

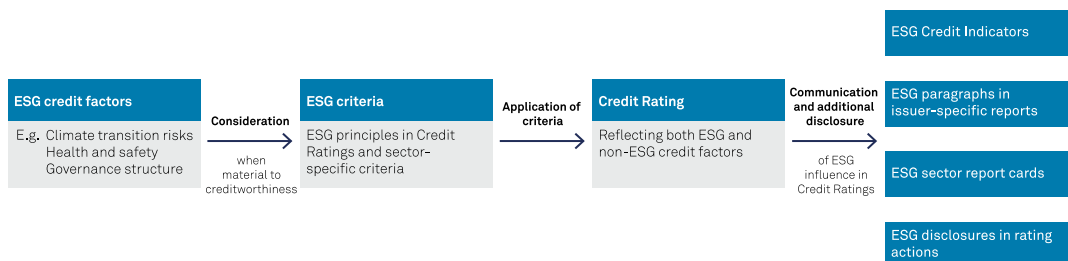
ESG Credit Indicator Definitions And Application

October 13, 2021

Following our recently published methodology on environmental, social, and governance (ESG) principles in credit ratings (see "Environmental, Social, And Governance Principles In Credit Ratings," published Oct. 10, 2021, on RatingsDirect), we intend to provide additional disclosure and transparency by applying ESG Credit Indicators to publicly rated entities. From mid-November to December, we plan to publish these indicators for individual companies in the corporate and infrastructure, banking, and insurance sectors, and we'll cover other asset classes in 2022. We will initially release these indicators through ESG sector report cards, and subsequently we plan to incorporate and update them in our issuer-specific rating publications to complement our existing Credit Rating analysis and surveillance. Below we explain the definitions and application in determining the ESG Credit Indicators.

Chart 1

ESG In Our Credit Rating Analysis



Source: S&P Global Ratings.
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Our ESG Criteria seek to enhance transparency in how and where we capture ESG factors in credit ratings through the application of sector-specific criteria. Our ESG Credit Indicators provide additional disclosure by reflecting our opinion of how material the influence of ESG factors is on the various analytical components in our rating analysis through an alphanumeric 1-5 scale (see Table 1). ESG Credit Indicators are applied after the ratings have been determined.

Given an ESG Credit Indicator is an alphanumeric representation of the qualitative assessment of ESG factors' impact on creditworthiness produced as part of the ratings process, accordingly the application of--or change of--an ESG Credit Indicator cannot in itself trigger a credit rating or outlook change. However, the impact of ESG factors on creditworthiness could contribute to a rating action, which in turn could lead to a change in the ESG Credit Indicator. Through the release of ESG Credit Indicators, we aim to further delineate and summarize the relevance of ESG factors to our credit analysis by isolating our opinion of their credit influence and separating it from the non-ESG factors affecting the credit rating.

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Table 1

ESG Credit Indicators

Influence on credit rating analysis	Environmental Credit Indicator	Social Credit Indicator	Governance Credit Indicator
Positive	E-1	S-1	G-1
Neutral	E-2	S-2	G-2
Moderately negative	E-3	S-3	G-3
Negative	E-4	S-4	G-4
Very negative	E-5	S-5	G-5

Source: S&P Global Ratings.

The above scale has a negative skew. This is deliberate and reflects our view that ESG considerations that are material to our rating analysis have a negative influence more often than a positive one. A neutral ESG Credit Indicator (E-2, S-2, or G-2) does not necessarily mean that ESG factors are not relevant; it only means that it is currently a neutral consideration in our Credit Rating analysis. For example, a negative environmental consideration in one area of our analysis (such as industry risk), may be counterbalanced by a positive environmental consideration reflected in another area of our analysis (such as competitive position if the entity is better positioned than its industry peers).

Environmental, Social, And Governance Credit Indicator Definitions

Table 2

Environmental Credit Indicators

Credit Indicator	Definition
E-1	Environmental factors are, on a net basis*, a positive consideration in our credit rating analysis, affecting at least one analytical component¶.
E-2	Environmental factors are, on a net basis*, a neutral consideration in our credit rating analysis.
E-3	Environmental factors are, on a net basis*, a moderately negative consideration in our credit rating analysis, affecting at least one analytical component¶.
E-4	Environmental factors are, on a net basis*, a negative consideration in our credit rating analysis, affecting more than one analytical component¶ or one severely.
E-5	Environmental factors are, on a net basis*, a very negative consideration in our credit rating analysis, affecting several analytical components¶ or one very severely.

