Environmental, Social and Governance (ESG) – Global

Moody’s approach to assessing ESG in credit analysis

» **Assessing ESG considerations forms an important component of our credit analysis.** Our credit ratings seek to incorporate a forward-looking view of all issues that can materially impact the credit quality of a given sector or debt issuer. In our analysis, we identify and assess the credit risks arising from ESG considerations either today or in the future, any mitigating and/or adaptive behaviour undertaken by related issuers and, in some instances, the ESG trends that may present credit-positive outcomes.

» **We consider material ESG issues in our rating methodologies through different channels.** ESG considerations are typically captured in the scoring of factors in methodology scorecards; for example, the business profile of a company or institutional strength of a sovereign. And in some instances, ESG criteria may be explicitly scored in our methodologies. ESG issues outside of the methodology scorecard may also have an impact on ratings – following the same approach as many other risks that affect credit quality but are not scored individually.

» **Our research highlights ESG themes that represent a significant credit consideration for an entire industry or sector.** We seek to identify the sectors with greatest exposure to specific ESG considerations through our research, develop analytical frameworks where material for a sector or industry and address how issuers are mitigating or adapting to such challenges in our regular credit analysis.

» **We are committed to strengthening our analysis of ESG considerations.** We will continue to evaluate the credit relevance of ESG factors for different sectors and debt issuers, review the channels through which ESG considerations are integrated into credit analysis and increase the transparency of how such factors are considered in our credit ratings.

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Assessing ESG considerations forms an important component of our credit analysis

ESG gaining prominence in global financial markets

Environmental, social and governance (ESG) analysis is gaining prominence within the mainstream investment community. Indeed, institutional investors are seeking ways to integrate ESG components into their asset allocation and risk management practices as a means to minimize risks and protect the value of their traditional investment portfolios, or to pursue standalone sustainable investment strategies. Such heightened focus is reflected in the marked rise of global assets managed under responsible investment strategies to $22.9 trillion in 2016 from $13.6 trillion in 2012.¹

There is also a burgeoning movement amongst policymakers and institutions to pursue stronger sustainability and climate agendas to foster economic development and safeguard against financial instability. The ratification of the Paris Agreement in 2016 represented a significant milestone in globally orchestrated climate policies.² And institutional efforts such as the G20 Green Finance Study Group, the Financial Stability Board Task Force on Climate-related Financial Disclosures, the European Commission’s High-Level Expert Group on Sustainable Finance and China’s ambitious agenda to establish a green financial system provide further evidence that climate and sustainable finance will play a more central role in financial markets going forward.³

Our ratings capture ESG considerations with material credit implications for sectors and debt issuers

Our credit ratings seek to incorporate a forward-looking view of all factors that can materially impact the credit quality of a given sector or debt issuer, including those related to ESG. In our analysis, we identify and assess the credit risks arising from ESG considerations either today or in the future, any mitigating and/or adaptive behaviour undertaken by related issuers and, in some instances, the ESG trends that may present credit-positive outcomes.

For instance, for a non-financial corporate, we seek to assess how ESG issues influence drivers of credit quality, such as demand for its products, its reputation or its costs of production (Exhibit 1). For sovereigns, meanwhile, we look at how ESG-related considerations – for example, country competitiveness, control of corruption, rule of law or physical climate change – affect government creditworthiness (Exhibit 2).

Exhibit 1
Illustrative example of how ESG considerations are an important component of our corporate credit analysis

Source: Moody’s Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.
Our objective is not to capture all considerations that may be labelled green, sustainable or ethical, but rather those that have a material impact on credit quality.

This distinction is important. Individual companies encounter a multitude of environmental, social, and governance-related risks and opportunities, many of which will have little tangible impact on operating or financial performance. For example, a company’s volunteer work, charitable activities and other such initiatives are important to the extent that they produce social value, but are unlikely to materially affect the issuer’s financial health or credit standing.

