of volatile payments, typically from unpredictable sources like public land sales.

LGFVs scoring weak typically demonstrate low predictability of government payments. Typical characteristics include frequent, unilateral changes to contractual arrangements between the RLG and the LGFV; poor adherence to the arrangements in place or no meaningful contracts; or poor track record of payment, including inadequate payments or frequent delays. For example, government payments that are dependent on premiums from land sales in a lower-tier market have weak predictability, because land sales in these markets tend to be more volatile than other fiscal budgetary items.

Exposure to Contingent Risks Sub-factor

Why It Matters

An LGFV's exposure to credit counterparties and contingent liabilities, usually associated with the LGFV's provision of loans or guarantees to third parties, could negatively impact its credit quality. Defaulted loans or calls on guarantees can impair an LGFV's equity base, create an unexpected need for liquidity or involve an LGFV in legal suits, which may make it difficult for the LGFV to get funding from financial institutions. Additionally, it is usually unclear whether or how the controlling RLG will compensate an LGFV for these types of losses.

How We Assess It for the Scorecard

In our forward-looking, qualitative assessment, key considerations may include an LGFV's aggregate credit exposure (loans, guarantees and similar undertakings) to third parties relative to the LGFV's equity base, the counterparty's credit risk and whether sufficient, transparent information is available for the transaction and the counterparty.

Entities that score as low (i.e., the best score) typically have portfolios of guarantees and loans to third parties that represent a small portion of LGFV's total equity.

Entities that score as medium typically have guarantees and third-party lending that account for a meaningful portion of LGFV's total equity. However, we assess the risk that major credit counterparties (those that benefit from the larger part of the LGFV's guarantees and lending) will default as low, and sufficient information about these counterparties is available.

Entities that score as high under this sub-factor (i.e., the worst score) typically have portfolios of guarantees and third-party loans that account for a sizable portion of LGFV's total equity. We typically assess that there is considerable risk of default by major counterparties, or the nature of the transactions and counterparties may be opaque, with insufficient available information to assess or monitor the associated credit risk.

Integration, Control and Oversight Factor: Assigning Final Notching

The combined scoring of the four sub-factors described above leads to indicative downward notching.[18] In unusual cases, notching for this factor may be different from the indicative notching, because the issuer's characteristics, as captured by the sub-factors, do not fully reflect our overall view of oversight, control and integration. For example, where there is exacerbated exposure to funding risk, for example with high refinancing risk, we may place more emphasis on the score for the Access to Funding sub-factor and assign more downward notching than indicated by the initial score.

Factor: External Bailout Risk

Why It Matters

Actions by the RLG can create credit problems for the LGFV. An RLG may use an LGFV as a vehicle to support other failing entities, including LGFVs, SOEs or private companies. For example, the RLG may direct an LGFV to engage in M&A transactions, with a healthier LGFV assuming the obligations of a weaker one, or it may direct a transfer of assets or other actions that support a weaker entity. These actions may also signal a lack of support from the RLG for the supporting LGFV. In particular, when the

18 Please see Appendix A for more details on the scoring mechanisms.

RLG does not adequately compensate the LGFV for the use of the latter's resources, the RLG is demonstrating a tendency to compromise the financial profile of the LGFV to the benefit of other entities.

How We Assess It for the Scorecard

In our assessment, we typically consider the RLG's track record in directing an LGFV (or other LGFVs controlled by the RLG) to use its own resources to support other entities and the likelihood of such an occurrence. We typically consider the frequency of any such events, the level of resources deployed by the LGFV, the resultant deterioration of the LGFV's financial strength, and the extent of any compensation paid to the LGFV by the RLG. The financial impact may also result from a deteriorated business profile through, for example, an acquisition that reduces the LGFV's financial resources or that offers limited business synergies. Presence of a number of distressed entities within the perimeter of the RLG can also be an indication of greater likelihood of external bailout risk.

