

Japan Credit Rating Agency, Ltd. 19-D-1079 January 30, 2020

Enhancing Explanation of ESG Factors in Credit Rating—JCR Started Including Relevant Explanations in the Issuer Report

Japan Credit Rating Agency, Ltd. (JCR) has decided to strengthen its efforts to explain ESG (Environmental, Social, and Governance) factors in its credit ratings (ratings) for corporates, financial institutions, and real estate investment corporations in response to growing interest among credit investors in ESG factors. Overview of JCR's recent efforts and approach to considering ESG factors in the ratings is provided below.

On September 15, 2017, JCR signed an "Initiative on ESG in Credit Ratings Statement" led by United Nations Principles for Responsible Investment (UNPRI). Recently, consideration and incorporation of ESG factors into investment activities has been progressing rapidly. JCR is also committed to actively pursuing various goals of the Initiative, which encourages credit rating agencies to consider ESG factors in a systematic and transparent manner.

1. Reference to ESG factors in the Issuer Report

- (1) JCR has decided to create, from January 2020, a section on ESG factors (ESG Explanation Column) for all applicable issuers in the Issuer Report, a credit analysis report on corporate, financial, and real estate investment corporations provided to subscribing members through the "RatingEye" rating information services. Accordingly, the ESG Explanation Column is included the Issuer Report, starting with ones that are updated or newly published this month.
- (2) In the ESG Explanation Column, if a particular ESG factor is considered to have a significant impact on creditworthiness or could become a positive or negative factor in the long run, JCR provides an overview and JCR's view on said factor even if the factor is not really deemed to be a major supporting or constraining factor for the current credit rating (including the credit rating outlook in this document). Also, even if JCR believes that the impact of such a factor on the credit rating is low, JCR will strive to refer to ESG factors when the interest of credit investors is very high. JCR of course provides the evaluation and views in the news release when the ESG factor is, or may become, a major supporting or constraining factor for the current credit rating.
- (3) In fact, there probably are only a few cases, at this point, where ESG factors have a large impact on creditworthiness as the factors specific to individual issuers. Therefore, JCR assumes that the ESG Explanation Column will mostly be descriptions common to the entire industry to which the issuer belongs. Specific statements for individual issuers shall be provided only if necessary.

2. ESG factors to be considered

- (1) ESG factors considered in credit ratings affect the certainty of debt redemption for issuers or financial instruments assessed by such ratings. JCR identifies ESG factors to consider by keeping in mind that these factors are highly likely to affect three areas that support the certainty of debt redemption, i.e. (i) sustainability of the issuer, (ii) cash flow generation capacity, and (iii) financing capacity. Specifically, factors related to regulations, technological innovation, competitive environment, demand for products and services, securing of raw materials, securing of human resources, disputes and litigation, reputation, asset value, financing environment, risk management, etc. are primarily taken into account.
- (2) ESG factors are identified first for each industry, then for individual issuers. Weights of evaluation for a particular ESG factor vary depending on the type of industry and the type of business and strategy of issuers in the same industry. Needless to say, factors to be considered and weighting of evaluation change with changes in the business environment, social recognition, etc., and new factors may be added.

3. Treatment of ESG factors

(1) When assigning a credit rating, JCR evaluates the issuer mainly from two aspects: business base and financial base. These bases are evaluated by examining more detailed items such as

regulations, technological innovation, competitive environment, demand for products and services, securing of raw materials, securing of human resources, reputation, asset value, financing environment, and risk management. ESG factors, together with other factors not related to ESG, are considered as part of these evaluation items. JCR carefully identifies and examines ESG factors related to the credit rating but does not separate them from other factors to be independently incorporated into the rating. For example, evaluation of technological capabilities, which is one of the items related to the business base, is conducted by comprehensively examining the impact of environmental pollution prevention technologies as an ESG factor along with the impact of technologies not related to ESG, such as production cost reduction technologies.