Materiality is also a fluid concept, and will invariably differ from one sector to another, or even across companies within the same sector. For example, air pollution may constitute a material credit issue for rated issuers in the auto sector, given the potential implications for emissions standards, regulation and user demand, but this is unlikely to be the case for the media sector.

Credit ratings, time horizons and ESG
Assessing the impact of ESG factors can be a complex task. For example, environmental and social issues can often be diffuse, and the underlying effects can be long term in nature and subject to the variability of potential policy measures and macroeconomic scenarios. This can result in a wide range of potential credit outcomes for affected companies.

However, such complexities are not unique to ESG. Credit analysis for any sector involves an evaluation of factors with inherent uncertainty or poor visibility. For instance, changes in governments or breakthrough technological developments – both of which can materially influence operating conditions for companies – are often difficult to predict over the medium term.

We seek to incorporate all relevant credit considerations, including those related to ESG, with the most forward-looking view that visibility permits. When we believe that an emerging risk or trend is highly likely to result in weaker credit metrics, even if not until many years in the future, this expectation is incorporated into ratings at the present time, well before the effects are fully evident in the issuer’s financial and operating performance.

However, we do not integrate the impact of long-term risks with any great degree of precision. This is because the uncertainty of risks increases as timeframes lengthen, while their importance diminishes relative to other more tangible risks (Exhibit 3).
Uncertainty on the probability and timing of risks often increases as timeframes lengthen

Near-term risks are typically more meaningful and have a more direct impact on ratings.

As timeframe lengthens, probability and impact of risks become less certain, as does importance relative to other risks.

A longer time frame provides companies with greater capacity to take mitigating (or self-damaging) actions in response to risks.

Source: Moody’s Investors Service

A longer timeframe also provides companies with greater capacity to take mitigating (or self-damaging) actions. For example, corporate issuers with sufficient financial strength have an ability to shift into a new industry without incurring losses for creditors if the demise of their existing industry is foreseeable and gradual. But even such stronger credits face a risk that mitigating actions will not be initiated soon enough if the company seriously underestimates the pace of change.
Defining environmental, social and governance (ESG) considerations

The term ESG typically refers to qualitative and quantitative performance indicators that assess the sustainability and ethical impact of an organization's businesses or investments, such as managing a company's carbon footprint, or ensuring management accountability.

The classification of ESG across financial markets is imprecise and subjective, largely because of the multiple and diverse objectives of various stakeholders. Several institutions, notably the UN Principles for Responsible Investment and the Sustainable Accounting Standards Board, have sought to establish voluntary definitions for ESG (Exhibit 4). Nevertheless, there is no single set of ESG definitions or metrics that are sufficiently comprehensive, verifiable and universally accepted, meaning that such issues are frequently assessed on a case-by-case basis.

Exhibit 4
Examples of ESG issues that can influence corporate credit

For our part, we are focused on any ESG consideration that may influence the relative risk of default and expected financial loss in the event of default for issuers and debt obligations over all time horizons. There is no “one size fits all” approach by which a specific set of ESG issues will be material to all sectors. For example, the ESG issues material to a sovereign are likely to be very different to those material to a company in the coal sector.

For the purpose of assessing its impact on credit quality and ratings, we define environmental risk as falling broadly into two categories: adverse effects of direct environmental hazards, such as air and water pollution or severe natural or man-made disasters (physical risks); and carbon regulations and other policy initiatives that seek to mitigate or prevent environmental hazards (transition risks).  

Governance considerations can differ significantly depending on the sector. For corporates, our focus is on areas that we believe are most likely to influence credit quality, including board oversight and effectiveness, risk management and controls, organizational complexity and financial policy. But for sovereigns, we evaluate governance in the context of the incidence of corruption in a given country and the related impact on institutional strength, or the quality of economic decision-making and management.

Social factors are less well defined. Considerations such as corporate reputation, industrial disputes and health and safety risks can be material for companies. For sovereigns and sub-sovereigns, we focus on broader socioeconomic factors that may influence credit considerations such as economic competitiveness and per capita income levels, for example.
We consider material ESG issues in our rating methodologies through different channels

Our rating methodologies provide general guidance on how qualitative and quantitative risk characteristics are likely to affect rating outcomes for debt issuers operating in a given sector or industry (see Appendix). In this context, there are a number of channels through which we consider material ESG issues in our rating methodologies.

