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Credit Rating Methodology

Sovereign and Public Sector Entities

This rating methodology was revised with regard to the sovereign part of the "Sovereign and Public-Sector Entities" published on November 7, 2014.

I. Sovereign

1. Sovereign Credit Rating

An issuer rating of a sovereign primarily indicates the government's ability and willingness to fulfill its debt obligations to the private sector by grading in the rating scale. It does not cover obligations to other governments or international organizations but considers their impact on the government's fulfillment of its obligations to the private sector. A sovereign borrower is usually the government or the central bank, although it may vary depending on the legal norm defined by each country. The major difference between the sovereign and a corporate is that the former has the power to levy taxes and the right to issue currency. It is normally not bound by the bankruptcy laws and cannot become extinct like the latter. This comes from the fact that the government has sovereignty of a country. An individual bond rating may differ from the issuer rating as each bond can have different degrees of certainty in repayment depending on its signed contracts or possible selective default. Rating symbols for the sovereign conform to JCR's Types of Credit Ratings and Definitions of Rating Symbols.

2. Local Currency Rating and Foreign Currency Rating

A sovereign debtor has the power to levy taxes that allows it to secure financial sources for fulfilling its debt obligations and the right to issue currency. For the payment of foreign currency debts, the debtor needs to convert its local currency to foreign currencies or procure them in the markets. The payment of local currency debts is hence less constrained. Considering such risk differences, JCR may assign different ratings to the local currency debts and the foreign currency debts. In that case, the local currency rating is normally higher than the foreign currency rating. The following factors are taken into account when assessing notch differences: financial and monetary conditions of the sovereign that can affect the use of its power to levy taxes and its right to issue currency; degree of development of the domestic financial markets; history of defaults; and the adopted currency.

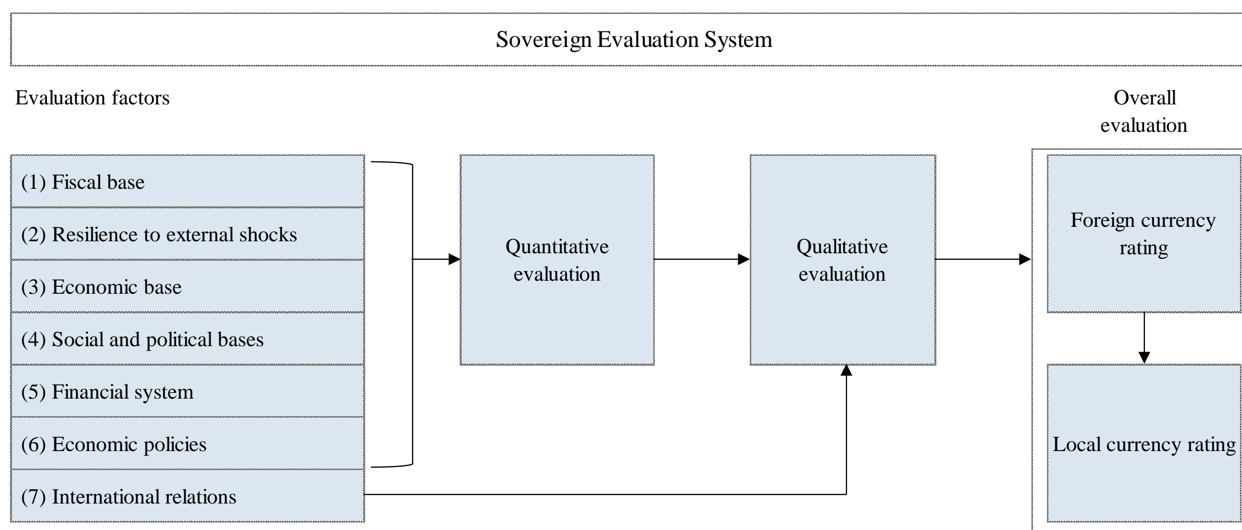
3. Outline of Rating Process and Evaluation Factors

