

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

September 12, 2019

Key Takeaways

- S&P Global Ratings incorporates environmental, social, and governance (ESG) credit factors into its credit analysis across all sectors if we believe the factors are material and relevant to our opinions of creditworthiness.
- ESG credit factors can influence ratings, rating outlooks, and ratings headroom. Their influence differs across industries.
- The potential influence of ESG credit factors depends on our opinion of how much they affect the capacity and willingness of an obligor to meet its financial commitments.
- Strong ESG credentials do not necessarily indicate strong creditworthiness.
- The main challenges when trying to evaluate ESG credit factors can be insufficient disclosure generally and--where there is disclosure--inconsistent disclosure across peers. New international disclosure practices, such as those recommend by the Task Force on Climate-related Financial Disclosures, could make evaluating ESG credit factors easier.
- Future public policy decisions may influence the materiality of ESG factors in credit ratings either by imposing requirements which make ESG factors more material, or by legislating to improve the quality of ESG related disclosures.
- Our long-term ratings and ESG credit factor analysis can incorporate qualitative and quantitative analysis and do not have a pre-determined time horizon.

The environmental, social, and governance impact of firms across the globe is under ever-increasing scrutiny. S&P Global Ratings monitors the credit impact of environmental, social, and governance (ESG) factors as rated entities respond to these risks and opportunities. This article outlines in detail how we incorporate ESG credit factors into our ratings analysis through the application of our criteria. It expands and updates our previous article, "Credit FAQ: How Does S&P Global Ratings Incorporate Environmental, Social, And Governance Risks Into Its Ratings Analysis," published Nov. 21, 2017, on RatingsDirect.

The first section below defines and provides examples of ESG credit factors. The second section addresses general issues related to ESG credit factors: how they can differ by industry, how we

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capture them in our criteria, their potential influence on credit ratings over time, the impact of disclosure practices, and the relationship between creditworthiness and ESG credentials.

The final section provides a sector-by-sector guide to how we incorporate ESG factors into our analysis through the application of our criteria. The sectors discussed are corporates, financial institutions, insurance, sovereigns and monetary authorities, multilateral lending institutions (MLIs), public finance, project finance, and structured finance.

An S&P Global Ratings issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, which assesses the obligor's capacity and willingness to meet its financial commitments in full and on time. Issuer credit ratings can either be long-term or short-term. We also assign issue credit ratings to certain financial obligations of obligors. For a full definition, see the Appendix.

ESG Credit Factors

ESG risks and opportunities can affect the capacity and willingness of an entity to meet its financial commitments in many ways.

S&P Global Ratings incorporates these considerations into its ratings methodology and analytics, which enables analysts to factor in short-, medium-, and long-term impacts--both qualitative and financial--during multiple steps in their credit analysis.

We define ESG credit factors as environmental, social, or governance factors that influence the capacity and willingness of an obligor to meet its financial commitments. This influence could be reflected through a change in the size and relative stability of an obligor's current or projected revenue base, its operating requirements, its profitability or earnings, its cash flows or liquidity, or the size and maturity of its financial commitments.

Examples of ESG credit factors

The following are examples of ESG credit factors that have been drivers of historic rating actions. These can have positive as well as negative credit impacts, for example due to the reduction of social or environmental risks or the creation of earnings opportunities.

Examples of environmental credit factors:

- Greenhouse gas emission factors, including CO2 emissions.
- Natural conditions factors, such as weather events.
- Other pollution factors, separate from greenhouse gases.
- Other environmental factors, such as water and land use and biodiversity.
- Environmental credit benefits, such as factors that create revenue and earnings opportunities or reduce environmental risks.

Examples of social credit factors:

- Health and safety factors, such as safety violations that lead to financial and reputational damage.
- Consumer-related factors, such as mis-selling of products, linked to environmental and social factors.
- Human capital management factors, such as factors linked to employee disputes and productivity.
- Social credit benefits, such as factors that create revenue and earnings opportunities or reduce social risks.

Examples of governance credit factors:

- Strategy, execution, and monitoring factors.
- Risk management and internal control factors.
- Transparency factors, including factors linked to the quality of information disclosure.
- Board-related factors, including factors linked to the board's composition, independence, turnover, skill sets, key person risk management, culture, and oversight of management.
- Other governance factors.

Examples Of ESG Credit Factors

Environmental factors



Greenhouse gas emissions



Natural conditions



Pollution



Other environmental factors



Environmental benefits

Social factors



Health and safety



Consumer related

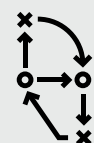


Human capital management



Social benefits

Governance factors



Strategy, execution, and monitoring



Risk management and internal controls



Transparency



Other governance factors

See table 1 and the following graphics for some examples of how these factors have influenced credit ratings.

Table 1

ESG Credit Factors

Entity	Date	Action	Criteria categories	Details
Greenhouse gas emission factors				
Drax Power Ltd.	May 15, 2009	Rating lowered to 'BB+' from 'BBB-'	Business risk profile and financial risk profile	The downgrade reflected higher business risk and CO2 emission costs from coal-based generation.
Natural conditions factors				
Aberdeen Roads (Finance) PLC	Feb. 14, 2017	Senior secured debt rating lowered to 'BBB+' from 'A-'	Construction phase stand-alone credit profile	Adverse weather has hindered construction progress.
PG&E Corp.	Nov. 15, 2018	Rating lowered to 'BBB-' from 'BBB'	Comparable ratings analysis modifier	Increased wildfire risks.

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Table 1

ESG Credit Factors (cont.)

Entity	Date	Action	Criteria categories	Details
Talos Energy LLC	Jan. 25, 2016	Rating lowered to 'CCC+' from 'B-'	Liquidity	The company has less than adequate liquidity. Weather disruption is a risk that could defer production.
The Society of Lloyd's	Oct. 12, 2017	Outlook revised downward to A+/Negative from Stable	Capital and earnings	Hurricane losses made it more challenging to restore capitalization consistent with the rating.
Banco Agropecuario S.A	Sept. 5, 2017	Outlook revised downward to BBB-/Negative from Stable	Business position	Business stability is under pressure due to weakening asset quality amid challenging climate conditions.
Rockport, Texas (General Obligation)	Dec. 6, 2017	Rating lowered to 'A+' from 'AA'	Economy and management	Uncertainty regarding its budgetary performance and flexibility following Hurricane Harvey.
Turks and Caicos Islands	June 28, 2018	Outlook revised downward to BBB+/Stable from Positive	Economic assessment	Hurricanes Irma and Maria caused damage worth about 55% of GDP.
Pollution factors				
Duke Energy Corp.	May 20, 2019	Outlook revised downward to A-/Negative from Stable	Cash flow/leverage	Significant elevated coal ash risks, including longer-term risks due to its coal exposure.
Other environmental factors				
Thames Water Utilities	July 24, 2017	Senior rating lowered to 'BBB+' from 'A-'	Business risk profile and financial risk profile	Regulatory costs linked to factors including water leakage hit when there was no financial headroom.
Environmental benefits				
Consol Energy Inc.	Feb. 1, 2017	Rating raised to 'B+' from 'B'	Competitive position	Business risk assessment raised, reflecting factors including reduced exposure to coal liabilities.
Health and safety factors				
Consolidated Edison Co. of New York Inc.	Nov. 23, 2015	Outlook revised downward to A-/Negative from Stable	Competitive position	Alleged safety violations that could increase regulatory risk, potentially weakening business risk.
Consumer-related factors				
Del Monte Foods Inc.	March 16, 2017	Ratings lowered to 'CCC+' from 'B-'	Competitive position and cash flow/leverage	Underperformance largely driven by shifting consumer preferences toward fresh produce.
Mulhacen Pte. Ltd.	July 19, 2019	Outlook revised downward to B+/Negative from B+/Stable	Capital and earnings and risk position	Increasing claims from customers over alleged usurious interest rates.
AMP Life Ltd.	Aug. 29, 2018	Rating lowered to 'A+' from 'AA-'	Competitive position	Misconduct creating risks due to brand damage and potential for material fines.

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Table 1

ESG Credit Factors (cont.)