- (2) JCR determines the credit rating based on its outlook for the business environment and financial conditions of the issuer over the next three years or so. Accordingly, also for the risks and opportunities arising from ESG factors, JCR considers incorporating into the credit rating those that are highly likely to have an measurable impact on the issuer's sustainability, cash flow generation capacity, and financing capacity over the next three years or so.
- (3) JCR identifies all of the ESG factors that could affect creditworthiness, but how each factor is reflected in the credit rating varies depending on the size of the impact on the issuer's business and financial bases and the timing of such impact. A rough categorization of treatment of ESG factors in the credit rating is provided below.
 - Category 1: Large impact is already observed or emerging If an ESG factor is significantly affecting the business or financial base as of now, or is expected with some degree of certainty to have a significant impact within three years, it shall be directly reflected in the credit rating as a factor supporting or constraining creditworthiness. In such cases, JCR shall provide its evaluation and views on said factor in both the Issuer Report and the news release.
 - Category 2: Impact is not so large but is already observed or emerging to some extent If an ESG factor has some impact on creditworthiness within three years or so but the impact is not so large, it shall not be treated as a major supporting or constraining factor for the credit rating but shall be regarded as an element constituting the evaluation. In such cases, JCR shall provide the outline of the ESG factor and its views on the factor in the ESG Explanation Column of the Issuer Report.
 - Category 3: Impact exceeds a certain level but takes a long time to materialize

For an ESG factor that could affect creditworthiness after the passage of three years or more, JCR shall consider said factor as an element constituting the evaluation for the credit rating only if the timing and size of the impact on the business and financial bases can be predicted with certain accuracy. However, such estimation is often difficult due not only to the uncertainty of the ESG factor itself but also to the uncertainty of the issuer's future response. For example, for a factor that is expected to negatively affect cash flows, the issuer may be able to mitigate the negative impact in the long run by taking action before the risk materializes. In such cases, JCR shall not directly incorporate said factor into the creditworthiness assessment but shall recognize it as a long-term positive/negative factor (a factor which may become a supporting or restrictive factor in the future) while monitoring future developments. JCR shall also provide the outline of the ESG factor and its views on the factor in the ESG Explanation Column of the Issuer Report.

Category 4: Impact exceeds a certain level but emerges contingently or suddenly

For an ESG factor that could affect creditworthiness contingently or suddenly, it is often difficult to directly incorporate risks and opportunities into the credit rating in advance. However, ESG factors that emerge in the form of disasters, accidents, scandals, etc. include those that will inevitably materialize at some point in time if no prior measures are taken, even though the timing of their materialization cannot be predicted. In cases where some prior measures are necessary and can be implemented, JCR shall incorporate the availability and details of such measures into the creditworthiness assessment. The extent of consideration depends on the probability and size of the impact, but, if the expected impact is large, JCR may incorporate it into the credit rating as a key factor supporting or constraint such rating. In any event, JCR shall provide the outline of the ESG factor and its views on the factor in the ESG Explanation Column of the Issuer Report.



4. Current perspectives on major ESG factors

(1) Environment

JCR recognizes that climate change (global warming) can have a significant impact on the credit rating for a considerable number of industries. Yet, with respect to the direct impact, impact on cash inflows-such as demand for products and services-are likely to materialize slowly in many sectors and for many issuers, except for sudden and temporary damage caused by largescale disasters. Therefore, the impact is likely to be limited in many cases over a time horizon of three years or so for JCR's credit rating. For the indirect impact, risks and opportunities associated with low-carbon and decarbonization moves to respond to climate change are taken into account. On the risk front in particular, an increase in the costs of complying with environmental regulations when regulatory tightening is expected to continue may reduce the competitiveness of businesses and the value of related assets, consequently increasing the business risks not only for individual issuers but also for the entire sector. Moreover, the continuation of operations with large environmental burdens, insufficient responses to the reduction of environmental burdens, etc. are projected to affect financing from financial institutions and investors who place emphasis on ESG. JCR does not consider, at this point, that these developments will progress rapidly but assumes that the risks will inevitably increase or materialize in the long run. Therefore, JCR will carefully examine the impact on cash flows and financial conditions of the issuers.