It is important to have a framework of systematic rating process in order to enhance the objectivity

and accuracy of the sovereign rating. For this purpose, JCR uses its Sovereign Evaluation System which covers the steps of both quantitative and qualitative evaluations. In assessing a sovereign's ability and willingness to fulfill its debt obligations, the following seven factors are considered: **(1) fiscal base, (2) resilience to external shocks, (3) economic base, (4) social and political bases, (5) financial system, (6) economic policies, and (7) international relations.** (1) The soundness of the government's **fiscal base** is extremely important because it directly affects its debt payment capacity. (2) The **resilience to external shocks** is critical as an indicator to assess a nation's capacity to repay external debts including those owed by the private sector. (3) A solid **economic base** ensures the stability and expansion of tax and other sources of funding for the government through sustained growth. (4) The sustainability of economic growth in turn largely depends on the stability of **social and political bases**. (5) The **financial system** assumes a vital role of supplying capital needed for economic growth. (6) Implementation of appropriate **economic policies** is considered to enhance the sustainability of economic growth through stabilization of the above factors. JCR also considers the sovereign's willingness to fulfill debt obligations and factors that may affect it, based on its track records. Lastly, (7) **international relations** are assessed in light of whether a nation has an environment where it can stably carry out its international economic activities. JCR pays attention to the fact that those evaluation factors are actually interrelated and their degrees of relevance can vary by country and time span.

The process of evaluation based on the Sovereign Evaluation System is summarized as follows: first, quantitative evaluation is conducted based on the quantitative indicators that JCR considers important among the first six out of the seven evaluation factors from (1) fiscal base to (6) economic policies. Next, the foreign currency rating is derived as an overall evaluation by taking into account (7) international relations in addition to qualitative factors that cannot necessarily be ascertained through quantitative evaluation. The overall evaluation considering qualitative factors shall be conducted so as to stay in principle within three notches above and below the quantitative evaluation. Finally, the local currency rating is derived from the foreign currency rating with making an adjustment already described in the Paragraph 2. Local Currency Rating and Foreign Currency Rating as necessary.

< Overview of Evaluation Factors and Sovereign Evaluation System adopted by JCR >



< Outline of Evaluation Factors for Sovereign Credit Ratings >

Evaluation factors	Sub-evaluation factors
(1) Fiscal base	Trends in the fiscal balance State of the government debt State of the fiscal funding
(2) Resilience to external shocks	Trends in the balance of payments State of external debt Impacts of the currency system
(3) Economic base	Fundamental elements of economic development Historical performances of economic development Growth potential
(4) Social and political bases	Social and political stability State of governance
(5) Financial system	Framework of financial regulations and supervision Lenders' financial conditions and trends of asset values International financial conditions
(6) Economic policies	Policy recognition Policy effectiveness Policy continuity
(7) International relations	Political, Economic, and security stability

(1) Fiscal Base

The fiscal base has a significant impact on a government’s capacity to fulfill its debt obligations. A nation’s fiscal base is analyzed from the standpoint of its soundness and sustainability, primarily based on the trend of the fiscal balance, the state of the government debt and the state of its fiscal funding. In principle, the analysis will cover the general government encompassing both the central and local governments and their social security funds. The central bank is not included in the general government.

In evaluating the fiscal balance, its trends and the government's revenue and expenditure structures are reviewed. The assessment confirms whether the government has been conducting

disciplined fiscal management after analyzing the past trends of the fiscal balance in terms of GDP ratio. A nation that has track records of maintaining fiscal discipline under the changing economic environment can be seen highly likely to find appropriate measures to recover its fiscal soundness in the future even when its fiscal balance temporarily deteriorated due to economic stimulus measures and some other factors. In assessing the revenue structure, the tax revenue base covering both direct and indirect taxes is the primary focus of analysis. Cases where revenues heavily rely on specific natural resources or specific industries require attention in light of the stability of revenues. As for the expenditure structure, JCR first sees whether expenditures are appropriate in size relative to revenues and then assesses the structure with a focus on social security expenses, subsidies, public investment, and interest expenses. The point here is whether fiscal discipline is impaired and whether there exists fiscal rigidity. It should be noted that reduction of public investment may have a negative impact on a country's long-term competitiveness and growth potential in terms of social capital formation.