Any notching that we may apply for this factor is based on our forward view of the likelihood that the LGFV's resources will be channeled for providing support and the materiality of the potential negative impact on the LGFV's financial profile. While our forward view is typically informed by the track record, we may consider that a need to provide material support is likely and apply downward notching even in the absence of a track record.

We typically do not apply downward notching where, based on our forward view, there is no or very limited external bailout risk, including an absence or a very limited track record of the RLG directing the LGFV to support other entities, with essentially no financial impact. There are also typically no apparent material negative transactions that the RLG is likely to direct in the foreseeable future.

Where, based on the track record or our forward view, there is strong likelihood of the LGFV being used as a bailout resource, but the financial impact is generally expected to be limited and short-lived, we may apply one downward notch if there is a risk that the LGFV will continue to be used as a bailout resource with potentially more negative impact. We may apply two downward notches where there is material bailout risk, which would often be evidenced by a track record of negative interference from the RLG and material impact on the financial well-being of the LGFV.

This notching factor can result in a downward adjustment of up to two notches.

Factor: Exceptional Governmental Willingness to Support Characteristics

Why It Matters

In rare cases, an LGFV may benefit from substantially higher support expectations than other LGFVs, owing to the importance of its activities and lack of substitute for these LGFVs to the controlling RLG, but also its importance to higher-tier local governments or the central government. As a result, the LGFV is likely to be prioritized when higher tiers of government allocate resources for extraordinary support.

How We Assess It for the Scorecard

In our forward-looking, qualitative assessment, we consider the nature of the activities an LGFV undertakes and their importance to the controlling RLG as well as higher-tier governments. Strong importance of these activities is usually indicated by the presence of extremely strong government payment mechanisms, accompanied by dedicated resources such as transfer payments from higher-tier governments or designated use of RLG bond proceeds, typically in the form of fiscal budget allocations that cover a large share of the LGFV's operational and debt servicing. In these cases, government payments are also expected to be predictable, based on an extremely strong track record of payment.

In some cases, the default of an LGFV, or a substantial impairment of its activities, may create wide, far-reaching economic, financial or social risks that would incentivize higher-tier government support. For example, we may consider that an LGFV whose activities are of sufficient scale and importance to national government policy objectives would be likely to benefit from such exceptional level of governmental support.

This notching factor can result in an upward adjustment of up to one notch. The upward notching would nevertheless not result in a scorecard-indicated outcome higher than the controlling RLG's credit profile. This is because issuers in the sector are expected to exhibit very tight linkages with their controlling RLG, including their decision-making, organizational structure and financial linkages.[19]

Other Considerations

Ratings may reflect consideration of additional factors that are not in the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Such factors include financial controls and the quality of financial reporting; track record of support; corporate legal structure; the quality and experience of management; assessments of corporate governance as well as environmental and social considerations. Regulatory, litigation, liquidity, technology and reputational risk as well as changes to consumer and business spending patterns, competitor strategies and macroeconomic trends also affect ratings.

Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes.

Regulatory Considerations

Issuers in the sector are subject to evolving regulation. Effects of these regulations may entail limitations on operations or on funding sources and substitution risk.

Our view of future regulations plays an important role in our confidence level in the willingness of supporting governments to provide necessary means for LGFVs to fulfill their mandate and ultimately to bail them out if needed. In some circumstances, regulatory changes or regulatory uncertainty may affect ratings.

Environmental, Social and Governance Considerations

Environmental, social and governance (ESG) considerations may affect the ratings of issuers in the LGFV sector. For information about our approach to assessing ESG issues, please see our methodology that describes our general principles for assessing these risks.[20] The scorecard includes risks related to ESG considerations at both the GCS and standalone LGFV characteristics components since these risks can impact the willingness or ability of the RLG to support the LGFV. Where ESG risks are not fully captured under the notching factors, we would incorporate these risks outside the scorecard.

