Sovereign

Rating Criteria

Scope of the Criteria

Lianhe Ratings Global Limited ("Lianhe Global") applies the sovereign rating criteria to sovereign governments and central banks across the globe. The criteria also apply to some sub-sovereign governments that have the authority to determine the fiscal and/or monetary frameworks within which they operate.

Lianhe Global has developed the rating framework for sovereigns based on our rating knowledge and experience. The criteria do not represent a comprehensive coverage but only address key rating factors that we consider are important for assessing a sovereign entity's credit profile.

The sovereign credit profile is continuously evolving and the rating framework or some rating factors of the criteria may not adequately address the emerging risk characteristics. Lianhe Global continues to monitor the development of sovereign credit and may revise the criteria when we deem it necessary.

Sovereign Rating Symbols and Definitions

Lianhe Global's sovereign ratings are a forward-looking assessment of a sovereign government's ability and willingness to service its financial obligations to nonofficial creditors in full and on time, which is also a prospective assessment of a sovereign government's probability of default.

If a sovereign government fails to repay its debts on maturity dates, undertakes a debt restructuring, or takes any action that harms the interests of creditors, such acts are typically considered credit defaults by Lianhe Global. However, failure to meet obligations to other governments, official creditors, supranational organizations (such as the International Monetary Fund or the World Bank), or other public sector entities, or failure to fulfil guaranteed obligations, shall not be deemed as credit defaults. Nonetheless, such failures would be considered as signals of political or fiscal crisis, and may indicate a lack of ability or willingness to meet other obligations.

Sovereign ratings include local currency and foreign currency credit ratings. A sovereign government's local currency credit rating generally is not lower than its foreign currency credit rating. The details of rating symbols and definitions can be found in the report "Rating Symbols and Definitions" published at the website www.lhratingsglobal.com.

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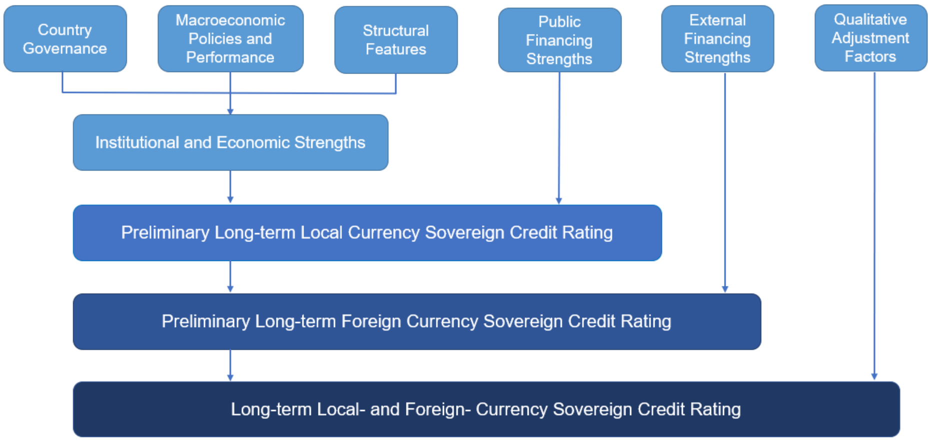
Sovereign Rating Framework

The following diagram shows Lianhe Global's general approach in deriving a sovereign rating. The assessment focuses on five key dimensions of a sovereign government (a country or a region): **country governance, macroeconomic policies and performance, structural features, public financing strengths,** and **external financing strengths.**

Lianhe Global employs a combination of qualitative and quantitative analysis to determine the sovereign rating. Firstly, we assign a score to each of the five key aspects. Secondly, we assess the institutional and economic strengths by aggregating the scores of country governance, macroeconomic policies and performance, and structural features, and then derive a preliminary long-term local currency sovereign credit rating by using a matrix of institutional and economic strengths and public financing strengths. Thirdly, we determine a preliminary long-term foreign currency sovereign credit rating by incorporating the assessment of external financing strengths. Finally, the sovereign credit ratings may be adjusted based on additional qualitative considerations, such as a country's default history.

The framework for sovereign rating:



Key Rating Factors

Country Governance

The assessment of country governance mainly consists of four factors: the country profile, political system, national security and social stability, and governance capacity.

The **country profile** typically includes fundamentals (geographic location, territorial area, administrative divisions, population, etc.), natural conditions (natural resources, disasters, etc.), historical performance (past political and economic performances), and international influence.