As to the government debt, the gross debt is the primary subject of evaluation. When the government holds a large amount of fiscal surplus funds or sovereign wealth funds, the net debt obtained by deducting financial assets from the gross debt is also taken into consideration. In evaluating the government debt, its past trends in terms of GDP ratio are reviewed at first. JCR also checks whether the government debt is not diverged and whether it stays at manageable levels. The government’s debt is generally an accumulation of the past fiscal deficits and it is desirable for it to stay at a low level. A low level of government debt may add to the government’s fiscal leeway in the event of a sudden economic downturn or financial crisis. Its bearable size of debt, however, can differ, depending on the possible room for revenue expansion and the level of interest rates. The government debt is then examined in terms of currency composition, debt duration, investor holding structure, etc. When the proportion of foreign currency-denominated debt is high, attention is paid to the risk that the debt burden may change in accordance with the fluctuation of exchange rates.

With regard to the state of fiscal funding, risks associated with future funding are evaluated through a review of the average maturity, debt redemption schedule and funding policy, based on past records of funding scales and costs. Also to be assessed is the state of the domestic bond market which serves as the primary funding base, specifically the market size, liquidity, interest rate levels and investor composition. Refinancing risk may increase when debt service is concentrated at a particular time. In addition, when foreign investors hold a high percentage of government bonds, refinancing risk may arise in the event of a sudden outflow of foreign capital.

As to contingent liabilities owed by the government, the likelihood of their materialization is judged when necessary, based on their size and content. Main subjects to be monitored include official support aimed to stabilize the financial system, fiscal support for public enterprises, fulfillment of government guarantees, shortage of contributions to social security programs, and fiscal expenditures at a time of natural disasters.

(2) Resilience to external shocks

It is important to analyze a country's resilience to external shocks in the trends in the balance of payments as one of factors largely affecting a sovereign debtor's ability to meet its external obligations.

That factor is analyzed in a comprehensive manner from the standpoint of its stability and sustainability by looking into the balance of payments trends, the state of external debt and the impacts of the currency system. Under circumstances where the resilience to external shock deteriorates, there may arise the need for the government to support or assume the payment of certain debts owed by the private sector in order to prevent its debt problems spilling over to impact the entire macro economy. The analysis therefore needs to cover the country's gross external debt including those owed by the private sector.

The balance of payments consists of the current account, capital account and financial account. As to the current account, JCR grasps the trends of individual items that constitute the account and conducts an analysis of their structures. Important here is to look into the nation's ability to acquire foreign currencies and its stability, for which its export competitiveness is a good indicator. The export of goods and services can, by the way, indicate a sustainable level of external borrowing if it is analyzed in comparison with the amounts of external debt balance and annual debt payment. Since the current account balance equals national savings minus investment, its trend needs to be seen in terms of international fund flows. Key points about the financial account include its size relative to the current account and the national economy, presence and degree of constraints stemming from capital regulations and foreign exchange policies, and components of the financial account and the stability of each component or the room for improvement thereof. Among the components of the financial account, direct investment tends to be more stable than short-term funds such as portfolio investment and short-term bank loans. In the case of a country with current account deficits, the sustainability of financing is checked through an analysis of the financial account.

With regard to external debt, in order to assess the ability to service external debt burdens in a sustainable manner, the trend of past debts outstanding and debt repayments is analyzed in terms of levels, GDP ratio and the ratio of goods and services exports. Next, its composition by currency, maturities, borrowers and lenders is examined. When a nation holds a large amount of external financial assets, its net debt calculated by deducting financial assets from the gross debt is also considered. In doing so, the composition of external assets and liabilities, their balance and past trends are examined using international investment position statistics. The analysis is also conducted on the basis of external assets and liabilities minus direct investment. As for external assets, attention is paid to the stock of foreign direct investment, foreign exchange reserves managed by monetary authorities, etc. Its appropriate level of adequacy is judged country by country based on the circumstances of each country. High levels of foreign exchange reserves are required in countries with large inflows of capital, such as short-term foreign debt and portfolio investments, which are prone to capital flight. On

the other hand, in the case of countries that adopt major currencies with a free floating exchange rate regime, the high capacity to procure foreign currencies through the market is taken into account.

Bilateral currency swap agreements and multilateral or regional financial arrangements that may supplement foreign currency liquidity are factored into evaluations as appropriate. International credit enhancement frameworks such as the European Central Bank in the euro area are also woven into assessments as needed. As to assistance such as the one provided by the IMF, precautionary credit lines are assessed as complementary to sovereign liquidity. On the other hand, with regard to financial assistance such as standby credit facilities in response to a balance of payments crisis, deterioration in sovereign liquidity is usually factored into JCR's credit rating at the stage up to the request for assistance, and such IMF assistance is assessed as a potential halt to further liquidity deterioration. As failure to receive such ex-post financial support due to political or other reasons does not supplement liquidity, JCR's sovereign ratings can be further downgraded.