Activities undertaken by LGFVs may face varying levels of environmental risks. For example, LGFVs engaging in building or operating infrastructure assets in locations subject to physical climate risks such as flooding and typhoons can be exposed to asset impairment risk. Similarly, environmental

19 Please see our cross-sector methodology that discusses how we assess the impact of sovereign credit quality on other ratings, including the guidelines that pertain to non-bank financial institutions and sub-sovereigns. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

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

considerations, for example the need to meet carbon transition targets related to China's national objectives, may affect RLGs' capacity to support.

Many social risks faced by LGFVs relate to their initiatives to build, own and operate public infrastructure. Demographic changes, public awareness and social priorities shape LGFVs' development targets and ultimately affect RLGs' propensity to support LGFVs. LGFVs can be exposed to reputational risk where there is insufficient attention to LGFVs' relationships with key stakeholders and missteps in handling public matters. Social considerations, such as customer relationships and human capital management, health and safety, and information protection can also carry risks, in particular for LGFVs involved in commercial activities such as trading, retail, tourism and commercial property.

Misalignment of an LGFV's strategy and operations with its public policy mandate is one of the key governance risks LGFVs face. For example, LGFVs are subject to oversight by the RLG controller and typically have to meet several reporting requirements and limited information transparency around investment strategy or financial policy may create risks of misalignment with the RLG's objectives. Weak governance by RLGs would weaken their capacity to support LGFVs and thereby negatively impact LGFVs' credit profiles.

Financial Controls

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. The quality of financial statements may be influenced by internal controls, including the proper tone at the top, centralized operations, and consistency in accounting policies and procedures. Auditors' reports on the effectiveness of internal controls, auditors' comments in financial reports and unusual restatements of financial statements or delays in regulatory filings may indicate weaknesses in internal controls.

Track Record of Support

History of absence or delay in timely governmental support for distressed LGFVs or other public or non-entities under a specific RLG perimeter can signal systemic constraints on support capacity or lower willingness to support failing entities, independently from the specific characteristics of the LGFV.

Management Strategy and Corporate Behavior

The quality of management is an important factor supporting an issuer's credit strength. Assessing the execution of business plans over time can be helpful in assessing management's business strategies, policies and philosophies and in evaluating management performance relative to performance of competitors and our projections. Management's track record of adhering to stated plans, commitments and guidelines provides insight into management's likely future performance, including in stressed situations.

Other important considerations may include our assessment of key person risk, track record under stress situation, etc. An LGFV's high dependence on a single executive or group of executives can pose increased risks, because the loss of a single person could adversely affect the LGFV's response to shocks, continuity of operations and transparency towards its controlling RLG.

Parental and Affiliate Considerations

Where an LGFV is owned by another LGFV or an SOE, our assessment of the credit quality of the LGFV incorporates the considerations described in the "Discussions of Scorecard Factors" section in addition to the risk that the parent may interfere with the support that the RLG controller intends to direct to the LGFV. In particular, if we consider the parent has meaningful incentives and ability to dilute the support intended for the LGFV as that support passes through the parent company or has a track record retaining these funds, the LGFV's rating would reflect this incremental risk and would likely be lower than it otherwise would have been had the LGFV been directly owned by the RLG. Weaknesses in the integration with the RLG controller and the control and oversight it exerts over the LGFV, as identified in the relevant scorecard factor, may be indications of a parent's ability to dilute the intended support. In some cases, a track record or risk of interference by the parent may also lead to a lower propensity to support by the RLG.

Liquidity

Liquidity can be particularly important where government payments to the LGFV are seasonal or unpredictable, and ratings can be heavily affected by extremely weak liquidity. We form an opinion on likely near-term liquidity requirements from the perspective of both sources and uses of cash. For additional insight into general principles for assessing liquidity, please see our liquidity cross-sector methodology.[21]

While access to funding is specifically considered in the scorecard, when it is very weak, the impact it has on ratings may be much greater than the standard scorecard notching would imply.

