Through The ESG Lens: How Environmental, Social, And Governance Factors Are Incorporated Into U.S. Public Finance Ratings

October 10, 2018

PRIMARY CREDIT ANALYST

Lisa R Schroeer
Charlottesville
(434) 529-2862
lisa.schroeer
@spglobal.com

SECONDARY CONTACTS

Kurt E Forsgren
Boston
(1) 617-530-8308
kurt.forsgren
@spglobal.com

Theodore A Chapman
Dallas
(1) 214-871-1401
theodore.chapman
@spglobal.com

Gabriel J Petek, CFA
San Francisco
(1) 415-371-5042
gabriel.petek
@spglobal.com

S&P Global Ratings continues to provide transparency on how it incorporates Environmental, Social, and Governance (ESG) factors into its credit rating analysis.

Key Takeaways

- ESG factors can and do affect debt issuers' cash flows and likelihood of default, and thus are important aspects of our evaluation of credit quality across public finance.
- S&P Global Ratings has been incorporating ESG risks and opportunities into the credit ratings of public finance entities with many factors embedded across our sector-based criteria.
- Challenges remain with respect to data and disclosure practices. However, we anticipate that over time, as the market evolves, disclosure from borrowers will converge and increase transparency on ESG factors.
- ESG analysis will increasingly require a qualitative view of an entity's capacity to anticipate a variety of long-term plausible disruptions to their credit fundamentals as well as an assessment of management's awareness and adaptive capacity to preserve their financial and organizational resiliency.

Such high-profile S&P Global Ratings credits as Puerto Rico, Detroit, Mich., Galveston, Texas, and Michigan State University signal the strong linkage between ESG factors and their effects on cash flows and institutional borrowers' ability to meet their financial and debt obligations. Given that many ESG factors can and do affect debt issuers' cash flows and likelihood of default, they are important elements in our evaluation of credit quality across all ratings and many are embedded in our sector-based criteria. As a signatory to the United Nations Principles for Responsible Investment (UN-PRI) global initiative to promote greater transparency and consistency of ESG factors in the credit rating process, S&P Global Ratings believes it is important to highlight how it incorporate these factors into its public finance credit analysis.

S&P Global Ratings has a long record of incorporating ESG factors into its analysis of public finance entities including U.S. state and local governments, school districts and charter schools, public housing agencies, public utilities, universities and colleges, health care providers and other municipal enterprises.

Challenges remain with respect to data and disclosure, although we anticipate over time, disclosure from obligors will converge to better highlight ESG issues. We also believe ESG analysis of USPF entities will increasingly require a qualitative view of an entity's capacity to anticipate a variety of long-term plausible disruptions to its credit fundamentals, as well as an assessment of management's awareness and adaptive capacity to preserve financial organizational resiliency.

Examples Of ESG Factors

Environmental (E)

Following Hurricane Ike in 2008, S&P Global Ratings lowered its rating on Galveston, Texas, reflecting the loss of taxable property and the effects of the storm on the industrial, shipping, and tourism-based economy. Declines in economic activity and revenues are key contributors to our view of credit strength. If extreme weather events become more frequent and the potential effects of longer term climate change become prominent, the interaction between climate and finances will remain a rating consideration, whether it involves the short-term ability to absorb financial shocks during an acute event or the longer term finances of issuing debt to plan and protect against future ones.

Social (S)

Social factors were a key contributor to the long-term financial decline and overall lower ratings on both Puerto Rico and Detroit where, among other issues, population trends and low incomes could no longer support the combination of operational and debt needs. These demographics exacerbated operational pressures by not only limiting revenue-raising capacity, but also by boosting demand for services.

Governance (G)

Governance was at the forefront of our March 2018 outlook revision to negative from stable for Michigan State University, reflecting our view of risk management issues stemming from state and federal inquiries related to historical Title IX concerns on campus, which resulted in numerous changes to senior leadership. These governance issues led to concerns regarding the potential financial effects of ongoing litigation and demand and enrollment on the university. Both issues are key contributing factors to overall financial performance and creditworthiness.