The **political system** is an important factor in evaluating the legitimacy and stability of a sovereign regime. An appropriate and effective political system is often a key determinant of sound governance. Legitimacy refers to the presence of an elected and accredited government, while stability refers to the ability of the ruling party to consistently implement and achieve its administrative objectives, complete its term as scheduled, and avoid inappropriate infighting within or between parties.

War, terrorism and ethnic tensions are closely linked to **national security and social stability**. In general, a country engaged in or threatened by war may face rising military expenditures and mounting fiscal pressure, which can undermine its economic development. Additionally, terrorism and ethnic tensions may disrupt social stability and hinder economic growth.

The assessment of a sovereign government's **governance capacity** includes political stability, governance capability and institutional maturity. A stable and effective government typically demonstrates strong governance capacity, with the ability and willingness to service its debts, and resilience to external shocks. We use World Bank's Worldwide Governance Indicators, including political stability, government effectiveness, rule of law, control of corruption, voice and accountability, and regulatory quality, as main quantitative indicators.

Macroeconomic Policies and Performance

The assessment of macroeconomic policies and performance primarily focuses on four key factors: macroeconomic policies, economic performance, inflation levels, and employment conditions.

The appropriateness and sustainability of **macroeconomic policies** are crucial to ensuring long-term stable economic development. These policies typically include fiscal, monetary, and exchange rate policies. We believe that the coordinated implementation of fiscal and monetary policies, aimed at maximizing production and minimizing inflation, is the most effective macroeconomic framework for promoting stable economic growth. Sovereign states that have maintained sound macroeconomic policies are, all else being equal, more likely to achieve stable and healthy economic growth, higher income levels, and greater resilience to external shocks.

Quantitative indicators of **economic performance** include the size of Gross Domestic Product ("GDP"), GDP growth rate, and economic volatility. Large economies that have sustained healthy growth over an extended period generally exhibit greater resilience to external shocks, lower volatility in public finances, and stronger growth in household income and wealth.

Price stability is a key prerequisite for stable economic growth and long-term prosperity. Economies with a track record of low inflation and stable economic growth tend to receive higher ratings than those plagued by chronic inflation and volatile economic cycles.

The unemployment rate serves as a vital indicator of labour market conditions. Elevated unemployment may signal sluggish economic activity or even an economic recession, which can negatively affect a sovereign's credit profile.

Structural Features

The assessment of structural features typically includes factors such as the development level, economic structure, and financial soundness. These elements are essential for assessing a sovereign's economic growth potential and identify risks within the economy.

The development level is mainly measured through indicators such as GDP per capita and the Human Development Index ("HDI"). A high GDP per capita often reflects a well-developed economy, as it suggests that the labour force is engaged in high value-added activities, and that the economy is more resilient to adverse shocks. The HDI, published by the United Nations Development Program ("UNDP"), provides a composite measure of average achievement in key dimensions of human development: health, education and standard of living.

In terms of **economic structure**, consumption-driven economies are usually more stable and resilient to external risks compared with those driven primarily by investment or foreign trade. From an industrial structure perspective, service-driven economies tend to be more stable and less affected by the external environment, as the service sector has advantages in absorbing labour and stimulating domestic consumption and demand. Additionally, a high degree of dependence on foreign trade and foreign investment reflects great openness to the global economy. However, this openness also increases vulnerability to fluctuations in the external environment.

A stable and efficient financial and banking system not only allocate national savings effectively to enhance economic efficiency, but also provides funding support to the government when needed. This may suggest that the government and central bank are likely to intervene to prevent systemic banking failures through supervision and regulation, or financial support. Therefore, risks in the banking sector may have a spillover effect on the sovereign government, affecting the sovereign credit profile. Capital adequacy and non-performing loan ratios are major indicators in assessing the banking risk.

Apart from the above-mentioned structural features, there may be some specific features to each economy (e.g. highly dependent on the oil sector), which would be specifically addressed through qualitative adjustments.

Public Financing Strengths

The assessment of public financing strengths mainly consists of evaluating the fiscal position, government debt burden and structure, and the government's capacity to repay debts and refinance.

Fiscal position is a key factor in assessing a sovereign government's public financing strengths. Major indicators include the size of fiscal revenue, the pace of revenue growth, the structures of government revenue and expenditure, and the overall fiscal balance (surplus or deficit).