Event Risk

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness, which may cause actual ratings to be lower than the scorecard-indicated outcome. Event risks — which are varied and can range from mergers to sudden regulatory changes or liabilities from an accident — can overwhelm even a stable, financially sound issuer. Some other types of event risks include M&A, asset sales, spin-offs, litigation, pandemics and significant cyber-crime events.

Assigning Issuer-Level and Instrument-Level Ratings

After considering the outcome of our top-down approach and, as described in the following paragraph, considerations relating to loss and recovery rates in a default scenario, we typically assign an issuer rating or senior unsecured debt rating.

Were an LGFV to issue debt instruments other than senior unsecured debt, individual debt instrument ratings may be further notched upward or downward from the senior unsecured rating or issuer rating to reflect our assessment of any differences in expected loss arising from an instrument's seniority and any collateral.

Key Rating Assumptions

For information about key rating assumptions that apply to methodologies generally, please see *Rating Symbols and Definitions*.[22]

Limitations

In the preceding sections, we have discussed the scorecard factors and many of the other rating considerations that may be important in assigning ratings. In this section, we discuss limitations that pertain to the scorecard and to the overall rating methodology.

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

[22] A link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

Limitations of the Scorecard

There are various reasons why scorecard-indicated outcomes may not map closely to actual ratings.

The scorecard in this rating methodology is a relatively simple tool focused on indicators for relative credit strength. Credit loss and recovery considerations, which are typically more important as an issuer gets closer to default, may not be fully captured in the scorecard. The scorecard is also limited by its upper and lower bounds, causing scorecard-indicated outcomes to be less likely to align with ratings for issuers at the upper and lower ends of the rating scale.

The weights for each factor and sub-factor in the scorecard represent an approximation of their importance for rating decisions across the sector, but the actual importance of a particular factor may vary substantially based on an individual company's circumstances.

Factors that are outside the scorecard, including those discussed above in the "Other Considerations" section, may be important for ratings, and their relative importance may also vary from company to company. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.[23] Examples of such considerations include the following: how sovereign credit quality affects non-sovereign issuers, the assessment of credit support from other entities, the relative ranking of different classes of debt and hybrid securities, and the assignment of short-term ratings.

We may use the scorecard over various historical or forward-looking time periods. Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

General Limitations of the Methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Companies in the sector may face new risks or new combinations of risks, and they may develop new strategies to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for an issuer's future performance; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates, as scorecard inputs or in other rating considerations, typically diminishes. Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, industry competition, disruptive technology, or regulatory and legal actions. In any case, predicting the future is subject to substantial uncertainty.

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

Appendix A: Using the Scorecard to Arrive at a Scorecard-Indicated Outcome

1. Measurement or Estimation of Factors in the Scorecard

In the "Discussion of the Scorecard Factors" section, we explain our analytical approach for scoring each scorecard factor or sub-factor,[24] and we describe why they are meaningful as credit indicators.

The information used in assessing the sub-factors is generally found in or calculated from information in the issuer's financial statements or regulatory filings, derived from other observations or estimated by Moody's analysts. We may also incorporate non-public information.

Our ratings are forward-looking and reflect our expectations for future economic, fiscal and financial performance. However, historical results are helpful in understanding patterns and trends of an LGFV's credit profile as well as for peer comparisons.

2. Mapping Scorecard Sub-factor Scores to Arrive at Indicative Notching under the LGFV Characteristics Affecting Support Component

After assessing each sub-factor under the first two factors of the LGFV Characteristics Affecting Support component, the scores are mapped to a numeric score (for the Business Profile factor sub-factors, the scores of strong/low, moderate/medium and weak/high are mapped to numeric scores of 1, 2 and 3.5, respectively; for the Integration, Control and Oversight factor sub-factors, the scores of strong/low, moderate/medium and weak/high are mapped to numeric scores of 1, 2 and 3, respectively). These numeric scores are then averaged to arrive at the factor's overall numeric score. This numeric score is then mapped to indicative notching shown in the table below. For the Business Profile factor, we apply weights of 30% for both business position and essentiality of primary activities sub-factors and weights of 20% for both proportion of commercial activities and riskiness of commercial activities sub-factors. For the Integration, Control and Oversight factor, we apply equal weights to sub-factors.