Entity	Date	Action	Criteria categories	Details
Human capital management factors				
Clark County School District, Nevada (GO)	May 29, 2018	Rating lowered to 'A+' from 'AA-'	Budgetary performance and flexibility	The school district's labor agreements viewed as unsustainable and expected to continue to pressure operational performance.
The Goodyear Tire & Rubber Co.	Oct. 16, 2006	Ratings placed on CreditWatch Negative	Business risk profile and financial risk profile	Due to potential for business disruptions and earnings pressures from ongoing labor dispute.
Social benefits				
Carnival Corp.	Oct. 13, 2016	Rating raised to 'A-' from 'BBB+'	Competitive position and cash flow/leverage	Carnival has implemented safety measures that should limit cash flow volatility.
Strategy, execution, and monitoring				
Deutsche Bank AG	June 1, 2018	Rating lowered to BBB+/Stable from 'A-'	Peer adjustment	Rating lowered on deeper restructuring and so elevated strategy execution risks.
City of Vancouver	Feb. 7, 2017	Rating raised to AAA/Stable from 'AA+'	Financial management	The city has transformed its management practices, enhancing its ability to meet its long-term objectives.
International Investment Bank	March 7, 2019	Rating raised to A-/Stable from BBB+/Stable	Governance and management	The bank strengthened its governance through changes to its voting system and a clear expansion strategy.
Indonesia	May 19, 2017	Rating raised to BBB-/Stable from BB+/Positive	Fiscal assessment and debt burden	Exhibited effective policymaking to promote sustainable public finances and balanced growth.
Risk management and internal controls				
Danske Bank A/S	Sept. 25, 2018	Outlook revised downward to A/Negative from A/Positive	Risk position	Failure to prevent money laundering.
Volkswagen AG	Oct. 12, 2015	Rating lowered to A-/Watch Neg from A/Watch Neg	Management and governance	VW has demonstrated material deficiencies in its management and governance and risk management.
Transparency				
Public Finance Authority, Wis. (revenue bonds)	June 19, 2018	Rating suspended	Governance and transparency	Failed to post audited financial 2017 information, in violation of its continuing disclosure agreement and SEC Rule 15c2-12.
Mingfa Group	April 6, 2016	Rating lowered to CCC+/Watch Neg from B/Negative	Management and governance liquidity	Financial reporting transparency, weak controls, less independent board and management, and heightened liquidity risks.
Wethaq Takaful Insurance Co. K.S.C.	June 12, 2018	Rating lowered to B/Watch Neg from B+/Watch Neg	Capital and earnings	Audit indicates financial reporting deficiencies and increased liquidity and capital adequacy risks.

Table 1

ESG Credit Factors (cont.)

Entity	Date	Action	Criteria categories	Details
Other governance factors				
Greece	July 20, 2018	Outlook revised upward to B+/Positive from Stable	Institutional and economic profile	Greater policy stability should support the economy and banks, while enabling the government to service its commercial debt.



Greenhouse gas emission factors

Drax Power Ltd. (May 15, 2009)



Rating lowered
BB+ (from BBB-)



Criteria categories
Business risk profile
Financial risk profile

The downgrade reflected higher business risk and **CO2 emission costs from coal-based generation**.



Natural conditions factors

Turks and Caicos Islands (June 20, 2018)



Outlook revised downwards
BBB+/Stable
(from Positive)



Criteria categories
Institutional and economic profile

High hurricane costs, mainly private-sector, in Sept. 2017 (about 55% of GDP).



Pollution factors

Duke Energy Corp. (May 20, 2019)



Outlook revised downwards
A-/Negative
(from Stable)



Criteria category
Cash flow/leverage

Significant elevated coal ash risks including **longer-term risks due to its coal exposure**.



Other environmental factors

Thames Water Utilities (July 24, 2017)

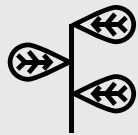


Senior ratings lowered
One notch to
BBB+/Stable



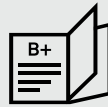
Criteria categories
Business risk profile
Financial risk profile

Regulatory costs linked to factors including water leakage hit when there was no financial headroom.



Environmental benefits

Consol Energy Inc. (Feb 1, 2017)



Rating raised
B+ (from B) ↑



Criteria category
Competitive assessment

Business risk assessment raised reflecting factors including **reduced exposure to coal liabilities.**



Health and safety factors

Consolidated Edison Co. of New York Inc. (Nov. 23, 2015)



Outlook revised downwards
A-/Negative (from Stable) ↓



Criteria category
Competitive position

Alleged safety violations which could increase regulatory risk, potentially weakening business risk.



Consumer-related factors

AMP Ltd. (May 2, 2018)



Rating placed on CreditWatch
Negative



Criteria categories
Business position

Misconduct creating risks due to brand damage and potential for material fines.



Human capital management factors

Clark County School District, Nev (GO) (May 29, 2018)



Rating lowered
A+ (from AA-) ↓



Criteria categories
Budgetary performance and flexibility

We think that the district's **labor agreements are unsustainable and will continue to pressure operational performance.**



Social benefits

Carnival Corp. (Oct. 13, 2016)

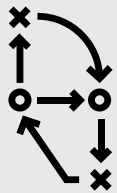


Rating raised
A- (from BBB+) ↑



Criteria categories
Competitive position
Cash flow/leverage

Carnival has implemented **safety measures which ... should limit cash flow volatility.**



Strategy, execution, and monitoring

Deutsche Bank (June 1, 2018)



Rating lowered
BBB+/Stable
(from A-)



Criteria category
Business position

Rating lowered on deeper restructuring and so **elevated strategy execution risks.**



Risk management and internal controls

Danske Bank (Sept. 25, 2018)



Outlook revised
downwards
A/Negative
(from A/Positive)



Criteria category
Risk position

Failures to prevent money laundering.



Transparency

Wethaq Takaful Insurance (June 12, 2018)



Rating lowered
B/Watch Neg
(from B+/Watch Neg)



Criteria category
Capital and earnings

Audit indicates **financial reporting deficiencies and increased liquidity and capital adequacy risks.**



Other governance factors

Greece (July 20, 2018)



Outlook revised
upwards
B+/Positive
(from Stable)



Criteria category
Institutional and
economic profile

Greater policy stability should support the economy and banks, while enabling the government to service its commercial debt.

General Considerations In Incorporating ESG Credit Factors

The potential influence of ESG credit factors can differ by industry

ESG credit factors may be relevant to our opinion of the creditworthiness of rated entities across sectors, but the materiality and visibility of those risks--as well as our assessment of the cost and effectiveness of any measures taken to mitigate or eliminate those risks--and opportunities can

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differ by entity, industry, and country, and can change over time.

For example, a relatively small subset of corporate industries may face greater exposure to environmental credit factors and linked public policy action or changes in consumer behavior than any other industry or asset class. Research published in the Carbon Majors Report written by the CDP and Climate Accountability Institute in 2017 posited that just 100 companies have been the source of more than 70% of the world's greenhouse gas emissions since 1988.

Material ESG credit factors are captured in different ways across our criteria

S&P Global Ratings incorporates ESG credit factors into its analysis in different ways, if we believe that ESG credit factors are relevant and material to our analysis of creditworthiness.

Our long-term ratings and ESG credit factors do not have a pre-determined time horizon

Our credit ratings are forward-looking and they incorporate our financial forecasts. These financial forecasts reflect the period over which we consider we have a sufficiently clear view of an entity's potential financial performance, taking into account the asset class, capital structure, and the potential impact of relevant credit factors, including ESG credit factors.

We include the impact of ESG credit factors such as greenhouse gas emission costs, other pollution costs, or health and safety costs in our financial forecasts if we deem them to be material to our analysis of creditworthiness. However, beyond that, we also consider whether the creditworthiness is sustainable beyond the forecast period. If we have a high degree of visibility about factors that may crystallize for an obligor beyond the typical forecast period, even if less certain, we could factor those into our ratings in our qualitative considerations.

The influence of ESG credit factors on credit ratings may change over time

An obligor's exposure to credit factors, including ESG credit factors, may evolve over time. A factor may become more visible or its potential impact more certain over time, or the obligor may take action to mitigate or eliminate its exposure to the factor.

We monitor the impact of credit factors, including ESG credit factors, and our view can evolve as new information becomes available, or as the issuer's fundamentals change, including its ratings headroom, or, for example, if there are changes in public policy that may influence the economics of the business and its creditworthiness. In some cases, an insignificant risk or strength that is currently considered immaterial to the obligor's creditworthiness can later become material. This could happen, for example, if new information becomes available, or if there is a policy or legal change that could impose new or higher costs, such as greenhouse gas emission costs, on the obligor. Another example would be an asset-heavy business suffering a reduction in the value of its investments in carbon-intensive companies because of the transition to a low-carbon economy.

The degree of visibility and certainty about potential drivers of creditworthiness reduces further into the future from today because key credit drivers can change. In addition, actively managed obligors (such as corporates, insurance companies, governments, and banks) can take decisions to eliminate or mitigate risks including through insurance, the purchase or sale of assets and group companies, or, over time, through business transformation. Examples of key credit drivers that can change include the strategic direction of the entity, public policy, laws and regulations

that apply to the entity--including ESG-related public policies (see below), laws and regulations, and greenhouse gas emission pricing or taxation--operating and financial or budgetary performance, and capital structure and tolerance for risk and leverage.

Future public policy changes related to ESG can influence credit ratings

Future rating actions may be influenced by policy changes targeted at ESG factors that impose new costs or create opportunities for rated entities, such as greenhouse gas emission pricing or taxes, natural condition adaptation requirements, or regulated safety management costs. A rating can reflect the potential effects of a given policy action once there is high certainty that a policy will be implemented (for example, if a related law or regulatory requirement has been, or is close to being, adopted). This makes its potential credit implications more predictable. In some cases, we could also consider the potential credit implications, and possibly take rating actions, where a future policy change is agreed and highly certain to be implemented but with a delay.

