China Local Government Financing Vehicle ("LGFV") Criteria

Rating Criteria

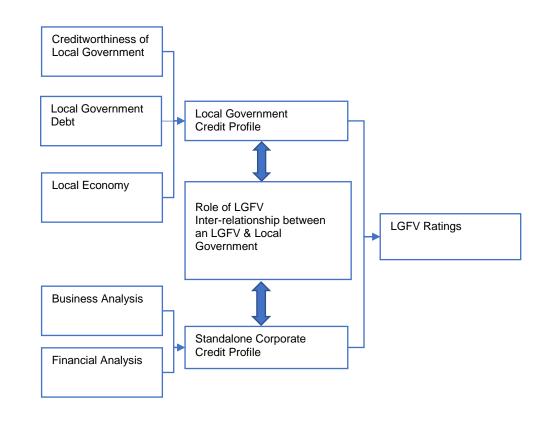
Scope of the Criteria

Lianhe Ratings Global Limited ("Lianhe Global") applies the LGFV criteria to Chinese entities that (1) have low or limited market-oriented business activities, (2) their primary purposes are to provide public goods and services as an extension of government functions, (3) rely on government subsidies or funding for debt service, and (4) operate for commercial purposes. The criteria intend to cover most China LGFVs, but there are circumstances in which an LGFV may fall outside our observations. We believe these cases would be few and far between and we intend to use the same underlying principles to conduct our analysis on them.

Overview

The criteria report explains Lianhe Global's general approach to assessing an LGFV's credit profile by combining the likelihood and degree of local government support along with the standalone credit profile of an LGFV.

The diagram below illustrates the topology of the criteria:



Analysts

Alex Kung +852 3462 9577 alex.kung@lhratingsglobal.com

Joyce Huang, CFA +852 3462 9578 joyce.huang@lhratingsglobal.com

Background:

From a regulatory perspective, an LGFV is an independent legal entity incorporated by a local government or other government departments with an initial capital investment in the form of financial contributions, land, and/or pledged shares etc. It functions primarily as a financing platform to facilitate the building of infrastructures and/or provide public goods and services as an extension of a local government. From a local government perspective, an LGFV is a government-financed entity but it operates as a market-oriented project company to facilitate the construction of infrastructure projects in cities, rural areas, and/or special economic zones. It puts the emphasis on the functionality of an LGFV. From an investor perspective, an LGFV is a local government-sponsored entity with an initial capital investment in the form of allocation of land, pledged shares, fee incomes, and government debt etc. to achieve a credit profile with sufficient assets and cash flow to qualify for financing activities in the capital markets with the added benefit of government fiscal contribution in times of need, to fund infrastructures and public services without regard to return on investments.

From Lianhe Global's perspective, local governments rely on connected entities as financing platforms, LGFVs, to fund infrastructures, with repayment stemming from receivables and government subsidies or funding.

Lianhe Global delineates LGFVs into three categories: (1) Public Services, (2) Quasi-Public Services, and (3) Commercial Purposes.

Public Services

In general, these are infrastructure projects or services, initiated by government bodies to provide public or quasi-public services for the general public without regard to any fee schedule or cash flow expectations, which includes (but not limited to) construction of roadways, schools and universities, and hospitals etc. They use LGFVs as financing platforms but operate at the directives of government bodies which they depend on for repayment of their outstanding financial obligations.

Quasi-Public Services

In general, these are projects or services with blended features of both public goods and non-public goods such as low-income housings, natural gas, water, and public transportation.

Commercial Purposes

In general, these are projects or services, with a fee for service in mind and/or sufficient cash flow prospects for debt service, which could be replaced by private sectors, such as housing, land development (i.e. turning raw land into improved land), toll roads, toll bridges and tunnels etc.

Local Government Credit Profile Analysis

Creditworthiness of Local Government

Administrative Level of Local Government

In general, the higher the level of a local government the subject entity is directly associated, the higher the creditworthiness of the subject entity and the stronger the expected level of support. In a case of an identical administrative level, we look into other economic metrics of the local governments.

Fiscal Strength of Local Government

In general, a local government relies on three fiscal revenue sources: local tax revenue, land sale revenue, and transfer of payments (from central and/or higher level of governments).

Lianhe Global examines fiscal revenue of a local government in terms of revenue structure and stability. We favour sustainable and diversified tax revenues. In addition, we examine the most recent 3 years' growth rate of fiscal revenue of a local economy.

We favour tax revenue over land sale revenue due to the former's higher stability over the latter. We also favour a diverse and broad tax revenue base for the same reason. Reliance on and concentration in one industry sector for tax revenue may put a local government's finance at risk in case of an isolated economic shock.

Likewise, we favour a higher degree of flexibility on the transfer of payments. Some transfers of payments are earmarked for specific projects in which a local government cannot use or redirect these funds for other purposes.

Lianhe Global also examines a local government's fiscal expenditure in terms of its flexibility and scalability, as well as its pro forma budget deficit against revenue. We favour a higher degree of flexibility and scalability on fiscal expenditure which is conducive to debt service in time of financial difficulties.