EXHIBIT 6

LGFV Characteristics Affecting Support Component:

Mapping Factor Scores to Arrive at Indicative Notching

Numeric Score	Notching Level
x ≤ 1.5	0
1.5 < x ≤ 2.0	-1
2.0 < x ≤ 2.5	-2
2.5 < x ≤ 3.0	-3
3.0 < x ≤ 3.5	-4

Source: Moody's Investors Service

3. Combining the Notching Factors to Arrive at the Scorecard-Indicated Outcome

After having decided on the Governmental Capacity to Support Score and the notching adjustments under the factors of the LGFV Characteristics Affecting Support component, we sum the notching factors and apply the cumulative notching to the Governmental Capacity to Support Score. The result is the scorecard-indicated outcome.

[24] When a factor comprises sub-factors, we score at the sub-factor level. Some factors do not have sub-factors, in which case we score at the factor level.

Appendix B: Scoring Guidance for LGFV Characteristics Affecting Support Factors and Sub-factors.

Business Profile Factor	Business Position	Strong	Entities that score strong under this sub-factor typically have low or very low risk of substitution, and the RLG tends to prioritize its financial resources to support these LGFVs. They often are one of a few most important platforms in a provincial-level government or provincial capital city or the sole or single dominant platform in other tiers of RLGs. We typically consider an LGFV to be a dominant platform where it owns the overwhelming majority of assets in a specific functional area. There is an absence of an alternative provider of the activity, or the cost of replacement, should the LGFV fail, would be very high. A failure would likely be highly visible and cause reputational risk and social disruption to the RLG.
		Moderate	Entities that score moderate typically exhibit a less dominant role and higher risk of substitution, but these LGFVs are still important platforms for their RLG owners. An LGFV in this case may be one of the several largest platforms performing similar activities in a lower-tier RLG's perimeter, or it may be a sizable platform in a provincial-level government or provincial capital city's perimeter, but not among the largest platforms. A failure of these LGFVs would typically be more manageable for the RLG and higher-tier governments and would cause lower systemic disruption or reputational damage.
		Weak	Entities that play a much less important role and have a high risk of substitution or being shut down typically score as weak under this sub-factor. They are typically ranked toward the lower end of the spectrum of SOEs owned by an RLG, in terms of their assets or equity bases. The impact of the failure of these entities, including reputationally, would be limited to the owner RLG.
	Essentiality of Primary Public Activities	Strong	Entities that score strong under this sub-factor typically have primary activities that align closely to national policies; i.e., they have high level of importance to the central government. Examples of activities with national importance include essential public services for major metropolitan areas, national new areas that are highly important to the central government, or critical public infrastructure (such as backbone lines in the national highway or rail networks, major ports and airports, key water conservation projects for a major river basin, or metro lines/network in a major city).
		Moderate	The primary activities of an entity that scores moderate under this sub-factor are typically related to its role as the provider of essential regional services. Such essential services include developing or managing regional or local urban infrastructure projects, basic or fundamental social and utility services and affordable housing projects.
		Weak	We typically score an entity's primary activities as weak if: (i) such activities are not essential, such as land development or property projects with strong commercial elements; tourism, culture, sports or industrial-related investment which, if suspended, will not immediately impact people's daily lives or the operations of the controlling RLG; or (ii) they benefit only a small population or geographic area.
	Proportion of Commercial Activities	Low	Entities that receive a score of low (i.e., the best score) typically have small exposure to commercial activities, usually below 15%, currently and on a forward-looking basis.
		Medium	Entities that receive a score of medium typically have material commercial activities, usually 15% – 30% of total, on a current or on a forward-looking basis.
		High	We typically assign a score of high (i.e., the worst score) in cases where an LGFV has a large (> 30%) or rapidly increasing share of commercial activities
	Riskiness of Commercial Activities	Low	Entities that receive a score of low for this sub-factor (i.e., the best score) typically have commercial activities that have meaningful positive contributions or are unlikely to create any material drag on the LGFV's financial resources, either because of the very low risks of these activities or because governments are expected to provide financial or other form of support when needed.
		Medium	We typically assign a score of medium to LGFVs whose commercial activities are a drag or could become a drag on the LGFV's financial resources, either because of the inherent risks of these activities or because governments may not provide financial or other form of support when needed.
		High	We typically assign a score of high (i.e., the worst score) in cases where an LGFV has commercial activities that exhibit a clear and material drag, or the risk of a clear and material drag, on the LGFV's financial resources and such activities are unlikely to receive government support.