New international disclosure practices could make evaluating ESG credit factors easier

The main challenges when trying to evaluate ESG credit factors can be insufficient disclosure generally and--where there is disclosure--inconsistent disclosure across peers. In our view, the provision of comprehensive, comparable, and consistent disclosures around climate-related risks and opportunities by the entities we rate, as recommended by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), should make it easier to assess environmental credit factors and reflect them in ratings in a more consistent and transparent way.

We believe TCFD-based disclosure would provide climate risk-related information that is more useable in the financial markets, including by S&P Global Ratings. We expect that widespread changes in disclosure will take time as organizations will have to decide whether to follow the voluntary TCFD disclosure guidelines, and might have to increase certain capabilities in order to facilitate the disclosure requirements. However, insufficient adoption of the voluntary recommendations or inconsistencies in disclosure could limit our credit rating analysts' ability to perform peer analysis, which can be an important element of our credit rating analysis.

Strong creditworthiness does not necessarily correlate with strong ESG credentials

Creditworthiness measures the capacity and willingness of an obligor to meet its financial commitments as they come due. Entities with strong creditworthiness may not have strong ESG credentials. We would regard an entity with weak ESG credentials but strong, relatively stable revenues, profitability, earnings, and cash flows, as well as minimal future financial commitments, as a relatively creditworthy entity because there is a strong likelihood that the obligor will continue to have the available resources to meet its financial commitments in full and on time.

For example, we could view an auto company that complies with applicable laws, but whose current product line comprises less fuel-efficient cars and a relatively small share of hybrid and electric cars, as being creditworthy if we expect its future available resources to be reasonable relative to its future financial commitments. By the same token, an entity that provides a product or service that we view as being ESG-friendly, such as renewable energy wind turbines, could have relatively weak creditworthiness if its revenues, profitability, earnings, and available resources are

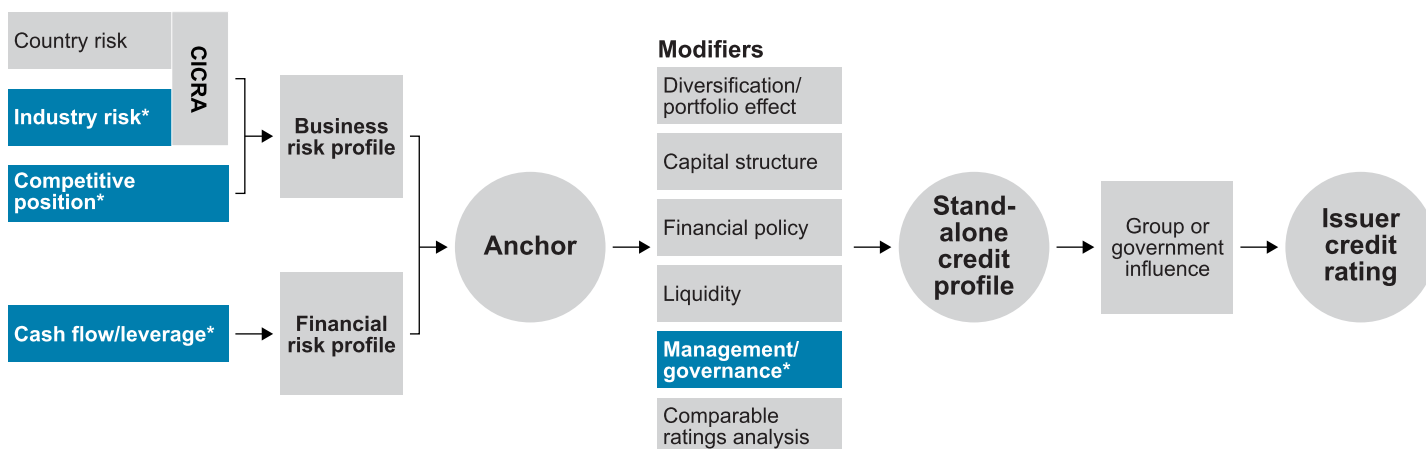
low and unstable relative to fixed and relatively high future financial commitments. This is because in this scenario there is a reasonable likelihood that the entity would not have the resources to meet its financial commitments in full and on time, in which case it could default on those commitments.

ESG Credit Factors In Our Analysis By Sector

Corporates

In our rating analysis, we evaluate the influence of material, known credit factors (both risks and opportunities) that could influence the obligor's creditworthiness; these include ESG credit factors (see "Corporate Methodology," published Nov. 19, 2013). Chart 1 shows which areas of our corporate criteria framework are most likely to include consideration of ESG credit factors: industry risk, competitive position, cash flow/leverage, and management and governance.

Corporate Criteria Framework



*Categories most likely to include consideration of environmental, social and governance credit factors.

CICRA--Corporate industry and country risk assessment.

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Industry risk: Visible environmental and social credit factors that have or could have a material effect on the issuer's creditworthiness are analyzed within the appropriate section of the corporate criteria framework. For example, if we consider that emerging or increasing environmental or social risks will cause industry-specific growth trends to deteriorate, or the level and trend of industry profit margins to weaken, we may revise down our assessment of industry risk for that industry. This, in turn, would weigh on the business risk profiles of rated obligors in that industry.

Competitive position assessment: If a ratings committee considered that environmental and social credit factors would affect an obligor's competitive position and so weaken or strengthen its creditworthiness, we would capture this in our competitive position assessment. This could happen if, for example, environmental and social credit factors influence an obligor's brand reputation, cost structure, and level and volatility of profitability.

Cash flow/leverage--financial forecasts: Similarly, if a ratings committee expects that an obligor's exposure to ESG credit factors will affect its earnings, cash flow generation, and financial commitments (and that the impact can be reasonably estimated), we could factor the impact into our financial forecasts in our cash flow/leverage assessment. If ESG credit factors have already influenced a corporate entity's historic profitability or cash generation, that impact will already be reflected in our adjusted cash flow and leverage ratios, and analysts might project a growing impact on financials in the future.

In addition, the consideration of ESG is referenced throughout the criteria. We identified close to 100 directly relevant environmental and climate risk references in our corporate criteria (including industry-specific criteria articles or accompanying guidance documents).

Management and governance: We include ESG considerations in our management and governance category of analysis. This analysis addresses how management's strategic positioning, organizational effectiveness, risk management, and governance practices shape the company's competitiveness in the marketplace, the strength of its risk management, and the robustness of its governance.

The management and governance criteria explicitly references environmental and social risk in the comprehensiveness of risk management standards and tolerances section, which states that:

"Corporate enterprises with a deliberate, consistent, articulated, resourced, and integrated approach that effectively identifies, selects, and prudently mitigates risks are more likely to build long-term credit strength as compared to enterprises with a casual, opportunistic, or reactive approach. Business managers demonstrate proficiency by institutionalizing comprehensive policies that recognize the complex interdependencies of the risks their businesses face, the trade-off between risk and reward, and the interplay between business and financial risk. The management of environmental and social risk is included under this subfactor."

Financial Institutions

BICRA

Our analysis of ESG credit factors can be reflected in many parts of our bank rating methodology, depending on their nature, their root cause, and the impact they could have on financial or business risk profiles, and thereby on credit quality. The starting point for assigning a rating to a bank in a given country is the anchor we derive by applying our BICRA methodology (see "Banking Industry Country Risk Assessment Methodology And Assumptions," published on Nov. 9, 2011).

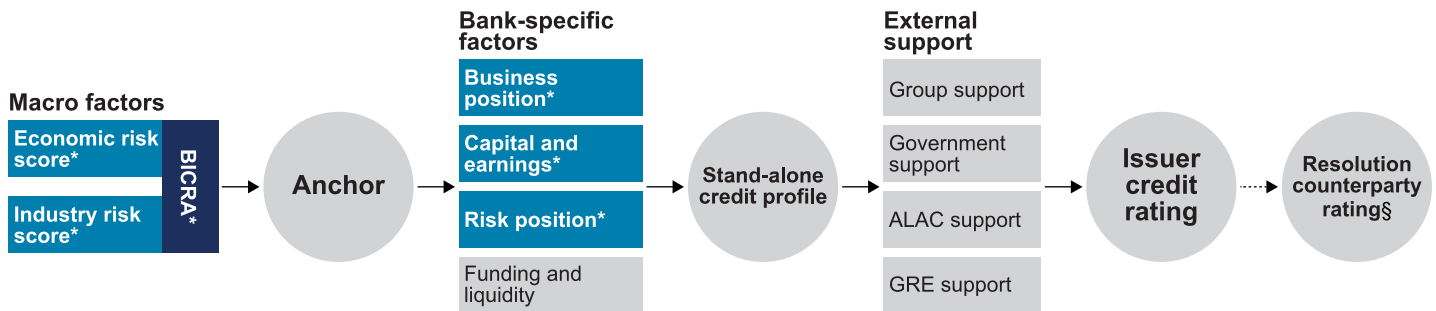
This macro analysis of the industry and economic risks in a given market could, for instance, be affected by identified structural deficiencies in the overall quality of a banking system's governance and transparency, or material systemwide effects related to climate change. Our view of economic resilience (part of the BICRA economic risk analysis) could be negatively influenced by the vulnerability of the economy, and of its banks, to climate change risks.