Local Economy

Lianhe Global examines a local government's geographic location and infrastructure, availability and accessibility of natural resources, as well as human capital and demographics, for future growth potential.

Level of local economic activities and development impacts a local government's tax revenue and GDP per capita. In general, we favour a large and diversified economy with a broad tax base, high tax revenue, and steady GDP growth rate. On the contrary, where there is a small and narrow economic base, it is often associated with a smaller tax revenue, lower GDP per capita, and slower GDP growth rate, in our view.

In terms of economic structure, we favour a balanced structure that is conducive to longterm economic growth in a sustainable manner. In general, agricultural (or primary) industry generates low tax revenue while manufacturing (or secondary) and service (or tertiary) industries generate high tax revenue for a local government. As a result, we favour a local government with high portions of manufacturing and service industries. We also believe both manufacturing and service industries are likely to be the engine for economic growth.

At the same time, we also recognize the important role of the central government's policies in local economies. A local government must follow the directives of the central government in order to receive funding and subsidies. In general, where a local government follows the directives of the central government, it is conducive to current and future economic development. Additionally, the competence of a local government official brigade in carrying tasks and prescribed policies is also a metric that we review, which in turn affects tax revenue and fee income streams and consequently affects debt service capacity.

Local Government Debt

We examine the structure of a local government debt in the context of its debt ceiling, headroom, yield spread, debt and liability ratios. Currently, Chinese local governments are not allowed to issue debt above their debt ceilings. Conversely, these limitations would likely to handicap local governments' willingness and ability to support their LGFVs in times of financial distress.

Standalone Corporate Credit Profile Analysis

Business Analysis

Unlike for-profit corporate companies, these LGFV entities often operate as not-only-forprofit. Oftentimes, these LGFV entities engage in the development of infrastructure projects with large initial outlay, long construction and pay-back periods etc. As a result, we often apply an additional set of metrics such as nature of the business, development trends, scope and mode of operation, source of funding, project construction phase/cycle, method and stage of payment, and project under planning etc.

Revenue Structure and Mode of Operation

We usually consider the business nature, role and functionality, profitability, and development trends etc. when we examine an LGFV entity.

For an LGFV that provides public goods and services, we consider accrued benefits to the public. On the repayment front, we consider the terms, size and timing of government subsidies and/or funding.

For an LGFV that provides quasi-public services, we consider both accrued benefits to the public and commercial aspects. For the sake of discussion, we consider regulated utilities as quasi-public services. Oftentimes, regulated utilities are also regulated monopolies with government oversights. These regulated utilities preform public services while they charge a market price to maintain their level of services with any shortfall filled by government subsidies or funding.

For an LGFV that operates like a commercial entity, we apply our general corporate analysis with the added benefit of external support.

Management

Lianhe Global pays close attention to the experience and background of senior management of an LGFV. We generally examine an LGFV's organizational structure, reporting hierarchy, delineation of duties, internal control process, and overall corporate culture. We may also examine senior management and board members' tenures, as well as their past official titles and roles within government bodies and current political party affiliations if any. We believe, given the close linkage between LGFVs and their related local governments, this is a critical assessment factor. If a current board member of an LGFV has had previously held positions within government bodies and/or currently has political party affiliation, this at least gives the appearance of the important role of the LGFV to a local government, as well as the close ties between them. Additionally, we believe this close linkage is also conducive for an LGFV to ask for more government resource or funding. We favour senior managers and board members with prior tenures at government bodies and/or have current political party affiliations with state-owned enterprises ("SOEs").

Mega Project Under Planning

We pay close attention to any mega or white elephant project undertaken by an LGFV, that require a large initial outlay, long construction and pay-back periods, which often run into delays of construction and budget overruns. We believe any mishap in a mega project could easily risk and ruin the viability of an LGFV. We take into consideration of mega projects that are both under construction and planning. We examine closely a mega project's initial outlay, total layout, source of funding, construction periods, stage of construction, budget shortfall, balance of budget, and pay-back period etc.

Financial Analysis

Asset Quality

Lianhe Global generally examines an LGFV's asset composition and purpose, as well as their prevailing market values of the most recent 3 years. We examine an LGFV's asset composition such as (but not limited to) PP&E, long-term investments, intangibles, and other assets' percentage shares, as well as their corresponding purposes such as assets earmarked for public services, quasi-public services, and commercial purposes. We also examine their prevailing market values and restrictions on asset sales if any.

We pay close attention to an LGFV's receivables and land reserves. An LGFV with sizeable account receivables and other receivables may pose risks to its liquidity position. We examine its receivable exposure to key clients in this regard. Also, we examine the valuation of land price. Oftentimes, land prices are volatile in some regions of China. Many of them are challenging to evaluate and develop, which may result in overstating their carrying values inadvertently. This may affect an LGFV's asset size and quality, consequently. Additionally, we may examine the development costs and carrying values of projects under construction to match their corresponding initial outlay and staged deployment of payments to ensure compliance.