Lastly, as to the currency system, JCR bases its assessment on the examination of the features of the system each country adopts. The floating exchange rate system has less problems as it can adjust macroeconomic imbalances. However, such adjustment is difficult under the fixed exchange rate regime, where the country's currency is pegged to the key currencies. This needs to be heeded along with the risks of major capital inflows or inflows stemming from the gap between domestic and foreign interest rates. In the case of countries taking part in a monetary union like the euro-zone countries, whereas capital movements can be easily made within the region since they are free from foreign exchange constraints, they may find it difficult to adjust macroeconomic imbalances between the member countries. JCR therefore looks into both their advantages and disadvantages. A country which adopts a currency in global circulation is in an advantageous position to secure international capital. The United States particularly enjoys this advantage as the issuer of the key currency.

(3) Economic Base

A solid economic base supports the stability of a country’s public finance, banking, politics and society, enhancing the effectiveness of its market mechanism and economic policy. As to a country's economic base, JCR assesses its stability and sustainability after reviewing the fundamental elements of its economic development in light of the historical performances of economic development and its growth potential.

Its analysis of fundamental elements of economic development covers a country's territory, natural resource endowment, demography and infrastructure as needed. Countries with rich natural resources have good prospects of economic development. However, that is not a sufficient condition. Even if a country is blessed with natural resources, its economic development will be hard if it fails to make an effective use of them. On the other hand, a country with little resource endowment can grow if it aspires for an open economy and succeeds in industrialization. The development of infrastructure may also lead up to strengthening the supply capacity of the whole economy and improving its

investment environment in the medium term, and the country can hope for increased domestic and foreign investments.

JCR reviews a country's historical performances of economic development after looking into its economic scale and per capita GDP. Per capita GDP suggests that the higher it is, the greater are the government's sources for tax revenues and funding. Purchasing power parity is prioritized here. The review of historical performances covers the evolution of a country's economic system and the degree of development of its market economy. While types of the economic system can vary depending on countries and time, it is important whether or not the market mechanism is actually functioning. Development of a market economy ensures an efficient allocation of resources and holds the key to the promotion of a long-term economic growth.

The growth potential is analyzed from a country's economic structure and transition of its economic growth rates in recent years. Greater emphasis is given here to structural characteristics than cyclical aspects. The economic structure is examined at its subcategories, i.e. industrial, international trade and employment structures. JCR assesses whether efforts are being made to encourage a structural shift to industries with higher productivity and whether each structure is being diversified to do away with dependency on a specific industry. As to the industrial structure, attention is paid to the level of its maturity, the competitiveness of key industries, and the systems and regulations in the background. The international trade is measured by major export and import items, their prices and counterparty countries. The degree of economic openness counts as well. Also important is to check whether a country’s exports are concentrated on specific products or counterparties to the extent even a minor environmental change can jeopardize its whole economy. The employment structure is seen in terms of the number of employees by industry, the labor force population and the number of the unemployed. As for the economic growth, JCR looks into its actual levels and volatility, and assesses whether a country has achieved a sustainable growth without distortions formed by inflation, asset price bubbles, external imbalances, etc. while giving consideration to its potential growth rate. It then conducts a detailed analysis of GDP growth rates in recent years, based on a review of each demand item. In so doing, it takes into consideration structural impediments to the growth, impacts from foreign economies and effects of government economic and financial policies.

(4) Social and Political Bases

The social and political bases give a country a foundation of economic activities and policy implementation. JCR assesses them by analyzing their stability and the state of governance. With regard to a country's political and social stability, JCR first examines the government’s political base by reviewing the historical changes of its political and social systems. Then it checks whether the stability of its whole society is secured from the viewpoint of religion, ethnicity, political thoughts and economic disparity. It also pays attention to the possibility of exceptional developments such as a civil war or an unexpected overthrow of the government and risks of the legitimacy of a sovereign debtor

becoming extinct as a consequence of a war or revolution. As to the state of governance, JCR assesses whether rule of law is established, whether corruption is controlled and whether the quality of public services is maintained. Administrative transparency and independence of the judiciary, the central bank and the media are also important. When carrying out its assessment, JCR refers to relevant indicators made available by the World Bank and other international organizations.