Our view of the institutional framework (part of the BICRA industry risk analysis) is informed by our view of whether there are structural deficiencies in terms of governance in the banking sector. Examples of deficiencies could be the prevalence in the system of related-party lending; opaque ownership structures, a non-transparent financial sector made up of a myriad of entities lightly controlled by local supervisors (encompassing shadow banking, booking centers, holdings, or special-purpose entities whose location is for tax reasons only, and other factors), or repeated and

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unaddressed scandals affecting the whole sector and the country (such as money laundering or tax evasion). Risks to both economic resilience and the institutional framework could lead to a weaker anchor and therefore affect the ratings on most domestic banks.

Bank Criteria Framework



*Categories most likely to include consideration of environmental, social and governance credit factors. §Subject to jurisdictional assessment and expected resolution strategy. BICRA--Banking industry and country risk assessment. ALAC--Additional loss-absorbing capacity. GRE--Government-related entity. Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Business and risk positions and capital and earnings

To derive a rating on a specific bank, we then modify the anchor by incorporating our assessments of factors including its business and risk positions and capital and earnings (see "Banks: Rating Methodology And Assumptions," published on Nov. 9, 2011). In assessing the business position, we analyze a bank's revenue stability, the diversification of its revenue stream, and the quality of its management and strategy. If a bank's business activities and revenues are heavily concentrated in overseas geographies that are more prone to natural catastrophes than its home base, this could weaken its business position and put the rating under pressure. Even if a bank reduces its exposure to climate-sensitive industries, the pressure on its business position may not ease until it finds an adequate replacement for the lost revenue.

That said, if a bank develops expertise and becomes an industry leader in a climate change-related niche, it could reinforce its business profile, to some extent, by strengthening revenue stability and increasing market share.

In a similar vein, we analyze the portion of revenues originating from lending activities that may be socially sensitive. Banks with high exposures to unsecured consumer finance loans (for example, credit cards or other loans with very high interest rates), or catering to a more financially vulnerable clientele, can be exposed to claims from retail clients and additional investigations from regulators if their commercial practices (including collections) are perceived by public opinion to be abusive or excessive. In addition to loss of revenues, it can rapidly affect banks' reputation.

Governance

As part of our analysis of a bank's business position, we also form a view of its governance, which is an important component of our assessment of the quality of management and strategy. We look at a number of factors, including the aggressiveness and continuity of the strategy, the stability of the management team, the incidence of controversies (even if they are small taken in isolation)

irrespective of whether they are financial or operational, the efficiency of the board, and the quality and transparency of communications.

We typically reflect systemwide governance issues in the BICRA and the anchor. However, if a bank in a given country, where we already adjust the anchor for poor transparency or governance, shows more positive or negative characteristics than the sector as a whole, we reflect those divergences in the business position. The risk of ineffective governance is not region-specific or inherent to countries that have a weak institutional framework. For instance, some financial institutions in developed economies, including those in Western Europe and the U.S., have uncovered large-scale governance failures, frequently arising from the interaction of poor incentive structures and limits on managerial oversight over large and complex financial institutions.

Risk position and capital and earnings

Although our capital assessment looks at expected credit- and market-risk elements of a bank's activities, our assessment of a bank's risk position incorporates risks that are not captured directly in our capital model, especially risks that are difficult to quantify. We may consider ESG credit factors in our assessment of risk position as well. For example, our ratings could be affected if we anticipate that a bank will suffer losses due to the impact of climate change on its loan and investment portfolios. This could include losses from climate-risk-related exposures that emerge on assets that act as collateral for loans (for example, residential properties with weak insulation features or that are subject to flood risk). Examples could be a bank overexposed to the agricultural sector in a county vulnerable to climate change or to a sector that is likely to see an erosion of its credit quality in the years to come because of disruption from customer or behavioral changes or changing environmental or social regulations.

The risk position assessment may also weaken if we believe the bank is exposed to significant legal risks. Costly litigation arising from weaknesses in governance, risk appetite, or the control framework has, in many recent cases, given rise to new risks not related to the credit quality of loans and investments, even for traditional banking activities. Recent cases include money laundering in Europe, mis-selling to retail clients, and potentially under-reserving linked to unrecognized depreciation in collateral values. However, the outcome of these risks is difficult to assess ahead of time, and the time taken for them to crystallize could be longer than we typically take into account in our capital forecasts. Alternatively, expected losses can also weigh on our projected earnings for a bank, and thus on our capital and earnings assessment.

Insurance

Our insurance methodology takes a similar approach to our corporate and bank criteria frameworks, embedding the impact of ESG credit factors into several aspects of the overall rating process. Our criteria for determining insurance ratings (see "Insurers Rating Methodology," published on July 1, 2019) incorporate our assessments of insurers' business and financial risk profiles. In assessing an insurer's business risk profile, we analyze the risks inherent to the insurance markets in which it operates. Our insurance industry and country risk assessment incorporates our view of the insurance markets' economic, institutional and governance effectiveness, financial system, and payment culture and rule of law risks; its regulatory framework and governance standards; and its growth and profitability prospects--ESG credit factors could affect all of these. An insurer's competitive position may also be affected by exposure to ESG risks and opportunities, which could affect the strength of the insurer's brand name and its profitability.

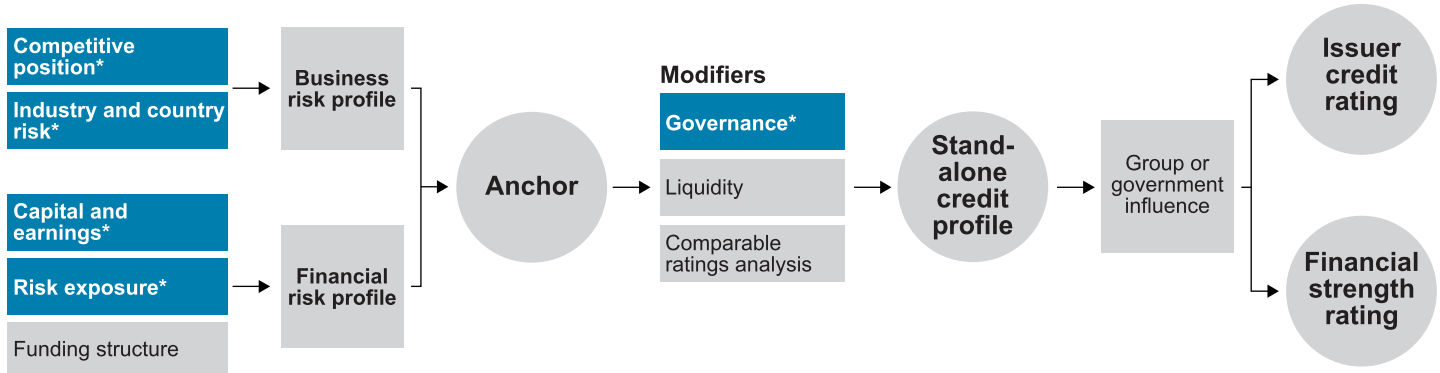
The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

Our assessment of an insurer's financial risk profile includes our prospective view of capital adequacy. Applying our capital model criteria, we incorporate into our capital model a risk charge to capture the impact of one-in-250-year annual catastrophe losses (that is, the level of annual losses that has a probability of 0.4% of being exceeded). Although climate change may affect the magnitude or frequency of extreme weather events, there is no scientific agreement about the precise quantitative impact that the industry could use in its natural catastrophe models. The uncertainty in an insurer's capital and exposure management relating to catastrophe models could lead us to conclude that risks are understated in our capital adequacy analysis and that this weighs on our capital and earnings assessment.

The financial risk profile assessment also incorporates our analysis of the insurer's risk exposure. Here, we measure risks not captured in the capital and earnings analysis and risks that could make capital more volatile, depending on the insurer's risk control framework. If we conclude that exposure to the impact of extreme weather events such as wildfires following droughts (or other ESG credit factors) is material and contributes to above-average volatility in prospective capital adequacy, we may revise down our risk exposure assessment.

Our ratings analysis also incorporates our view of an insurer's governance, including its risk culture. How well insurers prepare themselves to deal with the challenges presented by existing ESG risks or identify emerging ones could be a relevant consideration in this assessment.

Insurance Criteria Framework



*Categories most likely to include consideration of environmental, social and governance credit factors.
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Sovereigns And Monetary Authorities

ESG credit factors carry meaningful weight in our sovereign ratings analysis. As a result, changes in ESG credit factors frequently influence, positively and negatively, our sovereign ratings and outlooks (please refer to "How Environmental, Social, And Governance Factors Help Shape The Ratings On Governments, Insurers, And Financial Institutions," published on Oct. 23, 2018).

Our sovereign analysis most visibly considers ESG factors in the context of our institutional assessment, one of the five key sovereign rating factors (see "Sovereign Rating Methodology," published Dec. 18, 2017).

The institutional assessment includes our analysis of how a government's institutions and policymaking affect its credit fundamentals by delivering sustainable public finances, promoting balanced economic growth, and responding to economic or political shocks. Most of these factors

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

align closely with governance concepts. The main indicators of effectiveness, stability, and predictability of policymaking and political institutions are the sovereign's record of accomplishment in managing crises, prudent policymaking, and delivering balanced economic growth. The predictability of the overall policy framework also carries an important weight.