Capital Structure

(1) Equity

Lianhe Global first examines an LGFV's shareholder composition, their changes over time (or stability), as well as past and planned equity injection plans. We believe shareholders are the biggest supporters of an LGFV and they map its development direction with committed capital. They are the bedrock of an LGFV.

(2) Debt Structure and Trend

Second, we examine an LGFV's debt structure and trends. We usually examine an LGFV's debt structure in terms of bondholders, size and currency, tenor, yield spreads, maturity profile, financial guarantee if any, methods of payment, and their corresponding repayment plans of the most recent 3 years.

(3) Debt Level and Trend

Third, we examine an LGFV's level of debt and trends of the most recent 3 years. In particular, we examine an LGFV's leverage in terms of debt to equity, debt to capitalization, and long-term debt to capitalization ratios, as well as their respective trends.

(4) Contingent Liabilities

We believe a majority of the contingent liabilities stem from guarantees on third parties (or related parties) financial obligations. In case of a non-payment, an LGFV in its capacity as a guarantor has to honour the financial obligations. Lianhe Global usually examines the commercial terms of these guarantees and their associated liens and claims against on the third party (or the related party) for its own benefits in a case of default. This is commonly known as a counter-guaranty clause in China. We may also examine the business nature, guaranteed amount, duration, concentration risk, operating and financial strength of the third party, and include these contingent liabilities under an LGFV's debt profile.

Profitability

(1) Revenue Structure

Lianhe Global reviews an LGFV's most recent 3 years profit and loss statements. We review an LGFV's revenue and cost structure, as well as their stability and developing trends. Given LGFVs' nature of the business and their close ties to local governments, it is not surprising that some LGFVs may depend primarily and continuously on government subsidies and/or funding to stay operational. In these cases, Lianhe Global pays close attention to the stability of government subsidies and/or funding, as well as monitors LGFVs' changing roles and dominance under prevailing policy stances.

(2) Quality of Earnings

We examine an LGFV's statements of cash flow with particular attention to its cash flow from operating activities and investing activities. We believe a strong and steady cash flow from operating activities is the best harbinger for debt service. We pay particular attention to revenue categorised under operating activities and investing activities. In some cases, revenue would be recognised as investing activities which should have been recognized under operating activities. We will make adjustments as we see fit.

We also examine an LGFV's statements of cash flow from financing activities to understand its financing needs both in terms of debt service and new issuance to draw a full picture of its financial and repayment burdens.

Repayment Capacity

We examine an LGFV's short-term repayment capacity in terms of cash to short-term debt and FFO to debt ratios and long-term repayment capacity in terms of EBITDA over interest and debt over EBITDA ratios of most recent 3 years. In general, we examine these ratios' past stability, as well as our forecast on project construction phases and outlays, revenue projections and capital expenditures to estimate these ratios as we would under our general corporate criteria.

Availability of Credit Facilities

We usually review an LGFV's most recent 3 years of bank credit facilities in terms of the number of credit lines, terms, limits, utilized and unused portions. We may also review the type of banks which are providing credit facilities, such as policy banks, nationally recognized commercial banks and/or regional banks. We may also review if any credit line that has been renewed, declined, or terminated and/or any maturing bank loan has been

repaid or rolled over, in the past 3 years. We believe the availability of large and multiple bank credit lines are conducive for an LGFV to maintain its liquidity position.

Local Government Support

The role of an LGFV in the context of a local government

Lianhe Global examines the role and dominance of an LGFV in terms of finding a replacement or substitute, and its wider effect on a local economy and financing activities of other enterprises in case of an uncured default. In general, an LGFV performs a specific role in a local economy, such as for infrastructure, land development, waste treatment, public water and electricity individually etc. However, there are circumstances where an LGFV takes on multiple roles. In general, the larger the scope of services provided by an LGFV, the higher the willingness of a local government to give support. In addition, we examine the availability of other LGFVs of a similar administrative level in the locality as the probable replacements for the defaulting LGFV.

Inter-relationship between an LGFV and a local government

We examine the degree of dependence of an LGFV on a local government in terms of both operation and financial support, as well as their expected continuity. We measure this dependence based on the LGFV's shareholding structure, appointment/removal of the board of directors and senior managers, as well as track record of operational and financial support in recent years. We believe a full ownership, a majority government purchase of services and goods or support, speaks volumes about the inter-dependence between them. We also believe a local government directs the operation of an LGFV through full control. We are also of the view that a local government is likely to allocate more resources and dedicate operational support through control of an LGFV.

Key Factors	Sub-Factors	Indicators
Local Government Credit Profile	Fiscal Strength	Administrative level
		Fiscal strength
	Local Economy	Size of economy, GDP per capita, natural
		resources, economic outlook etc.
	Local Govt Debt	Outstanding debt and yields
Corporate Entity Credit Profile	Similar to General Corporate Analysis	
Local	Role of LGFVs	Number and nature of local LGFVs etc.
Government Support	Inter-relationship between LGFVs and Local Governments	Shareholders and controlling stakeholders' track record on capital injections, allocation of resources/assets, providing operational support and receiving govt subsidies /funding, as well as their expected continuity

Summary of Key Rating Factors

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