**On a net basis" means that we take a holistic view on exposure to environmental factors and related mitigants. ¶Analytical components include criteria scores and subscores (including the key analytical elements to assess them). "Affecting" means leading to a different outcome for an analytical component or lower/higher headroom for an analytical component.

Table 3

Social Credit Indicators

Credit Indicator	Definition
S-1	Social factors are, on a net basis*, a positive consideration in our credit rating analysis, affecting at least one analytical component¶.
S-2	Social factors are, on a net basis*, a neutral consideration in our credit rating analysis.

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Table 3

Social Credit Indicators (cont.)

Credit Indicator	Definition
S-3	Social factors are, on a net basis*, a moderately negative consideration in our credit rating analysis, affecting at least one analytical component¶.
S-4	Social factors are, on a net basis*, a negative consideration in our credit rating analysis, affecting more than one analytical component¶ or one severely.
S-5	Social factors are, on a net basis*, a very negative consideration in our credit rating analysis, affecting several analytical components¶ or one very severely.

*"On a net basis" means that we take a holistic view on exposure to social factors and related mitigants. ¶Analytical components include criteria scores and subscores (including the key analytical elements to assess them). "Affecting" means leading to a different outcome for an analytical component or lower/higher headroom for an analytical component.

Table 4

Governance Credit Indicators

Credit Indicator	Definition
G-1	Governance factors are, on a net basis*, a positive consideration in our credit rating analysis, affecting at least one analytical component¶.
G-2	Governance factors are, on a net basis*, a neutral consideration in our credit rating analysis.
G-3	Governance factors are, on a net basis*, a moderately negative consideration in our credit rating analysis, affecting at least one analytical component¶.
G-4	Governance factors are, on a net basis*, a negative consideration in our credit rating analysis, affecting more than one analytical component¶ or one severely.
G-5	Governance factors are, on a net basis*, a very negative consideration in our credit rating analysis, affecting several analytical components¶ or one very severely.

*"On a net basis" means that we take a holistic view on exposure to governance factors and related mitigants. ¶Analytical components include criteria scores and subscores (including the key analytical elements to assess them). "Affecting" means leading to a different outcome for an analytical component or lower/higher headroom for an analytical component.

ESG Credit Indicators relate to an entity's stand-alone analysis or, in the case of a parent company, the group credit profile. An entity's ESG Credit Indicator does not reflect the influence of ESG factors on the related parent or government owner (even if the rating on the latter could affect the entity rating). As such, the ESG Credit Indicator could diverge from that of its related parent or government. For instance, the Environmental Credit Indicator of a renewable energy company that is a subsidiary of a larger oil and gas group could be E-1 if we conclude that environmental factors have a positive influence on its stand-alone credit profile (SACP), even if the Environmental Credit Indicator of the parent or group could be E-4 to reflect the overall predominantly negative influence of environmental factors on our assessment of the group's industry risk. Similarly, a state-owned bank could have a G-2 Governance Credit Indicator, pointing to an overall neutral influence of governance factors, even if we lowered the rating on the related sovereign due to governance deficiencies (even if the sovereign rating may cap the rating on the bank). Because the distinction is less evident for government-related entities (GREs) with an almost certain likelihood of extraordinary support under our criteria, we will not apply--at least initially--ESG Credit Indicators to such entities in our upcoming report cards. In addition, we are typically not applying ESG Credit Indicators to entities that do not have an SACP because we do not undertake a stand-alone analysis on such entities.