The main indicators of the transparency and accountability of institutions are the existence of institutional checks and balances, respect for creditors' and investors' interests, and transparency and reliability of information. In addition to counting as an individual rating factor in our methodology, a very low institutional assessment serves as a cap on sovereign ratings, given the importance of this factor, regardless of the indicative rating that emerges from combining all our individual rating assessments.

Social factors also inform the institutional assessment, mainly as they relate to the cohesiveness of civil society. Our analysis of social cohesion looks at social mobility, social inclusion, the prevalence of civic organizations, degree of social order, and the capacity of political institutions to respond to societal priorities.

In addition to the governance factors included in the institutional assessment, our monetary assessment also reflects our opinion on monetary policy credibility, including the independence of the central bank, policymaking tools and effectiveness, track record on price stability, and role as lender of last resort.

Although environmental credit factors pose a limited direct risk to sovereign ratings of advanced economies, many emerging market sovereign ratings (especially those in the Caribbean, Southeast Asia and Sub-Saharan Africa, including those in the "vulnerable 20" or "SIDS" groups of countries) already reflect potential risks arising from future natural disasters. Our economic assessment includes a potential adjustment for volatility in economic output, which is often caused by constant exposure to natural disasters or adverse weather conditions. The cost of natural disasters can also affect our fiscal assessment (through the impact on tax revenues and spending pressures), and our external assessment (through a sudden loss of exports).

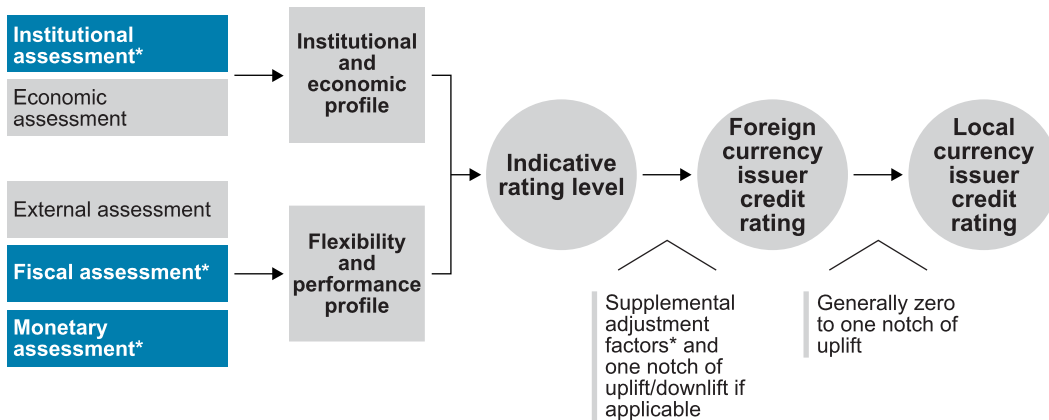
Global emissions reduction objectives may in time reduce the export revenues of economies reliant on hydrocarbon exports, and carry significant implementation costs, particularly compared to the size of developing economies.

While most observable environmental factors take the form of risks, we also pay attention to the potential for environmentally friendly policies to favorably affect sovereign creditworthiness by reducing risks. This can happen if substantial investment in infrastructure were to improve a country's resilience to natural disasters--or, more broadly, weather patterns--or if a push for renewable energy were to substantially reduce input costs, lower imports, or contain volatility in a country's terms of trade in the long run. In such cases, indicators used in the economic and external assessments would be the most likely beneficiaries.

Our assessment of a sovereign's fiscal performance includes an analysis of whether there is a significant shortfall in basic services to the population and in infrastructure that is likely to result in government spending pressures for a long period. In such cases, we could make a negative adjustment in our fiscal assessment. This analysis allows us to positively reflect proactive social and infrastructure investments in the ratings.

Finally, if ESG credit factors represent significant credit risks, we can then include a one-notch downward "event risk" supplemental adjustment. This could apply in cases of rising institutional instability, for social or governance reasons, or the occurrence of a rare but severe natural catastrophe.

Sovereign Criteria Framework



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Multilateral lending institutions

Addressing environmental, social, and governance issues is an intrinsic part of the business models of most MLIs, and typically shapes our perception of their unique role (see "Multilateral Lending Institutions And Other Supranational Institutions Ratings Methodology," published Dec. 14, 2018). Most MLIs have mandates that can include a combination of the following:

- Environmental objectives, such as combating climate change, helping public and private players reduce greenhouse gas emissions and pollution, protecting water and land resources and wildlife, or supporting resiliency projects.
- Social goals, such as fighting poverty and income disparities, fostering broad, inclusive, and sustainable economic development, or improving health and education outcomes.
- Governance objectives, supporting rule of law and transparency goals and the fight against corruption through policy support, technical advice, and implementation support.

These typical features of MLI mandates means an MLI's ability to fulfil these mandates, by deploying capital toward ESG objectives, provides a benchmark for us to assess its policy importance and public policy mandate. For instance, if we perceive that an MLI has been exposed to considerable ESG-related controversies, such as infrastructure projects that create environmental damage or dislocate local communities, this could call into question our view of the MLI's record of accomplishment in fulfilling its public policy mandate. By contrast, evidence that MLIs effectively deploy capital toward their ESG objectives confirms that mandate, strategy, and execution align. This analysis usually percolates to our assessment of the strength of the relationship with shareholders and shareholder support and the likelihood of extraordinary support in the form of callable capital, as we would expect institutions that successfully execute their ESG-driven mandates to be viewed more favorably by shareholders compared to institutions that are deemed as less effective.

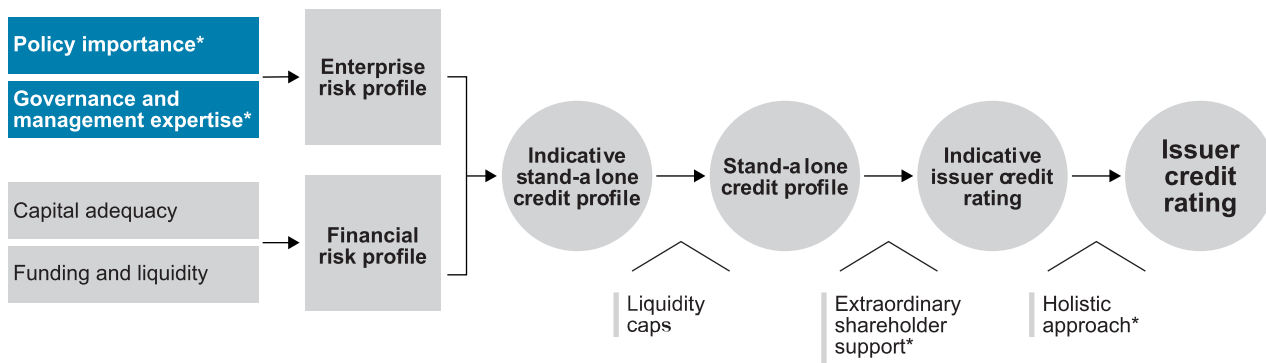
Our assessment of an MLI's governance and management expertise assesses the quality of its governance. Generally, a diverse governance structure, with borrowing and non-borrowing

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

members, may offer more checks and balances, as well as provide greater scrutiny of project approvals in terms of ESG benefits and risks. Alternately, a highly concentrated governance structure could overlook or downplay ESG factors when it comes to granting or disbursing funds, particularly when borrowers are in need of quicker and cheaper access to them. On the other hand, balanced governance structures tend to be correlated with more robust representation that can lead to improved accountability and transparency, and can strengthen ESG-related agendas over politically driven incentives. In our view, robust risk-management frameworks and policies, combined with clear mandates backed by solid institutional strategies, may mitigate some of the agency problems common in certain governance structures and ensure that the institution prioritizes ESG-related initiatives.

Because MLIs deploy a large part of their lending activity toward sustainability objectives, which an increasing share of investors look to support, they represent an important share of the world's green, social, and sustainable bonds (see "Can Multilateral Lending Institutions Support Rising Demand In The Green And Social Bond Markets?," published Oct. 29, 2018). While definitions of such bond types can vary widely, we believe that this trend contributes to solidify MLIs' access to a broad and diversified global pool of funds. This can potentially strengthen our assessment of MLIs' funding and liquidity.

Multilateral Lending Institutions Criteria Framework



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Non-U.S. local and regional governments

In our credit analysis of a local or regional government (LRG), we most explicitly consider ESG credit factors in our assessment of the LRG's institutional framework, economy, and its financial management. Policy and budgeting decisions, including those driven by ESG factors, in turn impact a government's budgetary performance, and, as a result its debt burden. (See "Methodology For Rating Local And Regional Governments Outside Of The U.S.," published July 15, 2019, "Rating Government-Related Entities: Methodology And Assumptions," published March 25, 2015, and "Methodology For Rating Public And Nonprofit Social Housing Providers," published Dec. 17, 2014.)

With respect to an LRG's institutional framework, a transparent and accountable system promotes the implementation of sound practices that encompass long-term financial planning with an appropriate assessment of external and internal risks, inclusive of ESG-related aspects. Our institutional framework assessment determines how we view the governance of all rated

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

entities within the same level of government within the country.