Stable and consistent growth in fiscal revenue indicates a healthy fiscal position and economic development. It helps reduce the fiscal deficit or increase the fiscal surplus, and enhance the government's solvency. As tax income serves as a main composition of government revenue, a broad tax base combined with low tax rates could improve the elasticity and resilience of fiscal revenue. Conversely, a narrow tax base usually results in more volatile revenue streams, increasing fiscal vulnerability.

Fiscal expenditure includes recurrent and non-recurring expenditure. Recurrent expenditures typically include government spending on public services, infrastructure, healthcare, and education. While these expenditures contribute positively to economic development, they are rigid expenditures. A high level of recurrent expenditure increases a government's fiscal burden, reduces budgetary flexibility, and may weaken its capacity to repay debts.

Governments with persistently high fiscal deficits face greater pressure on public spending and debt burdens. Reducing the deficit through spending cuts may constrain necessary investments and services, potentially hindering economic development. Therefore, striking a balance between fiscal consolidation and growth-supportive expenditure is crucial for maintaining both financial stability and economic momentum.

The key indicator to measure a **sovereign government's indebtedness** is the gross general government debt to GDP ratio. Although a high and increasing debt level would negatively affect a sovereign government's solvency, the extent of impact would depend on the level of economic development. As a result, the sovereign rating and its debt level is generally not directly correlated. However, all else being equal, a lower government debt to GDP ratio typically indicates a lighter debt burden and lower sovereign credit risk. Another important measure is the interest payment to GDP ratio. A heavy interest burden can widen the government's fiscal deficit and limit its capacity for capital expenditure, constraining long-term economic growth potential.

Effective government debt management is also an important factor in assessing sovereign debt risk. A reasonable **government debt structure** typically means that the majority of debts are in local currency, with fixed interest rates and long maturities. Such a structure helps reduce exposure to exchange rate and interest rate fluctuations, and refinancing risks.

All else being equal, a sovereign government with low financing costs and stable debt levels is likely to have a higher credit rating than one facing high financing costs and volatile debt trends.

The fiscal revenue to government debt ratio is the key indicator to measure **a sovereign government's capacity to repay its debts.** A higher ratio represents stronger debt-servicing ability. When a government's revenue growth potential is limited, its refinancing capacity becomes a critical consideration. Refinancing sources generally include domestic savings and external financing. High levels of household and private-sector leverage are negative factors as they constrain the feasibility of domestic refinancing. On the other hand, strong access to external financing may enhance a government's ability to manage its debts.

External Financing Strengths

The assessment of external financing strengths mainly consists of international balance of payments, external debt level and structure, capacity to repay external debt, and exchange rate risk.

A sovereign government's capacity to repay external debt is largely supported by its ability to **generate foreign exchange**. As international trade plays a vital role in generating foreign exchange, foreign trade volume and current account receipts ("CAR") are important indicators of foreign exchange generation capacity. The current account balance ("CAB") to GDP ratio reflects the potential for foreign reserve accumulation. A persistent current account deficit may lead to rising external debt or declining external assets, thereby weakening the government's ability to generate foreign exchange.

The key indicator to measure a sovereign government's **external debt level** is the gross external debt to GDP ratio. Gross external debt is the sum of the external debt of the general government, central bank, banking sector, and other sectors. For sovereigns with international currencies or serving as global financial centres, their banks may hold substantial foreign deposits, and their enterprises may possess strong external financing capabilities. In such cases, the external debt of the general government carries greater weight in evaluating the overall external debt level.

The assessment of **external debt structure** includes analysing the composition of debt holders, currency denomination, maturity profile, and interest rate structure. A well-diversified debt holder base generally indicates lower repayment risk. However, a high proportion of foreign currency-denominated debt increases exposure to exchange rate fluctuations and currency risk.

Adequate foreign reserves support a sovereign government's capacity in managing external debt and financial risk, particularly when facing emergency events and for sovereigns using non-international currencies. For those sovereigns with open foreign exchange markets and free-floating exchange rate regimes, especially those whose currencies are widely used internationally, the need for large foreign reserves is generally lower, as market mechanisms and investor confidence provide additional buffers.

Exchange rate fluctuations can significantly impact a sovereign government's capacity to repay external debt. A sharp depreciation of the local currency can weaken external debt solvency by increasing the local currency cost of foreign-denominated obligations. Additionally, it can affect trade volumes, inflation levels, and international capital flows, while also causing volatility in foreign reserves. These combined effects can heighten financial vulnerability and reduce the government's ability to manage external debt effectively.

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