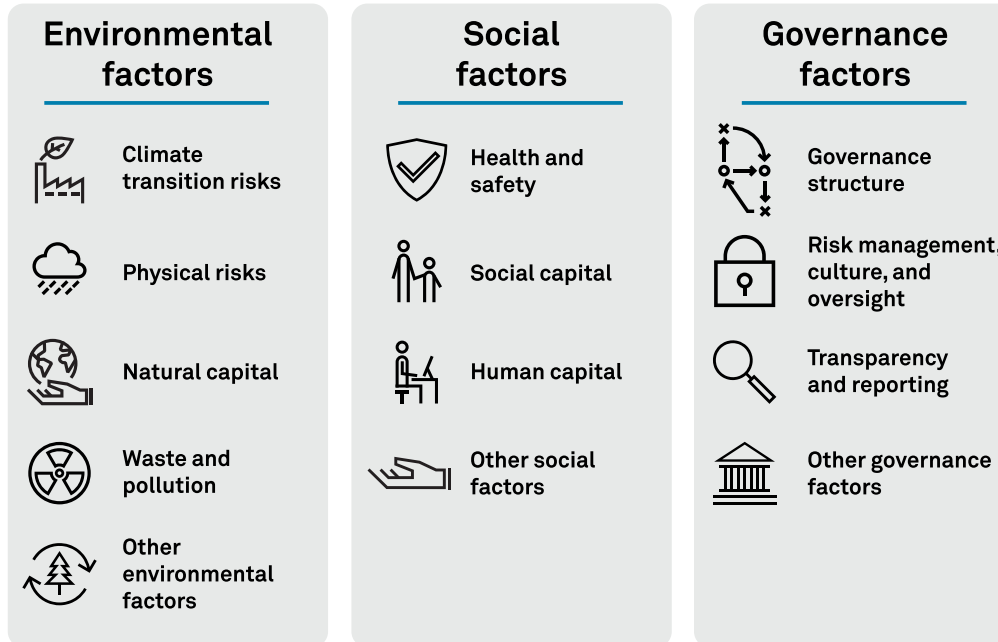
Finally, we list below examples of the key ESG credit factors we currently assess, as stipulated in

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our ESG Criteria. The ESG Credit Indicators will be accompanied by these factors to flag the actual areas of material influence we considered.

Chart 2

Examples Of ESG Credit Factors



ESG--Environmental, social, and governance. Source: S&P Global Ratings.
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Corporates And Infrastructure

Primary author: Karl Nietvelt

We assess the impact of ESG factors through our corporate criteria. When material, they are most likely to influence scores such as industry risk, competitive advantage, scale, scope, diversity, profitability, cash flow/leverage, and comparable ratings analysis. For governance, we have an explicit management and governance (M&G) score in our corporate criteria, even though other areas--such as country risk and comparative rating analysis--can also reflect governance considerations.

In our view, environmental factors have a direct negative influence on 15 out of our 38 corporate and infrastructure industry risk criteria scores (see Table 5). We capture climate transition risks, physical risks, and waste and pollution or biodiversity risks in our credit rating analysis through our forward-looking qualitative assessments of secular change and substitution risks, as well as through profit margin and growth trends. For the oil and gas as well as unregulated power industries, we consider such risks as most pronounced and severely affecting such industry criteria subscores. According to the ESG Credit Indicator definition, such negative influence could imply a higher number of entities in these sectors getting an Environmental Credit Indicator of E-4. That said, industry risk is just one of multiple components in our rating analysis. Consequently, environmental factors for a power generator with a high share of renewable generation assets could be an overall neutral consideration in our credit rating analysis because the negative influence on industry risk could be offset by positive environmental considerations in its competitive position score because of more advantageous (environmentally supported) regulations or contracted revenues. This could lead to an E-2 Credit Indicator for the entity rather than E-4.

Table 5 outlines our opinion as to the different degrees to which environmental considerations have affected the qualitative subscores of our industry assessment for corporate and infrastructure ratings.

Table 5

Environmental Influence On S&P Global Ratings' Corporate And Infrastructure Industry Risk Subscores

	Profit margin trends	Risk of secular change and substitution	Risk in growth trends	Environmental influence on industry risk subscore
Oil and gas integrated, exploration and production	High risk	Medium risk	High risk	Environmental factors affecting industry subscores severely
Oil and gas refining and marketing	High risk	Medium risk	High risk	
Oil and gas drilling equipment and services	High risk	Medium risk	High risk	
Unregulated power and gas	High risk	Medium risk	High risk	
Transportation cyclical	High risk	Medium risk	Medium risk	Environmental factors affecting industry subscores moderately
Oil and gas midstream	Medium risk	Medium risk	Medium risk	
Metals (downstream)	High risk	Medium risk	Medium risk	
Mining	Medium risk	Low risk	Medium risk	
Auto OEMs	High risk	Medium risk	Medium risk	
Auto suppliers	High risk	Medium risk	High risk	
Commodity chemicals	High risk	Medium risk	Medium risk	
Agribusiness and commodity foods	High risk	Medium risk	Medium risk	
Forest and paper products	High risk	Medium risk	High risk	
Building materials	Medium risk	Medium risk	Medium risk	
Homebuilders and developers	High risk	Medium risk	Medium risk	

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Social factors are principally influencing entity-specific components of our analysis rather than differentiating industry scores.