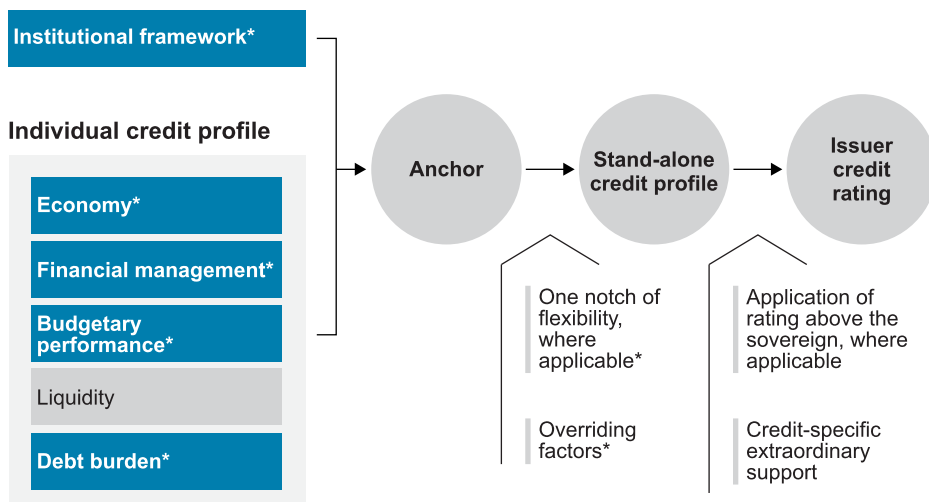
The socio-economic base, such as demographic and income factors, could have a notable impact on an LRG's creditworthiness. Demographic factors such as the age, wealth, or growth of the population will influence the need for services. Economic growth prospects and income distribution generally have meaningful impacts on budgetary pressures or social cohesiveness.

A significant concentration of economic activity in sectors that are vulnerable to natural conditions, including weather and climate patterns, would also weigh on our analysis. For example, a government overseeing a region with high agricultural output is susceptible to weather-related events like drought. A high relevance of operations in an environmentally impactful industry (such as mining) could, in time, result in lower or more erratic growth, or create social issues with local communities. Exposure to natural disasters, rising sea levels, or pressure to reduce emissions are also likely to affect a local government's economy, and therefore its revenue base, and can result in significant and rising budgetary pressures.

How local governments address ESG-related challenges in the medium- and long-term may influence our perception of financial management. This has potential to also affect our debt burden assessment, for example if we believe that these risks create significant contingent liabilities, and our expectation for future budgetary performance. Our assessment of an LRG's financial management includes our view on the amount of control a government exercises over government-related entities (GREs), which could expose an LRG to additional ESG-related challenges.

On the positive side, the social and environmental scope of many LRGs' mandate has supported a significant rise in the issuance of green and other "sustainable" forms of financing, which has significantly broadened some LRGs' investor bases, and supported our liquidity assessment. This observation is similar to that on MLIs, which have also tended to be significant providers of funds to support LRGs' environmental and social projects.

Non-US LRG Rating Criteria



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Other international public finance ratings

While public ownership is not always synonymous with strong environmental or social mandates, we believe that the regulatory, legal, and statutory frameworks of many rated public finance entities, whether government-owned or not, reflect environmental or social objectives. Such objectives often percolate from a higher level of government, typically the central government, and apply regardless of ownership or narrower geographical scope within the respective jurisdiction. This can strongly influence credit ratings, mostly positively. As an example, we reflect the mandates of social housing operators in a relatively strong industry risk assessment compared with peers in the market sector, because we believe that the regulated parts of these activities, even if less profitable, provides outsized benefits in terms of revenue stability and the cushions afforded by below-market rents.

Such public finance entities tend to face environmental risks and opportunities that are similar to their private sector peers. For example, social housing operators also have significant obligations related to building energy efficiency and emission standards. Both public and private waste management entities are subject to generally rising environmental standards, while benefiting from growing demand for higher value-added services in recycling. The ratings on public health care operators such as public hospitals, and those on public transportation infrastructure enterprises such as airports and ports, may also benefit from enterprise risk profile assessments reflective of public policy support for their social mandates. For their part, governance factors for such public finance entities play a significant role in the rating construct, as an important driver of their enterprise risk profile.

Finally, a particularity of non-U.S. public finance enterprises is that the ratings often include a degree of uplift for potential extraordinary government support. This applies in similar ways, although with typically lower rating uplifts than for government agencies or national public bodies, because the link to the government tends to be weaker than the role they play in public policy execution.

Some public sector entities have ratings primarily reflecting our assessment of the likelihood of extraordinary government support rather than their intrinsic stand-alone credit profile (SACP). This is particularly the case for those entities with an almost certain likelihood of extraordinary government support, because of what we believe to be their integral link with the government and the critical importance of their role to the government. We equalize the ratings on such entities with those on the national or local government under our GRE rating methodology. These ratings include those on entities that execute strategic government policies such as government arms, certain public bodies, or national development banks. In this case, we primarily assess ESG factors insofar as they provide a guide to the strength of the role for, and link with, the government. The quality and structure of a GRE's governance provides a strong guide for the integral link with the government, but our assessment of the GRE's critical role is also reflective of how well the entity aligns with governmental objectives, including environmental and social ones.

U.S. public finance

We believe government entities and not-for-profit enterprises possess unique characteristics when examining ESG factors, given their role as providers of safety-net social services, critical infrastructure, and essential public goods, often accompanied by multi-layered governance and institutional frameworks with political accountability.

In U.S. public finance, we define ESG credit factors as those positive or negative credit

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

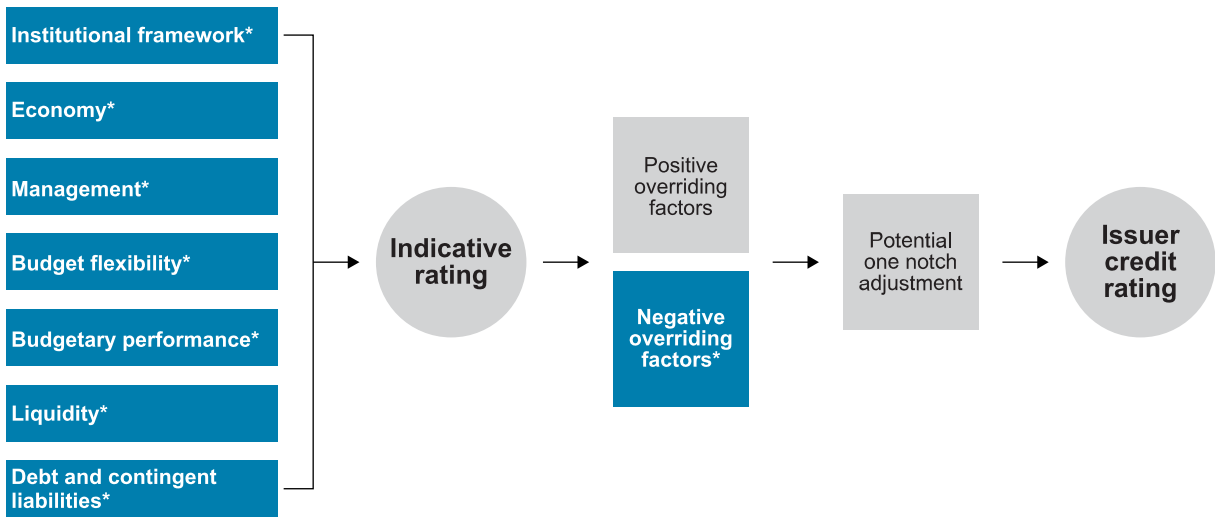
considerations associated with environmental characteristics, social and demographic characteristics, and management, governance, and institutional characteristics outlined in our criteria.

For governments or not-for-profit enterprises, positive or negative ESG credit factors can influence their capacity to serve their population or customers (for example, providing services, a public good, product, or infrastructure), ability to respond to public demands, adaptability to market changes, physical resilience, and overall organizational effectiveness. These, in turn, can impact long-term fiscal sustainability. Because public finance issuers provide essential services and infrastructure, many ESG factors are fundamental to and embedded into our analysis and are often key credit determinants in our U.S. public finance (USPF) ratings.

For example, public spending on social programs intended to reduce dependent populations, expand affordable housing, improve pension funding levels, or build resilient infrastructure can achieve an organization's mission or mandate and enhance its long-term sustainability. However, public resources are limited and spending for these purposes can also result in negative near-term implications on financial operations and performance. Balancing today's tax, expenditure, and infrastructure investment decisions by governments and not-for-profit enterprises with the need to preserve their long-term fiscal and physical resilience is one of the key challenges faced by public-sector entities.