(2) Society

Appropriately maintaining relationships with various stakeholders is essential to the smooth operation of the issuer's business. If the risks of social factors materialize, the issuer's reputation may be damaged, affecting cash flows and financial conditions in various ways. In terms of quality control of products and services, problems such as safety defects and alteration of quality data often occur, and the business base including trust of customers is seriously damaged in some cases. Also, labor shortages stemming from the harsh labor environment could affect the competitiveness of the issuer and the supply and demand of services in the industry as a whole. Litigation risk can also be a key factor in the evaluation. There are cases where globally operating issuers receive claims for huge amounts of compensation overseas. In such cases, the worst scenario and its probability shall be verified and incorporated into the evaluation, although there are uncertainties such as the timing of settlement and the amount of compensation. On the other hand, businesses that focus on social factors, such as provision of products and services to the socially vulnerable, often have positive aspects in terms of the business base including cultivation of untapped markets. In industries where growth in existing markets has peaked out, businesses that focus on these social factors may have important implications for a breakthrough.

(3) Governance

As regards the governance factors such as corporate governance and internal control, JCR has been incorporating them into the credit ratings qualitatively and quantitatively, including information collected at meetings with the management, as important factors that affect all aspects of management. In particular, when controlling shareholders and top management change, JCR has focused on confirming the policies of corporate governance and internal control. Under good corporate governance and internal control, sound cash flow cycles are likely to be established through appropriate decision making. On the contrary, if corporate governance or internal control is inadequate, improper accounting, cartel behavior, compliance violations, and other misconduct could cause long-term losses, including the loss of confidence of customers, financial institutions, and other stakeholders. JCR believes that many of the environmental and social factors are affected by governance, which determines the ability of issuers to respond to a given situation and their risk management capabilities, and thus governance factors should be regarded as a considerably broad concept.

Kenji Sumitani, Shigenobu Tonomura, Yasuhisa Aono



Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan Tel. +81 3 3544 7013, Fax. +81 3 3544 7026

Information herein has been obtained by JCR from the issuers and other sources believed to be accurate and reliable. However, because of the possibility of human or mechanical error as well as other factors, JCR makes no representation or warranty, express or implied, as to accuracy, results, adequacy, timeliness, completeness or merchantability, or fitness for any particular purpose, with respect to any such information, and is not responsible for any errors or omissions, or for results obtained from the use of such information. Under no circumstances will JCR be liable for any special, indirect, incidental or consequential damages of any kind caused by the use of any such information including but not limited to, lost opportunity or losts money, whether in contract, tort, strict liability or otherwise, and whether such damages are foreseeable or unforesceable. JCR's ratings and credit assessments are statements of JCR's current and comprehensive opinion regarding redemption possibility, etc. of financial products, and not statements of opinion regarding any risk other than credit risk, such as market liquidity risk or price fluctuation risk. JCR's ratings and credit assessments are statements of opinion, and not statements of fact as to credit risk decisions or recommendations regarding decisions to purchase, sell or hold any securities such as individual bonds or commercial paper. The rating and credit assessments may be changed, suspended or withdrawn as a result of changes in or unavailability of information, alteration, alteration, including success a rating fee paid by issuers for conducting rating services in principle. UCR retains all rights pertaining to this document, including JCR's rating data. Any reproduction, adaptation, alteration, etc. of this document, including JCR's rating data. Any reproduction, adaptation, alteration, etc. of this document, including services are as "Mixing data. Any reproduction, adaptation, alteration, etc. of this document, including JCR's rating data. Any reproduction

and easily preserved as a "Nationally Recognized Statistical Ratio Organization" with the U.S. Securities and Exchange Commission with respect to the following four classes. (1) Financial institutions, brokers and dealers, (2) Insurance Companies, (3) Corporate Issuers, (4) Issuers of government securities, municipal securities and foreign government securities.

JCR publishes its press releases regarding the rating actions both in Japanese and in English on the same day. In case that it takes time to translate rating rationale, JCR may publicize the summary version, which will be replaced by the full translated version within three business days. (Regarding Structured Finance products, JCR only publicize the summary version in English.)