(5) Financial system

A stable and efficient function of the financial system is vital for a sustainable economic growth and the maintenance of a sound public finance. As long as the financial system is sound, the economy can get a stable supply of funds needed for the growth. An effective functioning of the regulations and supervision by the authorities can preemptively prevent a financial crisis. On the contrary, a fragile financial system can interfere with economic activities and even set off a crisis. Because of its importance, the financial system often receives government support such as injection of public funds and debt guarantees in time of crisis. Therefore, an analysis of the financial system is also important from the viewpoint of grasping the government's contingent liabilities. The analysis is focused on the banking sector as the centerpiece of the financial system.

Taking those viewpoints into consideration, JCR assesses the stability of the financial system, based on the framework of financial regulations and supervision, the lenders’ financial conditions, trends of asset values and international financial conditions. In so doing, it examines institutional characteristics of financial institutions, such as the composition of their business type and the degree of oligopoly, the maturity of financial and capital markets and the financial supervision systems including macroprudential policy and failure resolution system (including coordination with international frameworks such as Basel regulations). The lenders’ financial conditions is measured by the soundness of their assets, capital adequacy, funding structure, liquidity and profitability. As to asset value trends, whether there are asset bubbles is checked along with an analysis of the state of fund availability, such as bank lending and money supply to the private sector, as well as trends of interest rates. An upsurge of asset prices away from the real economy can have a serious adverse impact on the financial system in the subsequent adjustment process. Moreover, in today’s world where financial institutions have become gigantic and the financial markets have been globalized, there are growing possibilities that a default by an individual institution may spread to the entire financial system and that a country’s crisis may spill over to other countries, resulting in grave consequences. Accordingly, taking into account the size of the financial system, JCR also tries to take hold of systemic risks where a financial trouble at a large bank, its adjustment of asset prices and a resultant decline of liquidity can cause a wave of ripple effects. When looking at comparison to international banking systems, it relies on statistics based on globally recognized common standards as much as possible.

(6) Economic Policies

The economic policy is a tool with which the government and the central bank address their policy challenges such as sustainable economic growth. JCR assesses its effectiveness and continuity, starting with such recognition on the part of relevant authorities.

JCR first checks how the government and the central bank recognize their policy issues. A precise recognition will make it possible for them to take appropriate policy measures. Their strong commitment can also be confirmed. Then JCR examines each of their policy measures and checks if they are consistent with each other and if they are effective. The flexibility of their policy responses taken in the past is also reviewed at the time. Finally, the sustainability of the current policies is evaluated based on the past records of policy implementation, public support thereto and the international environment at the time. Successes in overcoming economic and financial crises in the past can convince JCR about the effectiveness and continuity of the current policy measures to some extent. Even in a change of administration, new policies can be predictable if there is public support under an advanced political system. On the other hand, problems about succession of administration or concentration of power can be uncertain factors for the continuity of policies. It is also necessary to check fully if a country's policies are relevant in the ongoing international environment it faces.

When evaluating economic policies, JCR also considers the history of defaults and the reliability of statistical information, as necessary. Various indicators published by the World Bank and the World Economic Forum are also used as reference for the evaluation.

In recent years, there have been an increasing number of cases where central banks have introduced unconventional policies, such as an asset purchase program involving government bonds. Attention needs to be paid to an exit strategy because there is no denying those policies can lead up to a loss of confidence in currencies or a possibility of rapid inflation.

(7) International Relations

International relations are assessed political, economic and security stability. From the political perspective, JCR first looks into a country's positioning in the international community. Important here is whether it is internationally recognized as a state and whether it has established political relations of trust in some multilateral framework. From the economic perspective, JCR sees if the country has put in place frameworks that allow it to freely conduct international trade and financial activities. From the security perspective, it is necessary to ascertain the country's geopolitical position and identify the risk that heightened political and military tensions in another country may spread to that country due to its geographic location. When the country is a party to a regional integration like the EU or affiliated with international organizations and frameworks aimed to curb such risk, JCR factors them into its assessment after checking how those arrangements actually work.