We believe this is because the influence of social risks becomes more important when assessing an entity's specific exposure to and management of social risks, as it often relates to its own staff, communities, and customer base. The one exception is the mining industry, which has exposure to community opposition and safety risks that moderately negatively influence our industry subscores, notably growth and profit trends.

The limited impact of social factors on our industry scores is also due to the heterogeneous nature of some of our industry risk scores. For instance, the "transportation cyclical" industry combines both shipping, with its low health and safety exposure, and airlines, which have high such exposure. As a result, the average impact of social factors on our "transport cyclical" industry score is limited. However, the final Social Credit Indicator for airlines will likely be weaker than S-2, as the credit ratings on all airlines are negatively affected by the pandemic and safety considerations more generally (whether through profitability, cash-flow performance, or other entity-specific business drivers).

Governance Credit Indicators are strongly linked to our management and governance (M&G) criteria score. (See "Methodology: Management And Governance Credit Factors For Corporate Entities," published Nov. 13, 2012, for more details.) We may assign a strong M&G score to reflect, among other factors, our positive assessment of management's ability to anticipate, monitor, and rapidly adapt to changing operating or financial conditions and successfully execute its strategy. Such positive credit influence translates into a Governance Credit Indicator of G-1. A satisfactory M&G score would generally reflect a neutral view of governance factors on creditworthiness and would therefore correlate to a G-2 Credit Indicator, whereas a weak M&G score under our criteria would generally reflect that governance factors are a very negative consideration on creditworthiness, therefore correlating to a G-5 Credit Indicator.

For entities with a fair M&G score, we differentiate Governance Credit Indicators further--from G-2 to G-4, depending on how the underlying management and governance subfactors have been assessed. The most important governance considerations in our M&G criteria relate to governance subfactors such as board effectiveness; entrepreneurial or controlling ownership; management culture; regulatory, tax, and legal infractions; internal controls; communication of messages; and financial reporting and transparency. However, we also consider the following management subfactors as governance-related: the strategic planning process, consistency of strategy with capabilities, execution of strategy, and risk management standards and tolerances. If we view particular weaknesses in any of these M&G subfactors, this would generally reflect either a moderately negative or negative view of the impact of governance on creditworthiness and would therefore correlate to a G-3 or G-4 Credit Indicator, depending on the severity. Conversely, we likely view governance as an overall neutral credit consideration, correlating to a G-2 Credit Indicator, if the fair M&G assessment did not identify any material weakness among these M&G subfactors.

In addition, in almost all instances, entities controlled by a financial sponsor or private equity firm that have been assigned a fair M&G score, will generally be seen as reflecting a moderately negative view of the impact of governance on creditworthiness therefore correlating to a G-3 Credit Indicator. This is because we believe that the company's highly leveraged or aggressive financial risk profile points to corporate decision-making that prioritizes the interests of the controlling owners, given its focus on maximizing shareholder returns and often finite holding periods.

Table 6

Governance Credit Indicators Are Largely Derived From Our Management And Governance Criteria*

Strong	A strong M&G assessment tends to correlate to a G-1.
Satisfactory	A satisfactory M&G assessment typically results in a G-2.
Fair	A fair M&G assessment could result in 1) G-2, when there are no material weaknesses in the M&G subscores*; 2) G-3, if there is a moderate weakness in the M&G subscores*; or 3) G-4 if there is a more severe weakness in one or more M&G subscores* (including when an SACP of 'a-' or higher was negatively affected).
Weak	A G-5 corresponds to a weak M&G assessment.

*The most important governance-related subfactors in our M&G criteria are board effectiveness; entrepreneurial or controlling ownership; management culture; regulatory, tax, or legal infractions; internal controls; communication of messages and financial reporting and transparency; strategic planning process; consistency of strategy with capabilities; and execution of strategy and risk management standards and tolerances.

Finally, governance factors might affect other analytical components of our rating analysis. This

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could result in some deviation from the above-outlined correlation to our M&G scores (the exception being a G-5, which we only apply when the M&G assessment is weak). An area of governance-related exposure in our rating analysis relates to the potential high institutional, political, or transparency risks for countries with high or very high country risk or rule-of-law-related regulatory/operating risks in certain countries that feature negatively in our competitive position assessment. Governance weaknesses may also be captured in our comparable rating analysis.

Banks

Primary author: Emmanuel Volland

We assess ESG factors for banks through our applicable criteria, including our Banking Industry Country Risk Assessment (BICRA) and bank criteria. Although these factors can influence our assessment of any analytical component (criteria scores) described in these methodologies, they are most likely to influence (when material) criteria scores such as the economic resilience and institutional framework of our BICRA methodology (when at system or country level) and business position or risk position (when at the entity level).