» **ESG considerations are typically captured within scored factors in our rating methodologies.** ESG issues, where material for a particular sector, will influence the scored factors in a given rating methodology. For example, our assessment of the business profile of a soft beverage manufacturer includes an analysis of reputation and image, both of which are important to brand value. For global reinsurers, we evaluate exposure to and management of catastrophe risk – from both natural and man-made events – in the context of the firm’s capital resources.

» **In some instances, ESG criteria may be explicitly scored factors in a rating methodology.** For example, “Financial Policy” is an explicitly scored factor in approximately three quarters of our corporate industry methodologies globally, and scoring is influenced by our view of corporate governance. “Governance”, meanwhile, is an explicitly scored factor in our US states rating methodology that examines the quality of financial decision-making and execution.

» **ESG considerations outside of the rating methodology scorecard may have an impact on ratings.** For example, the expected long-term decline of the thermal coal industry cannot be fully captured in a scorecard unless the financial metrics are projected decades into the future. Such a scenario would raise false-precision issues. So our long-term expectations are typically taken into account as qualitative considerations that may result in a rating that differs from the scorecard outcome. This follows the same approach as many other risks that affect credit quality but are not scored individually, such as litigation, changes in technology and competitor strategies.

Our methodology for the automobile manufacturing industry provides an example where ESG issues are captured via different channels (Exhibit 5). We consider the impact of an issuer’s emissions-reducing technologies and alternative fuel vehicle product development, as well as its ability to meet future regulatory standards, in our assessment of “Business Profile”. “Financial Policy” is an explicitly scored grid factor, which includes an assessment of the perceived tolerance and track record of a company’s governing board and management for financial risk. Finally, our expectations for how carbon transition and regulatory considerations will affect a company’s market position, product breadth or strength and future financial ratios are considered qualitatively.

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**Exhibit 5**

Illustrative example of how material ESG issues are reflected in our methodology for automobile manufacturers

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**Captured within scored factors**

*Example: Business Profile*

Assessment of emissions-reducing technologies and alternative fuel vehicle (AFV) product development in terms of innovation and customer acceptance, and sufficiency to meet future regulatory standards.

**Explicitly scored factor**

*Example: Financial Policy*

Assessment of company’s desired capital structure or targeted credit profile, its history of prior actions, including its track record of risk, and its adherence to its commitments.

**Outside of scorecard**

*Example: Environmental and Other Regulatory Considerations*

Assessment of implications of environmental standards and regulatory oversight for company’s market position, product breadth or strength, and expectations of future financial metrics.

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*Source: Moody’s Investors Service*
Our methodology for unregulated utilities and power companies provides another illustration. Environmental factors are considered in the context of both a company’s “Market Framework and Positioning” and “Capital Requirements and Operational Performance”, while “Financial Policy” constitutes an explicitly scored grid factor that is influenced by our assessment of corporate governance.

**Our research highlights ESG themes that represent a significant industry-wide credit consideration**

In our research, we identify important ESG themes that may have material credit implications for an entire sector or industry, now or in the future. In some instances, we have also developed analytical frameworks to assess the implications of a specific ESG issue for entities in those sectors. These frameworks allow us to identify the relative exposure of issuers to a particular ESG concern, and address how they are mitigating or adapting to such challenges in our regular credit analysis.

For example, we conducted a study in late 2015 of the relative credit exposure of 86 sectors – accounting for roughly $68 trillion in rated debt globally – to environmental issues including air pollution; soil and water pollution and land use restrictions; carbon regulations; water shortages; and natural and man-made disasters. The study showed that while the potential credit implications of environmental issues vary widely by sector, carbon transition risk is likely to have material credit implications over the near term for a subset of 14 sectors with roughly $3.2 trillion in rated debt. Subsequently, we have published reports focusing on the key transmission channels for carbon transition at a sector level, including for the automotive and utilities industries.