Integration, Control and Oversight	Debt Management	Strong	We score as strong LGFVs that exhibit prudent debt management. These entities typically demonstrate: (i) debt growth not materially higher than local economic growth and infrastructure investment needs over the medium-term; (ii) an established plan or mechanism to access RLG financial resources (e.g., bond proceeds, reserve fund) that can be used for capital expenditure or LGFV debt repayment; and (iii) incurrence of debt resulting from investment in areas of high importance to the central or regional government rather than simply covering operating needs or financing commercial activities. We expect the debt used on highly important public policy activities will be more likely to get government funding support and refinancing from banks and the capital market. LGFVs scored as strong may have different rates of debt growth, in part because LGFVs in geographic areas with higher GDP or fiscal income growth have a greater ability to service growing debt than LGFVs in slower-growing areas.
		Moderate	We typically assign a score of moderate to LGFVs that exhibit the following characteristics: (i) aggressive debt growth, i.e., materially higher than local economic growth and infrastructure and investment needs over the medium-term; ii) capacity to access some RLG financial resources for capital expenditure or debt repayment but absence of a clear plan; and iii) increasing use of debt for investments for which the RLG may have no clear funding support channel.
		Weak	Entities that score weak typically exhibit the following characteristics: i) very aggressive debt growth relative to local economic growth and infrastructure and investment needs over the medium-term; ii) absence of a plan and very limited capacity to access RLG financial resources for capital expenditures or debt repayment; iii) cash flows that are typically insufficient to cover interest payments; or iv) most incremental debt finances investments in risky commercial activities.
	Access to Funding	Strong	We typically assign a score of strong to LGFVs that have strong banking relationships and robust access to high quality debt funding. Typically, the primary funding sources are competitively priced loans from major Chinese policy banks or commercial banks, or debt issued in the Chinese public bond market. These LGFVs are typically frequent issuers in the public bond market. They typically have no or insignificant exposure to shadow banking channels, such as trusts, asset management plans, financial leasing or P2P lending. Funding from shadow banking channels is generally less reliable and normally carries higher costs and refinancing risk than funding from major banks and the public bond market, especially when relevant policy changes or credit markets tighten.
		Moderate	LGFVs scored as moderate under this sub-factor typically have meaningful exposure to funding sources that are viewed as less reliable, including from shadow bank channels. Additionally, their banking relationships are not very strong; e.g., no or limited credit facilities from large state or shareholding banks, bank facilities mainly provided by small to medium-sized banks and facilities are concentrated in a few banks. Limited public bond market access characterized by some sensitivity to liquidity conditions in the public bond market or a high percentage of loans from small regional banks are also typically an indicator of moderate access to funding. For this assessment, small regional banks include urban or rural commercial banks with a small capital base, and banks with poor capital adequacy or stressed liquidity.
		Weak	Entities with a weak score have large exposure to shadow banking funding and weak access to other debt funding, which may imply challenges in refinancing their maturing debt. These LGFVs typically rely heavily on shadow banking channels and have limited alternative channels of funding.
	Predictability of Government Payments	Strong	LGFVs that exhibit strong predictability of government payments are typically characterized by clear contractual arrangements or payment mechanisms and a good track record of timely, sufficient and recurrent payments. There are typically clear arrangements between the RLG and LGFV that cannot be unilaterally changed by the RLG, well-proven payment mechanisms and evidence of dedicated budget allocations, all pointing to continued predictability in the payment stream.
		Moderate	We assign a moderate score to entities that demonstrate a generally good payment track record from the RLG, but with less predictability of government payments. Typical characteristics include arrangements that are vague or uncertain or can be unilaterally changed by the RLG, untested payment mechanisms, a lack of dedicated budget allocation or a track record of volatile payments, typically from unpredictable sources like public land sales.
		Weak	LGFVs scoring weak typically demonstrate low predictability of government payments. Typical characteristics include frequent, unilateral changes to contractual arrangements between the RLG and the LGFV; poor adherence to the arrangements in place, or no meaningful contracts; or poor track record of payment, including inadequate payments or frequent delays. For example, government payments that are dependent on premiums from land sales in a lower-tier market have weak predictability, because land sales in these markets tend to be more volatile than other fiscal budgetary items.
	Exposure to Contingent Risks	Low	Entities that score as low typically have portfolios of guarantees and loans to third parties that represent a small portion of an LGFV's total equity.
		Medium	Entities that score as medium typically have guarantees and third-party lending that account for a meaningful portion of an LGFV's total equity. However, we assess the risk that major credit counterparties (those that benefit from the larger part of the LGFV's guarantees and lending) will default as low, and sufficient information about these counterparties is available.
		High	Entities that score as high under this sub-factor typically have portfolios of guarantees and third-party loans that account for a sizable portion of an LGFV's total equity. We typically assess that there is considerable risk of default by major counterparties, or the nature of the transactions and counterparties may be opaque, with insufficient available information to assess or monitor the associated credit risk.