Environmental factors

In our view, environmental factors currently have a very limited influence on our credit rating analysis of banks, and therefore we expect that most banks would have an Environmental Credit Indicator that correlates to E-2. However, we recognize that climate is likely to become a more important credit consideration for banks given the evidence that climate change and the energy transition are becoming a greater focus for policymakers. If this were to materially affect our credit rating analysis (through some analytical components), it is likely that we would view the impact of environmental factors weighing more negatively on creditworthiness and that correspondingly the Environmental Credit Indicator of some banks would transition to weaker categories (E-3, E-4, and E-5).

We believe that the most relevant environmental factors for banks are climate transition and physical risks. When material, the influence of these factors is more likely to be captured under the economic risk score of our BICRA analysis (when it is system- or country-specific) or under our scoring of business position or risk position (when it is entity-specific).

Overall, there is a high correlation between the geographical location of a bank's assets and the materiality of some environmental factors. Some countries are regularly adversely affected by natural disasters, such as hurricanes and earthquakes, that cause significant damage to critical infrastructures and disrupt economic activity. Due to these geographic concentrations, the customers of banks operating in these countries are likely subject to heightened physical risks that ultimately affect their creditworthiness and could lead to weaker credit-quality metrics. This negative environmental consideration, if material enough, is reflected in a weaker economic resilience score under our BICRA analysis, weighing on domestic banks' anchor. This impact could result in Environmental Credit Indicators of E-3, E-4, or E-5, depending on the severity of these risks and the influence they have in our credit rating analysis.

The exposure to environmental factors is also evident at the individual bank level. Climate transition risks would be higher for banks displaying a high exposure to economic sectors most exposed to climate change. For instance, a bank with a high concentration of customers in the oil and gas sector is more vulnerable to shifts in policies and to climate change, even if this risk is not

material at country or sector level. We therefore expect some correlation between our Environmental Credit Indicators of banks and the climate-exposed sectors or entities they lend to.

Social factors

The influence of social factors is most likely to be bank-specific instead of country-specific. Overall, we see social factors as a neutral consideration in our credit rating analysis for a majority of banks.

The positive influence of social factors could stem from the specific function that some banks play in the economy. For example, some government-owned banks have a public mission that can directly be linked to social considerations. This could be the case when their role is to improve financial inclusion or finance specific sectors of the economy, including social housing. This feature is not a reason in itself for a bank to be viewed as having its creditworthiness positively affected by social factors and an S-1 Credit Indicator outcome. The latter would more likely apply to some GRE banks if we believe their social mission means they benefit from a greater likelihood of extraordinary government support (as assessed through their GRE-related role and link under our GRE criteria).

Social factors could also have a negative influence in our bank analysis. For example, we view banks with a high proportion of lending to subprime customers as more exposed to social factors, as they usually face heightened compliance, reputational, and regulatory risks. These risks can be more or less pronounced depending on the country in which they operate. For instance, we believe that these risks are more pronounced in the U.S. than in emerging markets. We would apply a Social Credit Indicator of S-3, S-4, or S-5 if one or more analytical component (for instance, the risk position) is negatively influenced by this element, depending on its severity.

Governance factors

We assess the influence of governance factors at system and entity levels through our BICRA and bank criteria. Unlike corporates and insurance, our bank methodology does not have an explicit M&G score. Banks are subject to a higher level of regulation and supervision than most other economic sectors, meaning that the quality of their governance tends to be overall stronger. This will be reflected in Governance Credit Indicators that are expected to be, on average, stronger than for corporate entities.

We analyze the quality of governance at the system level in our BICRA analysis when assessing the institutional framework. This assessment is based on the analysis of the following three factors: banking regulation and supervision, regulatory track record, and governance and transparency. The initial assessment is based on the first two subfactors, but it can be worsened by one category if we've scored governance and transparency as weak. Therefore, our Governance Credit Indicators would be partly driven by the assessment of this subfactor, even if other governance-related analytical components could also have an influence (positive or negative). Most banks that would be expected to have a Governance Credit Indicator of G-3, G-4, or G-5 would likely be based in some emerging markets for which we have a negative view for governance and transparency in our BICRA analysis.

However, some banks in mature markets could also have weak Governance Credit Indicators. At the individual bank level, we analyze the quality of the governance through our scoring of the business position. Indeed, management and corporate strategy is one of the three subfactors. Typically, good governance does not have a material positive influence on our bank ratings, as it is expected for these entities (and embedded in our rating construct through the high level of some

bank anchors) given that they are highly regulated and supervised.