All USPF criteria specifically include unique sector-specific assessments of management and governance factors, as well as any relevant credit exposures to environmental events and any negative externalities associated with social or economic issues that could, in our view, affect creditworthiness. While variations exist within each USPF sector, overall, our body of USPF criteria enables us to incorporate any relevant and material ESG credit factors that we view as critical to evaluating the ability of the obligor to operate and pay debt on time and in full. Examples of where ESG factors appear in USPF criteria are illustrated below for U.S. municipal (water and sewer) utilities and U.S. local governments. Across the various USPF sectors, ESG factors can be generalized as follows:

U.S. Local Government Criteria Framework



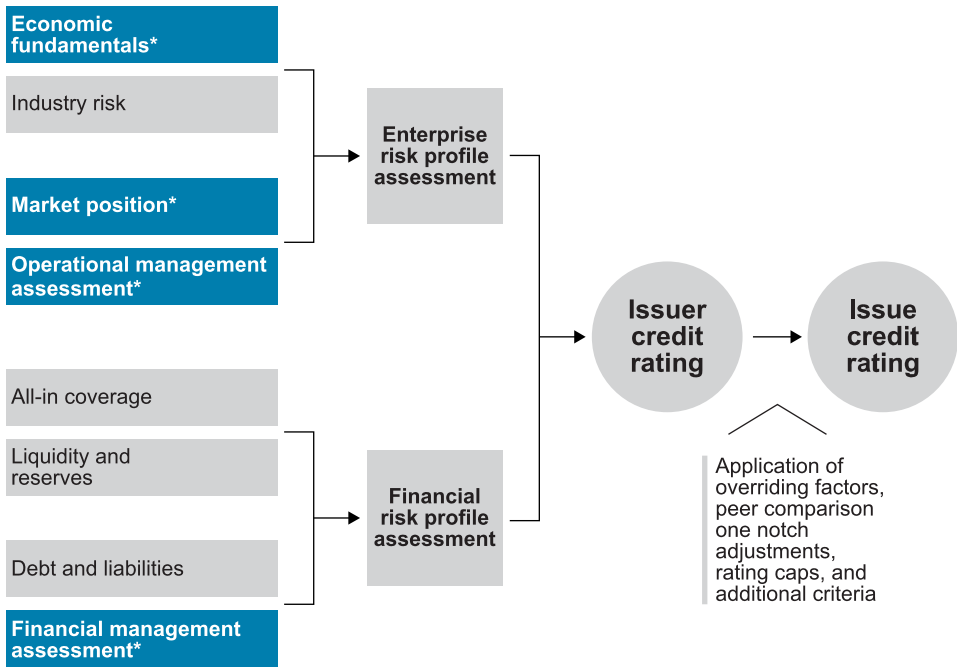
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The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

Environmental: Bound by geography, public entities are on the front lines of extreme weather events, natural phenomena, rising sea levels, and other environmental and climate-related risks. Our opinion of management's long-term planning and preparation, risk assessments, and insurance coverage, as well as entities' market positions, overall resiliency, and operational assessments, are important elements of our criteria and ratings analysis. For municipal water and sewer utilities, environmental stewardship is their core business, and environmental and climate risk impacts to water supply and drought management planning are explicitly referenced in our criteria.

Public power electric utility and wholesale cooperative criteria have long evaluated exposure to environmental regulations, including those associated with transitioning to less carbon-intensive production, the current regulatory climate notwithstanding. Beyond the physical and regulatory manifestations of environmental factors are more indirect risks associated with the impacts on population and demographic trends, land use, employment, and the resultant economic activity essential to support governments and not-for-profit enterprises.

U.S Municipal Utility Criteria Framework



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Social: S&P Global Ratings incorporates social factors to inform its economic and demographic analysis, a key rating input across sectors, as well as the service needs of a given dependent population for general governments or customer base for not-for-profit enterprises. We evaluate per capita income, gross domestic product, household income, and other measures of wealth and income equality that affect changes in demand for services or enrollment, employment, location, and economic activity which, in turn, influences financial performance. For example, in the U.S. not-for-profit health care sector, revenue and profitability can be constrained by the continued aging of the population who use hospital services at a higher rate relative to the general

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

population, resulting in heightened reliance on the federal Medicare program, which typically offers lower rate increases than commercial payers.

The interplay between income levels and affordability of rates for utility users influences support operations and capital needs, influencing creditworthiness. Enrollment is linked to demographic changes and is a key rating factor for education sectors, including kindergarten-grade 12 public school districts, charter schools, and higher education. Exposure to labor actions, political unrest, and crime rates is also a consideration in our evaluations of economic drivers to financial metrics such as property values, tax rates, and market positions.

Governance: Our criteria explicitly highlight governance across all sectors. We evaluate governance through our view of management policies and practices and the environment in which the public finance entity operates, including the institutional framework and financial management policy, as well as oversight and board structure, corruption, and transparency and disclosure. Additionally, the institutional framework assesses whether there is the potential for any extraordinary support from the state for its local governments under extreme fiscal or other unusual stress, including whether a local government can file for bankruptcy. Strategic positioning, especially for enterprises and other not-for-profits who compete for customers, is a key factor, along with traditional risk management and organizational effectiveness. Our analysis focuses on a qualitative assessment of these issues.

Beyond the policy setting, a key factor we examine is how management teams balance sometimes competing interests between achieving the organization's mission and prudently using public resources or, in the case of a not-for-profit enterprise, producing a self-sustaining operating margin. In addition, we consider management practices, internal controls, and policies, insofar as they are clearly defined and well-structured, important governance indicators given their role in ensuring solid internal controls. This is a feature we consider relevant given the autonomous nature of local governments and nonprofit entities in the U.S., and the corresponding strong link between management and creditworthiness. Overall, we aim to evaluate the ability and willingness of governments and not-for-profit enterprises to take effective and timely action to avert any financial deterioration and ensure their ability to pay debt in full and on time.

Project Finance

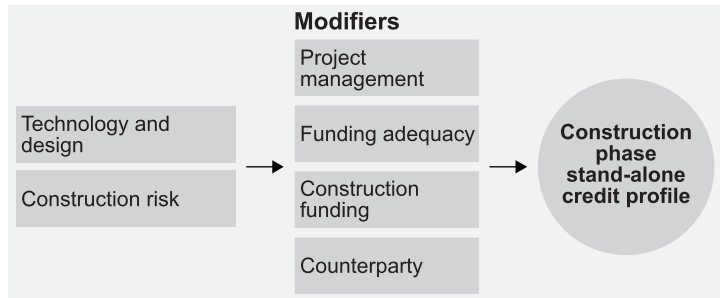
Under our project finance methodology, ESG credit factors will generally flow through in our analysis and assessment of a project's construction and operations profiles (see "Project Finance Operations Methodology," published Sept. 16, 2014, and "Project Finance Construction Methodology," published Nov. 15, 2013). On the construction side, our methodology assesses the likelihood that a project will have adequate funding, so that it can be built and completed on time and within budget; and that the project will be capable of operating as designed and as expected. If ESG credit factors materially affect funding adequacy, timing of completion, or the size of the budget required to complete construction on time, we could modify the construction phase SACP of a project finance entity. Similarly, ESG credit factors may also affect our operations phase SACP assessment and forecasting of revenues, operating and maintenance costs, and capital costs.

ESG credit factors may also affect counterparties on which a project finance transaction depends. In these situations, we would apply the relevant methodology--most often, our corporate or financial institution rating methodology--to the counterparty first, and then determine how any knock-on ESG credit factors would affect the transaction. Counterparties in a typical project finance deal would include: construction counterparties; equipment supplier counterparties; operating and maintenance counterparties, raw material and supplier counterparties; and

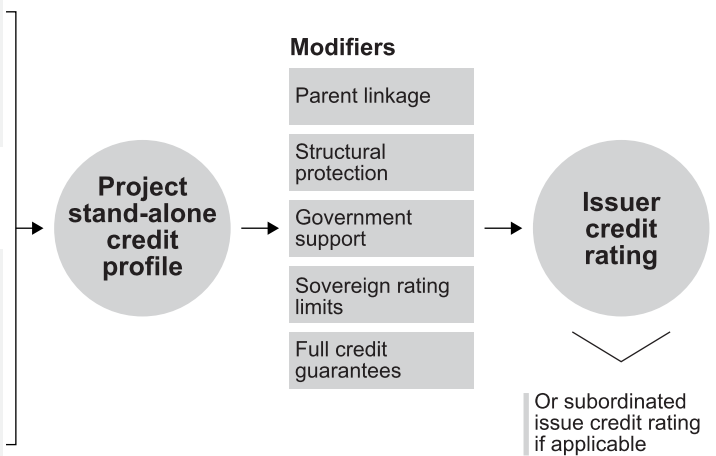
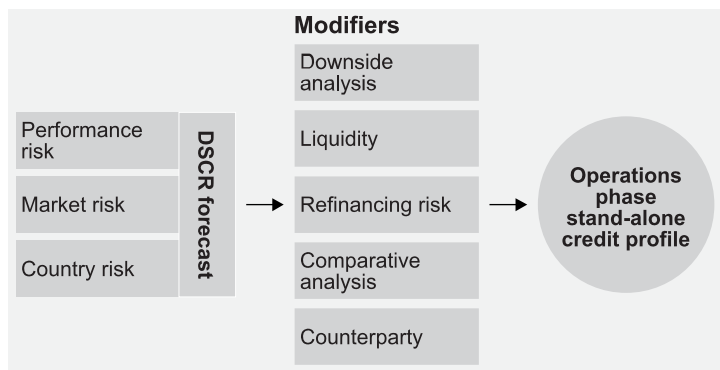
revenue counterparties.