External Bailout Risk	External Bailout Risk	0 notch	We typically do not apply downward notching where, based on our forward view, there is no or very limited external bailout risk, including an absence or a very limited track record of the RLG directing the LGFV to support other entities, with essentially no financial impact. There are also typically no apparent material negative transactions that the RLG is likely to direct in the foreseeable future.
		-1 notch	Where, based on the track record or our forward view, there is strong likelihood of the LGFV being used as a bailout resource, but the financial impact is generally expected to be limited and short-lived, we may apply one downward notch if there is a risk that the LGFV will continue to be used as a bailout resource with potentially more negative impact.
		-2 notches	We may apply two downward notches where there is material bailout risk, which would often be evidenced by a track record of negative interference from the RLG and material impact on the financial well-being of the LGFV.
Exceptional Governmental Willingness to Support Characteristics	Exceptional Governmental Willingness to Support Characteristics	+1 notch	We may apply an adjustment where we view the LGFV's activities as having strong importance. This is usually indicated by the presence of extremely strong government payment mechanisms, accompanied by dedicated resources such as transfer payments from higher-tier governments or designated use of RLG bond proceeds, typically in the form of fiscal budget allocations that cover a large share of the LGFV's operational and debt servicing. In these cases, government payments are also expected to be predictable, based on an extremely strong track record of payment. In some cases, the default of an LGFV, or a substantial impairment of its activities, may create wide, far-reaching economic, financial or social risks that would incentivize higher-tier government support. For example, we may consider that an LGFV whose activities are of sufficient scale and importance to national government policy objectives would be likely to benefit from such exceptional level of governmental support.

Source: Moody's Investors Service

Moody's Related Publications

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. 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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