ESG In U.S. Public Finance

We believe public entities and not-for-profit enterprises possess unique considerations when examining ESG factors, given their role as providers of safety-net social services and essential public goods with sometimes multilayered governance and institutional frameworks, as well as political accountability. For example, public spending for 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, but can also result in negative near-term implications on financial operations and performance. Balancing today's tax, expenditure, and infrastructure investment decisions with the need to preserve long-term fiscal and physical resilience is one of the key challenges faced by public-sector entities.

Local Government, States, Water/Sewer Utility, Public Power, Transportation, Higher Education, k-12 and Charter Schools, Health Care, Housing		
Environmental	**Social**	**Governance**
1. Sea level rise; extreme weather events, inland flooding;	1. Demographics changes and population trends affecting need or demand for government services, not-for-profit enterprise's product or infrastructure	1. Federal/State framework
2. Longer-term changes in climate affecting water supply, agricultural production;	2. Income levels, income inequality, population trends	2. Financial & debt management policies
3. Swings (positive or negative) to demand for a not-for-profit enterprise's product, supply chain disruption, of necessary inputs to production or services	3. Dependent populations	3. Political discourse/harmony
4. Costs or benefits from a transition to newer, more environmentally-beneficial production or user base; environmental regulation	4. Affordability of service provided by enterprises	4. Transparency of policies, information, decision-making
5. Impact of regulations including managing carbon emissions	5. Tax structure, taxing ability	5. Impacts of self-inflicted controversies, corruption & misdealing
6. Economic violations, consent decrees	6. Exposure to labor unrest	6. Board structure/independence from politics/turnover/diversity; Employee recruitment, retention and engagement
	7. Exposure to political unrest/terrorism	7. Risk culture and risk mitigation including cyber security
		8. Acknowledgement of deferred maintenance requirements
		9. Pension and OPEB exposure

Source: S&P Global Ratings.

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, including, for example, population demographics that could, in our view, affect creditworthiness. While slight variations exist within each public finance sector, overall, each criteria enables us to incorporate any 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. In many instances, we incorporate ESG aspects that affect credit quality into our analysis of our credit rating holistically.

Environmental: From Response To Preparation

There is broad variation among USPF sectors regarding how environmental factors such as the effects of climate change and extreme weather are incorporated into our credit analysis. For example, environmental stewardship is the core business for essential waterworks and sanitary sewer utilities, so assessments such as the incorporation of climate risk into water supply and drought management planning are explicitly referenced in our criteria. However, a city or county requires potable water to grow, as a school or hospital does to operate. Therefore, our criteria across sectors are able to incorporate an entity's response to and planning for environmental risks including extreme weather events or longer term climate issues. Beyond water issues, the effects of environmental regulation, sea level rise, and how these and other related risks affect such areas as population and demographic trends, land use, and employment are aspects of long-term planning, market position or operational management assessmentsthat we evaluate.

Our credit ratings do not have a pre-determined "time horizon." The period in question for the rating factors of a given rating is linked to the degree of visibility and certainty for which the available information allows. Thus, one key component to our assessment of environmental risk for public finance is the entity's ability to plan and prepare for longer term issues. The following highlights our more common areas of rating evaluation.

Example Criteria Highlights Across USPF	
E	• Capital budgeting and planning, asset management and mitigation as appropriate • Deferred maintenance • Exposure to environmental regulation, extreme weather events, effects of climate change and sea level rise • Establishing reserves/having sufficient liquidity to be prepared for climate risks and perils • Legal framework for issuing debt: Is there flexibility to issue debt in the event of a climate/weather disaster • Sufficient water supply and compliance with regulatory requirements • When applicable, being responsive to and able to serve any health effects associated with locality (heat in some areas; hurricanes in other areas, diseases, etc.) • Awareness and ability to work with federal framework and insurance for reimbursements • Location of property and risks flood, additionally for housing projects exposure to lead or asbestos

Source: S&P Global Ratings.

Beyond hurricanes or other acute weather events, the table highlights that longer term capital planning and mitigation are key environmental components that factor into ratings. For example, we revised the outlook on Pompano Beach, Fla. (AA/Positive), to positive from stable on Aug. 29, 2018, in part because of the community's disaster planning, along with the management team's efforts to address sustainability, climate change, and sea level rise in its long-term planning efforts, development regulations, and infrastructure improvements.