4. ESG Factors

JCR incorporates ESG (Environment, Social and Governance) into the evaluation factors for its sovereign ratings. Environmental factors are mainly focused on climate change and natural disasters in the evaluation of a country's economic base and fiscal base. If the government successfully transforms the economic structure by promoting effective measures to stimulate demand and accelerate investment associated with decarbonization through its initiative to combat climate change, it will lead to stabilizing both the economic and fiscal bases. Social factors are mainly viewed in terms of employment conditions, human rights and political freedom, demographic changes, education, etc. when evaluating a country's social and political bases and economic base. Improvement of employment conditions and alleviation of poverty may enhance not only socio-political stability but also economic growth. Enhancement of education standards may also lead to strengthening the economic base through improvement of human resources. Governance factors are mainly viewed in terms of rule of law, control of corruption and the quality of public services in the evaluation of social and political bases. The government's economic policies and international relations surrounding the government are another important factors related to governance, and are looked at when evaluating a country's economic policies and international relations.

< Overview of Evaluation Factors for ESG >

Evaluation factors	Sub-evaluation factors
① Environment	Evaluated through economic base and fiscal base - Costs of dealing with climate change - Natural disasters etc.
② Social	Evaluated through social and political bases and economic base - State of employment - State of human rights and political freedoms - Demographic changes - Education and health and sanitation etc.
③ Governance	Evaluated through social and political bases, economic policies and international relations - Rule of law - Control of corruption - Quality of public services - Economic policies - International relations etc.

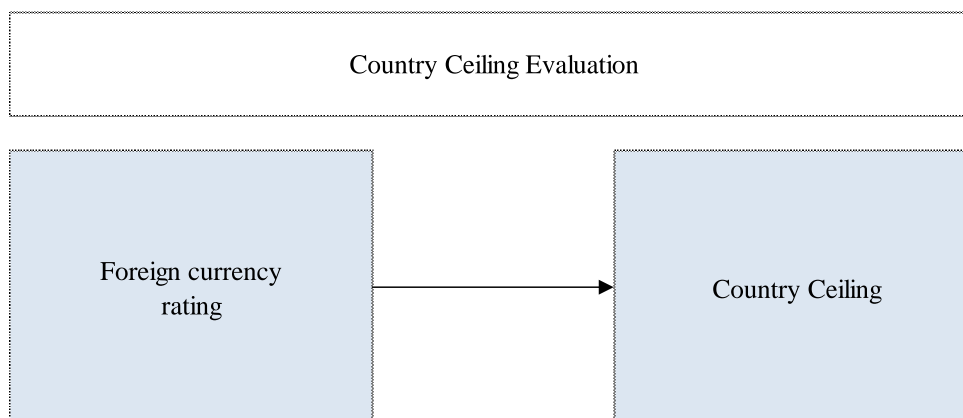
5. Country Ceiling

A country ceiling reflects JCR's assessment of authorities' likelihood to impose restrictions on foreign currency transactions made by a corporate entity in the country to fulfill its debt obligations, such as conversion of local currency into foreign currency and remittance of foreign currency outside the country. It serves as a maximum limit for the entity's foreign currency rating and in most cases is higher than the sovereign foreign currency rating.

A country ceiling only applies to a foreign currency rating. This is mainly because authorities generally have limited capability to procure or issue foreign currency as compared to local currency. Therefore, authorities sometimes impose restrictions on foreign currency transactions of an entity in the country when they run into difficulties financing repayment of its debt in foreign currency.

A country ceiling will be determined, based on the overall assessment of the currency in circulation, foreign exchange regime, trade settlement and capital control, economic policies and foreign debts as well as responses to crises. In most cases, a country ceiling will be increased by zero-three notches from the sovereign foreign currency rating. However, countries like the US and Japan or in the Euro area may not come under the above criteria mainly because they adopt hard currencies and therefore have only limited likelihood to restrict foreign currency transactions.

In most cases, a country ceiling is a maximum limit for the foreign currency rating of an entity in the country. However, there may be some exceptions when agreements are in place among countries such as multilateral development banks and when strong support is provided to the entity by its parent company outside the country.