Project Finance Criteria Framework

Construction profile



Operations profile



DSCR--Debt service coverage ratio.

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Structured Finance

Rating actions on structured finance transactions due to ESG credit factors have, so far, been limited. Based on typical transaction structures, we generally do not anticipate ESG credit factors to be key rating drivers in this sector.

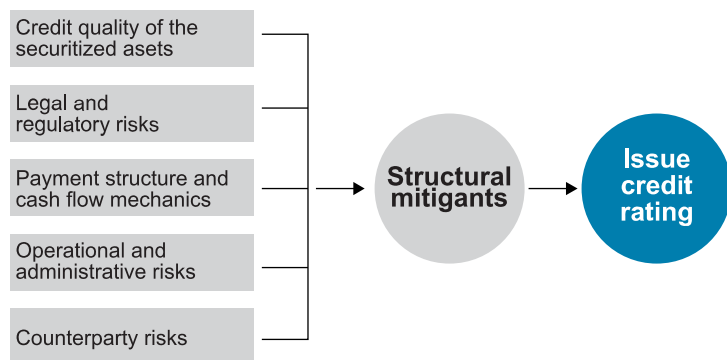
Our structured finance analytical framework incorporates an analysis of the credit quality of the securitized assets and the related operational and administrative risks, legal and regulatory risks, counterparty risks, and payment structure and cash flow mechanics (see "Principles Of Credit Ratings," published Feb. 16, 2011). ESG credit factors have historically been part of these analyses, including ESG-related events, which could prompt a surveillance review. We believe that ESG credit factors could have an impact on the securitized assets or a transaction's operations, but it is likely to be indirect or mitigated by legal and structural features already embedded in typical transactions. For example, the impact of major 2017 hurricanes on rated U.S. residential mortgage-backed security (RMBS) transactions was limited and our related ratings remained unchanged because geographical diversification of the collateral backing the rated transactions limited the total exposure of loans in the affected counties (see "Impact Of Major 2017 Hurricanes On Rated U.S. RMBS: Potential Exposure To Maria Totals \$555 Million," published Oct. 4, 2017).

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

It is possible that assets we consider to have strong ESG credentials can face greater credit risk than assets that are considered to have weaker ESG credentials. For example, while electric vehicles are generally considered beneficial to the environment, their presence in auto lease asset-backed securities transactions could, in our opinion, increase the uncertainty of future residual values. This is due to the limited historical performance data, reliance on fiscal incentives, the strong link to the manufacturers and suppliers, and technological factors for electric vehicles. Given this, we may adjust our assumptions and stresses as we evaluate the related collateral backing the rated security. Another example is how taxing or restricting the use of diesel vehicles in certain European cities could influence used car values. This could negatively influence recovery proceeds or increase residual value losses (see "Credit FAQ: Questions Over Electric Vehicle Residual Values In European Auto ABS," published on May 31, 2019, and "German Diesel Ban Brings Bad Air For Carmakers And Auto ABS," published on Feb. 28, 2018).

Despite the potential risks posed by material ESG credit factors, there may not be a ratings impact if we believe structural features mitigate the risks. Typical mechanics in structured finance transactions that can mitigate risks, including ESG-related risks, include credit support levels to absorb losses, amortization and deleveraging, concentration limits, eligible collateral requirements, shorter tenor of the rated securities relative to longer-term risks, and isolation of assets from the bankruptcy of the originator, among others. As part of our general surveillance practice, we continue to monitor our ratings as risks, including ESG-related risks, emerge and evolve.

How We Consider ESG Credit Factors In Our Structured Finance Analytical Framework



*Material environmental, social, and governance credit factors could impact any of the five key rating factors in our structured finance analytical framework. Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

Related Research

- ESG Industry Report Card: Midstream, June 3, 2019
- ESG Industry Report Card: Chemicals, June 3, 2019
- ESG Industry Report Card: Transportation Infrastructure, June 3, 2019
- ESG Industry Report Card: Real Estate And Homebuilders/Developers, June 3, 2019
- ESG Industry Report Card: Metals And Mining, June 3, 2019
- ESG Industry Report Card: Building Materials And Engineering And Construction, June 3, 2019

The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis

- ESG Industry Report Card: Oil And Gas, June 3, 2019
- ESG Industry Report Card: Capital Goods, June 3, 2019
- ESG Industry Report Card: Forest And Paper Products, June 3, 2019
- ESG Industry Report Card: Leisure, May 21, 2019
- ESG Industry Report Card: Retail, May 21, 2019
- ESG Industry Report Card: Health Care, May 21, 2019
- ESG Industry Report Card: Consumer Products And Agribusiness, May 21, 2019
- ESG Industry Report Card: Technology, May 21, 2019
- ESG Industry Report Card: Media And Entertainment, May 21, 2019
- ESG Industry Report Card: Telecoms, May 21, 2019
- ESG Industry Report Card: Power Generation, May 13, 2019
- ESG Industry Report Card: Regulated Utilities Networks, May 13, 2019
- ESG Industry Report Card: Autos And Auto Parts, May 13, 2019
- ESG Industry Report Card: Transportation, Aerospace, And Defense, May 13, 2019
- S&P Global Ratings Introduces ESG Industry Report Cards For Corporate And Infrastructure Sectors, May 13, 2019
- When U.S. Public Finance Ratings Change, ESG Factors Are Often The Reason, March 28, 2019
- How Management & Governance Risks And Opportunities Factor Into Global Corporate Ratings, Nov. 7, 2018
- Can Multilateral Lending Institutions Support Rising Demand In The Green And Social Bond Markets?, Oct. 29, 2018
- How Environmental, Social, And Governance Factors Help Shape The Ratings On Governments, Insurers, And Financial Institutions, Oct. 23, 2018
- Through The ESG Lens: How Environmental, Social, And Governance Factors Are Incorporated Into U.S. Public Finance Ratings, Oct. 10, 2018
- How Social Risks And Opportunities Factor Into Global Corporate Ratings, April 11, 2018
- How Our U.S. Local Government Criteria Weather Climate Risk, March 20, 2018
- Credit FAQ: How Does S&P Global Ratings Incorporate Environmental, Social, And Governance Risks Into Its Ratings Analysis, Nov. 21, 2017
- How Environmental And Climate Risks And Opportunities Factor Into Global Corporate Ratings, Nov. 9, 2017
- Credit FAQ: Understanding Climate Change Risk And U.S. Municipal Ratings, Oct. 17, 2017
- Green Bonds Are Increasingly Expanding France's Public Sector Investor Base, Sept. 26, 2017

Appendix

What are credit ratings?

An S&P Global Ratings issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, which assesses the obligor's capacity and willingness to meet its financial commitments in full and on time. Issuer credit ratings can be either long-term or short-term. We also assign issue credit ratings to certain financial obligations of obligors.

Issuer ratings can have outlooks, which assess the potential direction of a long-term rating over the intermediate term (typically six months to two years). In determining an outlook, we consider potential changes in business conditions, including regulatory or public policy changes that could relate to ESG credit factors. An outlook is not necessarily a precursor of a rating change or a CreditWatch placement. A CreditWatch listing on a rating signifies a potential short-term change in the rating. Ratings may be placed on CreditWatch when an unexpected event occurs, such as an extreme weather event that may result in significant costs and losses, or when a deviation from an expected performance trend has occurred or is expected, and when additional information is needed to evaluate the current rating.

Among the many types of credit factors that can influence credit ratings are a subset that we will refer to as ESG credit factors. The credit factors that can influence our opinions of creditworthiness and that we may incorporate into each rating are described in our criteria for each sector and asset class. We also disclose key rating drivers in our published research. Credit ratings incorporate many other factors that in our opinion may influence the obligor's creditworthiness, such as the obligor's industry and business model, the diversification and relative stability of an obligor's ongoing revenue streams, historic and prospective profitability and earnings, cash flows and liquidity, and the size and maturity of its financial commitments, which include interest and debt principal repayments.

What are ESG credit factors?

We define an ESG credit factor as an environmental, social, or governance factor that influences the capacity and willingness of an obligor to meet its financial commitments. The influence could be reflected through a change in the size and relative stability of an obligor's current or projected revenue base, profitability or earnings, cash flows or liquidity, or the size and maturity of its financial commitments, which is sufficiently material to influence our view of the obligor's creditworthiness. The "tipping point" for a change that leads to a rating or outlook change or a CreditWatch listing may be influenced by the amount of headroom, if any, within the ratings on the obligor. This headroom provides potential capacity for a change in some of the credit factors without the rating or outlook changing. Headroom can change over time.

If ESG credit factors are, in our opinion, sufficiently material to influence an obligor's creditworthiness through its capacity and willingness to meet financial commitments, then the rating would reflect these factors, as appropriate. Precisely how and where the rating incorporates the ESG credit factors depends on the analysis of the ratings committee, through the application of the relevant criteria.

This report does not constitute a rating action.

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