For acute weather events, we track for credit risks, public finance obligors in potentially affected areas. Our assessment includes their ability to respond, demonstrate financial flexibility, and plan for--and perhaps mitigate against--future disasters.

Rockport, Texas (A+/Negative) is an example of a city downgraded in the aftermath of Hurricane Harvey, to 'A+' with a negative outlook from 'AA'. The downgrade reflected our view of potential tax-base deterioration, revenue declines, and Rockport's uncertainty with regard to its budgetary performance and flexibility following the hurricane.

Related research

- How Our U.S. Local Government Criteria Weather Climate Risk, March 20, 2018
- Understanding Climate Change Risk And U.S. Municipal Ratings, Oct 17, 2017
- Hurricane Watch: Monitoring The Financial Impact On Governments In Florence's Path, Sept 14, 2018
- Hurricane Watch Update: Triage Of Anticipated Impact For Local Governments, Utilities, And Public Power Systems, Sept. 25, 2018

Social: From Demographics To Services

S&P Global Ratings incorporates social factors to inform its economic analysis, which are key rating factors across sectors. This analysis provides insight into service needs of a given population or customer base, and also highlights areas of future risk. For USPF, rated entities are overwhelmingly made up of obligors that exist for providing basic social and public goods, such as infrastructure.

USPF criteria incorporate demographic data, such as per capita income, measures of wealth and income equality, employment, location, and economic activity and the effects those may have on finances.

Example Criteria Highlights Across USPF

S	• Income levels, income inequality, population trends, age, dependent population • Affordability of service provided by enterprises, subsidizing lower income customers within rate structure and degree of financial support or subsidization from other levels of government • Budgetary flexibility, through tax structure or willingness/ability to raise taxes • Exposure to labor or political unrest • Housing Affordability • Mitigation of negative externalities associated with public infrastructure and enterprises

Source: S&P Global Ratings.

In the U.S. not-for-profit health care sector, an example of incorporating a social factor is looking at how revenue and profitability are generally being constrained by the continued aging of the population because older people use hospital services at a higher rate relative to the general population, resulting in heightened reliance on the federal Medicare program. Medicare is a payer that typically offers slimmer rate increases than commercial payers (such as private insurers) and makes reimbursements to hospitals at levels that are usually below commercial rates.

Another example of a social factor within USPF criteria involves water and sewer utilities. We assess the affordability of rates for utility users to support operations and capital needs. On the negative side, we can see operations and thus ratings negatively affected when rate hikes are delayed or avoided due to payer affordability constraints. Slimmer margins or delayed capital projects can have a negative effect on ratings. However, when we feel that the utility has sufficient capacity to raise rates within the context of the service area's income and poverty levels, we view this as credit strength.

Given the affordability of rates is a key rating component, there are many examples where this factor has affected a rating. Just one recent example that highlights the importance of rate affordability is in Omaha, Neb. Our recent report highlights that the ability to afford the needed rate hikes to support a large capital plan was a contributing factor in affirming our current rating. Our analysis showed that the system is anticipated to have significant capital needs to address its combined sewer overflow program and that rate increases will be necessary to cover costs. An assessment of affordability factored into our overall opinion that the utility had sufficient capacity to absorb the rate increases through the current projected hikes and supported the current rating, despite the significant capital needs.

Related research

- Diagnosing Distress in US local Governments, Feb 12, 2018
- U.S. Not-For-Profit Health Care Sector 2018 Outlook: Balance Sheet Strength Drives Stable

Outlook Despite Expectations That Operations Will Weaken, Jan. 11, 2018

- Affordability As A Component Of U.S. Water And Sewer Utility Ratings, Jan, 19, 2016
- Credit FAQ: How Issuer Credit Ratings Are Determined for Community Development Financial Institutions, Sept. 20, 2017

Governance: From Management Practices To Data Transparency And Sufficiency

Governance is explicitly highlighted across all sectors and evaluated through our view of management policies and practices and the environment in which the public finance entity operates, including the institutional framework, Financial Management Policy (FMA), operational assessments, and management and governance analyses across enterprise sectors. When evaluating governance, we consider the predictability of polices and policy-making, as well as accountability and transparency. We consider the transparency of both the policies and practices of the governing bodies as well as the transparency of financial data. 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 involves 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. 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.