II. Public Sector Entities

1. Credit Rating Methodology

For the rating of government-affiliated institutions such as state-owned banks and enterprises, JCR gauges the strength of their relationship with the relevant government by reviewing if they have legal support, their importance in the government's industrial policy, etc., and judges to what extent the government's creditworthiness should be reflected in their ratings. At the same time, JCR analyzes and assesses the financial position and business risks of such entities to draw the judgment. As a result, ratings on public sector entities can be equal to or lower than those of the relevant government. This rating methodology is applied to foreign public sector entities.

2. Key factors in the evaluation

JCR measures the strength of relationship between the public entity and the relevant government from various angles, with attaching importance to the following five factors. Each factor has its own evaluation weight. Basically, JCR considers that factor (1) weighs most among the five factors below, but such weightings are not strictly fixed. When appropriate, JCR may change the weights depending on types and situations of the entities reviewed.

(1) Strength of legal protection including regulatory protection

If government protection of a public sector entity is stipulated under legislation including the law for its inception, that can be a positive factor in assessing the strength of its relationship with the government. Such protection may include, for example, (i) explicit guarantees by law, (ii) government support defined by law, and (iii) laws to provide budgetary support such as operational subsidies, official loans, and interest payment allowances for bond issues.

In addition, the existence of protective governmental regulations can also be a positive factor in evaluating the strength of the entity's relationship with the government. For example, the government can restrict new market entry with a licensing system to control competition in the domestic market. It is also necessary to foresee future of the government's regulatory moves. The forecast takes into consideration matters such as the regulatory authority's policy towards privatization, and the external environment and the existence of social or political organizations which may influence the authority's policies.

(2) Strength of government support other than the above-mentioned

It is also necessary to analyze the measures for credit enhancement by way of economic and regulatory supports by the government, which does not necessarily have clear legal grounds such as a founding law. Such supports may include: (i) explicit guarantees not based on any legislation, (ii) the government's will to support the entity to fulfill its liabilities in case it falls into a financial difficulty

and (iii) an indirect subsidy and assistance in a broad sense such as creation of a general economic and social environment that can contribute to enhancing the credit quality of the entity. With regard to the government supports other than explicit guarantees, it is important how the government sets up and maintains the overall regulatory, economic and political environment. In that case, it is necessary to analyze whether the government has capacity and will to create a business environment to the future managerial advantage of the entity.

(3) Strength of capital relationship

If the government intends to continue holding an equity stake in a public sector entity, that can be evaluated positively in assessing its relationship with the government as it may indicate the government's will to maintain its power to control the management of the entity. However, it should be noted that the government's equity holding does not necessarily mean it is fully responsible for the entity's obligation of debt payment. If the government holds more than 50% of the entity's shares, it is generally considered more likely than not to intervene in its management when it falls into a financial difficulty, as compared to the case where a government stake is less. This may not be the case all the time, however.

Also important is the purpose of government's equity holding. For example, if it is to prevent foreign companies from controlling the entity, it can be expected that the government will promote policies to protect the entity's market and keep its business environment secured. Furthermore, it is necessary to check if the government has plans to privatize the entity or change the shareholding ratio.

(4) Importance in the government's industrial policy

It is necessary to analyze the importance of a public sector entity in light of the government's national policies including energy policy, industrial policy, social security policy and defense policy. If the entity is given a greater importance, that can be positively evaluated, in assessing the strength of its relationship with the government or vice versa.

(5) Strength of personnel relationship with government

A public entity's strong personnel relationship with the government can be positively evaluated in assessing the strength of its relationship with the government. If the government participates in the management of the entity or it has the power to appoint management of the entity, it is necessary to check whether there is any legal ground for it.

In assigning the credit standing of a public sector entity, JCR judges the strength of its relationship with a government by analyzing and evaluating the above-mentioned five factors. However, it should be noted that the entity's strong relationship with the government can be a negative factor from the viewpoint of creditworthiness on the basis of its financial and operating performance. For example, a

high government equity stake can be an impediment to the entity's efforts to enhance its management efficiency and run its business in keeping with market principles. It can also lead to moral hazard. In addition, a regulation that restricts investment in the entity by foreign companies can be a negative factor in a long-term perspective as it may restrain its overseas fund raising. Therefore, a comprehensive evaluation based on all these factors is required in the final phase of the rating process for a government-affiliated entity.

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