Insurance

Primary author: Dennis Sugrue

We assess ESG factors through our insurance rating methodology. Although these factors can influence our assessment of any analytical component (criteria scores) described in these methodologies, they are more likely to be reflected under components such as competitive position, capital and earnings, risk exposure, and governance (when material at the entity level) and in the insurance industry and country risk assessment (IICRA; when material at the country level).

Environmental factors

We believe that the most relevant environmental factor for insurers is physical risk, particularly for non-life re/insurers. Our assessment of a re/insurer's risk exposure considers material risks that could make an insurer's capital and earnings significantly more volatile. Concentrations in natural catastrophe exposure, and as a result physical risk, have been a source of significant capital and earnings volatility for many non-life re/insurers over the years, and we typically reflect these concentrations with a risk exposure assessment of moderately high or high. For companies with a risk exposure assessment that is primarily driven by potential volatility from physical risks, we are likely to apply an E-3 or worse Environmental Credit Indicator, depending on the severity of these risks and the negative impact they have on our analysis. In addition, in some markets we have observed that the impact of natural disaster risk manifests at an industry level through its impact on profitability across the non-life sector in that country. For insurers in these markets, such as Japan, physical risk exposure is captured in our IICRA and likely to result in an E-3 or worse Environmental Credit Indicator for non-life insurers in those markets.

At the same time, in our view, environmental factors are currently having a limited influence in our credit rating analysis of insurers more generally, and therefore we expect that most insurers would have an E-2 Credit Indicator applied. Climate is likely to become a more important credit factor for insurers given the evidence that it is changing and policymakers' efforts to reduce greenhouse gas emissions. If so, this could eventually affect our rating analysis and ultimately result in a lower Environmental Credit Indicator.

Social factors

The influence of social factors for insurers is most likely to be company-specific instead of country-specific. Social factors are a neutral consideration in our credit rating analysis for the majority of insurers.

The positive influence of social factors could stem from the specific function that some insurers play in the economy. Some insurers (including some that we are likely to consider a GRE under our criteria) provide a benefit to the economy that can directly be linked to social considerations. This could be the case, for example, when a GRE's role is to improve financial inclusion or provide coverage for certain risks that the private market would otherwise not insure at an affordable price for citizens. We also observe the positive influence of social factors in insurers with activities that generate measurable externalities that have an impact beyond just their client base. These characteristics in themselves are not a reason for an insurer to be viewed as having its

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creditworthiness as being positively affected by social factors and an S-1 Credit Indicator outcome. Indeed, the latter would only be considered if we assess that this specific role is a positive consideration in our credit rating analysis. This would be the case for some GRE insurers if we believe their social mission means they benefit from greater government support (as assessed through their GRE-related role or link under our GRE criteria) or for private insurers with social activities that provide benefits to their competitive positions through higher customer retention, improved brand awareness, or stronger earnings.

Governance factors

Our assessment of the quality of an insurer's governance (and its related factors) is done both at a system and entity levels through our IICRA and governance assessments, respectively. Insurers, like banks, are subject to a much higher level of regulation and supervision than most other economic sectors, meaning that the quality of their governance tends to be stronger overall. This will be reflected in Governance Credit Indicators that are expected to be, on average, stronger for insurers than for corporate entities.

Our governance criteria factor in our insurance rating methodology assesses an insurer's risk culture and how it is governed; its relationship with shareholders, creditors, and other stakeholders; and how its internal procedures, policies, and practices can create or mitigate risk. Typically, good governance does not have a material positive influence on our insurance ratings, as it is expected for entities that are highly regulated and supervised. For insurers where we identify shortcomings in or severe risks posed by the governance structure, we typically expect to apply Governance Credit Indicators of G-3 or worse.

We assess the quality of governance at system level in our IICRA analysis when scoring both the institutional framework under our industry risk assessment and country risk. If our industry risk analysis suggests that the institutional framework is not supportive of profitability, we would expect the Governance Credit Indicators for insurers in that market to typically have a Governance Credit Indicator applied of G-3 or worse. In addition, there are instances when country risk is assessed as high or very high due to concerns about the potential for significant institutional or political risks or weak transparency that cannot be sufficiently mitigated by prudential regulation. Accordingly, we expect insurers in these markets to typically have Governance Credit Indicator applied of G-3 or worse.

This report does not constitute a rating action.

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