Exhibit 6 provides an illustration of our top-down approach to identifying and integrating carbon transition analysis at a sector level for the automotive manufacturing sector, and how this has informed our credit analysis.

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**Exhibit 6**

Our analytical framework assesses the implications of carbon transition on automakers...

Framework constructed to identify primary transmission channels through which carbon transition can influence credit and ratings

Global credit study of environmental risks shows that 14 sectors have elevated credit exposure to carbon regulations

Integrating ESG into credit analysis

Sector research maps framework to global automotive sector, with shift to alternative fuel vehicles an important industry driver

Impact on rated global automotive manufacturers integrated into regular credit analysis

“General Motors is making prudent investments in emerging technologies that include electrification, ride sharing and autonomous driving… GM remains very proactive in allocating managerial, financial and technical resources necessary to comply with increasingly stringent carbon emissions regulations.”

Credit Opinion – General Motors Company, August 2017

Source: Moody’s Investors Service
Our 2015 study also identified emerging market sovereigns as having elevated credit exposure to climate-related events, including natural disasters. Exhibit 7 shows how we have since created a framework to evaluate the physical effects of climate change on sovereign credit, identifying the individual issuers most susceptible to such risks. Indeed, natural disaster risk and/or climate change exposure has represented an important credit consideration in recent rating actions for Sint Maarten (Baa2 review for downgrade), Fiji (Ba3 stable) and Bahamas (Baa3 negative). Going forward, the effect of climate change, and hence its impact on sovereign credit profiles and ratings, is projected to grow over time.

Exhibit 7
…and the physical effects of climate change on sovereigns

Sector framework constructed to assess sovereign susceptibility to physical climate change

Global credit study of environmental risks shows that emerging market sovereigns have elevated exposure to natural and man-made disasters

Integrating ESG into credit analysis

Moody's-rated sovereigns mapped to framework using selected macroeconomic and climate-related variables

Impact on most susceptible sovereigns integrated into regular credit analysis

"India is vulnerable to climate change risk. For example, the magnitude and dispersion of seasonal monsoon rainfall varies each year and influences agricultural sector growth, food inflation and rural household consumption. As a result, droughts can create economic, fiscal and social costs for the sovereign."

Government of India - Baa3 Positive: Annual credit analysis, August 2017

Sector-wide ESG exposure captured in our industry analysis may inform the rating positioning of an entire sector. For example, all coal mining companies face extremely high environmental risks that are mainly experienced through their impact on the price and volume demand for coal. This is one of the reasons why all investor-owned coal mining companies globally are currently rated below investment grade.

And while virtually all sectors are exposed, to varying degrees, to governance factors, our research can also provide a peer comparison of specific issues at an industry level. We have published thematic research on issues such as shareholder activism, executive compensation, bribery and corruption, which has helped inform our credit analysis where such issues are material to specific issuers.
For instance, in a recent report, we found that corporate governance standards are improving across a large subset of Brazilian state-owned enterprises, a credit positive development for companies such as Petrobras (B1 positive), Eletrobras (Ba3 negative) and Banco do Brasil (Ba3 stable deposit rating) given that the protections of key stakeholders, including creditors, will likely strengthen.

**We are committed to strengthening our analysis of ESG considerations**

We will continue to evaluate the credit relevance of ESG factors for different sectors and debt issuers, review the channels through which ESG considerations are integrated into credit analysis and increase the transparency of how such factors are considered in our credit ratings.

Furthermore, we are supporting a variety of initiatives to enhance the systematic and transparent consideration of ESG factors in the assessment of creditworthiness. Through such efforts, we intend to create a comprehensive and consistent way to engage with investors, debt issuers and market participants and to better understand and capture the credit implications of ESG at both a sector and entity level.
Appendix

Moody's Long-Term Credit Ratings
Moody's long-term credit ratings are opinions of the relative credit risk of financial obligations with an original maturity of one year or more. The ratings are forward-looking opinions that address the possibility that a financial obligation will not be honoured as promised, in full and on time. Such ratings use Moody's long-term global scale, and reflect both the likelihood of default and any financial loss suffered in the event of default.