The following highlights some of our more common areas of evaluation.

Example Criteria Highlights Across USPF	
G	• Institutional& Fiscal policy framework: The legal and political framework within which a government operates • FMA, financial & debt management policies: Policies and practice by the operating management team intended to provide oversight to the financial performance and debt issuances • Management and governance: Strategic positioning, risk management including climate, cyber, social and environmental, organizational effectiveness • Transparency of financial data, whether generally accepted accounting principles are applied • Operational Management Assessment (OMA) • Controversies, corruption & misdealings • Funding of pension/OPEB & deferred maintenance • Willingness to support debt obligations

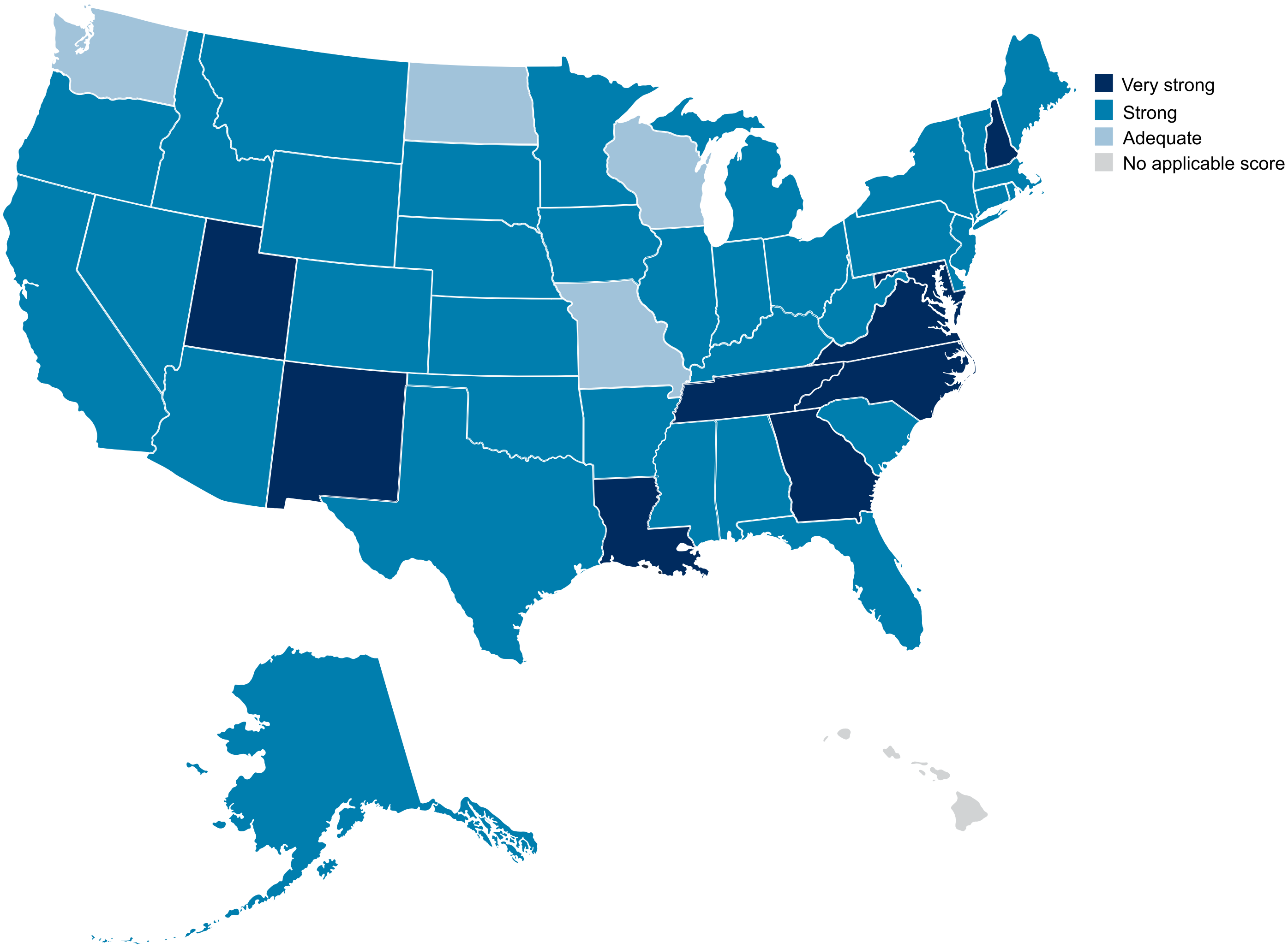
Source: S&P Global Ratings.