Moody's Rating Methodologies
Our rating methodologies explain Moody's approach to assessing credit risk for debt issuers in a given sector or industry globally. Such documents provide general guidance that help companies, investors, and other interested market participants understand how qualitative and quantitative risk characteristics are likely to affect rating outcomes for entities operating in the given sector or industry. Our rating methodologies do not include an exhaustive treatment of all factors that are reflected in Moody's ratings but should enable the reader to understand the qualitative considerations and financial information and ratios that are usually most important for ratings in the relevant sector or industry.

Our methodologies for corporates and governments typically include detailed rating grids or scorecards that provide a reference tool that can be used to approximate credit profiles within a given sector or industry in most cases. These rating grids or scorecards provide a reference tool that can be used to approximate credit profiles within a given sector or industry in most cases. The grids provide summarized guidance for the factors that are generally most important in assigning ratings. However, the grids are a summary and do not include every rating consideration. The weights shown for each factor in a grid represent an approximation of their importance for rating decisions, but actual importance may vary substantially. In addition, the illustrative mapping examples in a rating methodology document use historical results, while ratings are based on our forward-looking expectations. As a result, the grid-indicated rating is not expected to match the actual rating of each issuer.

The full index of our rating methodologies is publicly available and can be found on our website.
Moody's Related Research

» Environmental, Social and Governance (ESG) - Global Greater policy certainty and corporate disclosure would enhance carbon transition analysis, August 2017

» Environmental Risks and Developments: FSB Task Force Recommendations Will Lead to a Mainstreaming of Climate Disclosure Over Time, June 2017

» Environmental Risks – Sovereigns: How Moody’s Assesses the Physical Effects of Climate Change on Sovereign Issuers, November 2016

» Global Unregulated Utilities and Power Companies: Carbon Transition Brings Risks and Opportunities, October 2016

» Environmental Risks: Automotive Sector Faces Rising Credit Risks from Carbon Transition, September 2016

» Environmental Risks: Risks and Opportunities; What the Paris Agreement Means for Capital Markets, July 2016

» Environmental Risks and Developments – Moody’s To Analyse Carbon Transition Risk Based On Emissions Reduction Scenario Consistent with Paris Agreement, June 2016

» Moody’s Approach to Assessing the Credit Impacts of Environmental Risks, November 2015

Endnotes

1 See Global Sustainable Investment Review 2016, Global Sustainable Investment Alliance.

2 See Environmental Risks and Developments - Global: Paris Agreement Advances Adoption of Carbon Regulations; Credit Impact to Rise, April 2016.

3 The Task Force on Climate-related Financial Disclosures is global; its members were selected by the Financial Stability Board and come from various organizations, including large banks, insurance companies, asset managers, pension funds, large non-financial companies, accounting and consulting firms, and credit rating agencies. Moody's Investors Service is a member of the Task Force. See Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures, Financial Stability Board, June 2017.

4 See Environmental Risks: Moody's Approach to Assessing the Credit Impacts of Environmental Risks, November 2015.


8 See Rating Methodology: Automobile Manufacturing Industry, June 2017.


12 See North American Coal Restructured Coal Industry Buoyed by Price Relief but Faces Secular Headwinds, June 2017.

13 See State-owned enterprises - Brazil: Improving corporate governance bodes well for Brazilian state-owned enterprises, September 2017.

14 As part of the Principles for Responsible Investment (PRI) initiative, Moody’s signed the Statement on ESG in Credit Ratings and Analysis in May 2016, with a commitment to look at ESG factors in a more systematic way. The PRI has since published a report, Shifting Perceptions: ESG, credit risk and ratings – Part 1: The state of play, July 2017, outlining how investors and credit rating agencies are paying heed to ESG in credit risk analysis.
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