There are many examples from our ratings' analysis where changes in management policies or risk management have caused rating changes or outlook revisions.

Using a broader perspective on the importance of governance, we can look at the U.S. not-for-profit health care sector as an example. We view the role of governance as critical to successfully navigating the changing landscape in that sector. To succeed financially, our analysis highlights the need for management teams to adapt to the changes, including new competitors and a risk that core inpatient business is becoming commoditized. We believe these issues require more specialized management skills and this aspect of governance issue is factored into ratings through an assessment of management.

Additionally, below is an example of our local government assessment of our institutional framework, which assess the legal and practical relationship between the state and its local governments which factors into all of our local government ratings. When looking at municipal government IF scores, in general, these assessments tend to show a governance framework of strong predictability for local governments to forecast revenues and expenditures without significant changes from the state level, an ability to support its expenditures without high levels of unfunded mandates from state government, and provide transparency and accountability of financial information. Additionally, the institutional framework assesses whether there is any extraordinary support from the state of its local governments under extreme fiscal or other unusual stress, including whether a local government can file for bankruptcy.

Institutional Framework Scores For Municipalities



Represents the score for the municipal government with the largest grouping of credits. See table 4 for additional scores. Source: S&P Global Ratings.

Related research

- 2018 Update Of Institutional Framework For U.S. Local Governments, Oct. 2, 2018
- The Top 10 Management Characteristics Of Highly Rated State And Local Borrowers, May 22, 2017
- Shifting Competition Leads U.S. Not-For-Profit Health Care Organizations To Accelerate New (And Old) Strategies, May 14, 2018
- When Analyzing Municipal Utility Credit Quality, Strong Management Is Often An Asset, Feb. 20, 2018

Remaining Challenges With Disclosure: From E, S, To G

We continue to monitor the effects of these ESG factors and our view will evolve as new information becomes available, or as issuer fundamentals change. We believe consistent disclosure will be a key component to supporting the continued evaluation of these issues within public finance.

Disclosure has become an increasing focus in this market. On Oct. 5, 2018, two law professors petitioned the SEC to request further clarity on ESG disclosure, citing transparency needs for the market. Most notably, in late June 2017, a Task Force on Climate-Related Financial Disclosures of the Financial Stability Board released its final report with 11 recommendations for all organizations--including public-sector organizations--to improve transparency of climate-related risks with a focus on governance, strategy, risk management, and identification of specific metrics and targets. While the U.S. municipal market might adopt improved climate disclosure standards voluntarily, we have observed that government and not-for-profit enterprises often await formal guidance, accounting standards, or guidelines for financial reporting or final requirements as determined by regulators. S&P Global Ratings has been a vocal proponent of improving disclosure, recognizing that the availability and quality of information in this area at the state, local, and regional levels might be limited now but is improving.

However, it will take more than just availability of historical metrics and models to provide context to forward-looking analysis. We believe ESG analysis will increasingly require a qualitative view of an entity's capacity to anticipate a variety of long-term plausible disruptions to its credit fundamentals, as well as an assessment of management's awareness and adaptive capacity to preserve financial and organizational resiliency.

Related research

- How Social Risks And Opportunities Factor Into Global Corporate Ratings, April 11, 2018
- Sovereign Postcard: ESG And Sovereign Ratings, Feb. 7, 2018
- Credit FAQ: How Does S&P Global Ratings Incorporate Environmental, Social, And Governance Risks Into Its Ratings Analysis, Nov. 21, 2017
- Credit FAQ: How The Recommendations Of The Task Force On Climate-Related Financial Disclosures May Figure Into Our Ratings, Aug. 16, 2017
- ESG Risks In Corporate Credit Ratings--An Overview, Nov. 16, 2015

This report does not constitute a rating action.