S&P Global Ratings

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Reimagining Accounting To Measure Climate Change Risks

December 4, 2020

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Key Takeaways

- Greater balance-sheet recognition of actual and potential climate-related liabilities would be a positive step and could be applied under existing accounting standards. This would enable users of financial statements to shift qualitative measures of climate exposures to more quantitative assessments.
- Applying incremental changes to today's accounting practices would contribute not only to increased transparency around climate-related legal risks, but would also enhance visibility of any capital expenditure (capex) needed to adapt to, or mitigate, future climate risks and the potential effects of factors such as consumer preferences and carbon taxes on demand, revenues, and operating margins.
- S&P Global Ratings also supports certain new and more ambitious changes to accounting regimes that would incorporate a wider view of each reporting company's sustainability position.

Carbon emissions intensity, and their absolute level, must reduce significantly over the next few decades if the most dramatic climate-change scenarios--and the associated social and economic costs--are to be mitigated.

Given this backdrop, it follows that accounting--the means by which companies measure and record financial performance, position, and cash flow generation--needs to be similarly reimagined. Incremental changes can happen alongside the more radical. We believe accounting standards can and should be improved to facilitate the provision of more historic and forward-looking sustainability and climate-related data and information.

Rigorous Application Of Existing IFRS Would Help Quantify Risk

Under IAS 37, an entity must recognise a provision if, and only if "a present obligation (legal or constructive) has arisen as a result of a past event (the obligating event), payment is probable ('more likely than not'), and the amount can be estimated reliably". [IAS 37.14]. If the identified present obligation would only result in "possible" cash outflows, no provision would be recognised but a contingent liability needs to be disclosed. The disclosure requirement falls away when the

payment becomes even less likely or "remote". While the words are slightly different, the distinction between provisions and contingent liabilities is largely equivalent under US GAAP (ASC 410, 420, and 450).

With the current strict provision-recognition criteria requiring future cash flows to be "probable" or "more likely than not", most climate-related risks do not result in on-balance-sheet accrual. Today, both climate physical and transition risks tend to fail this test due to the unpredictability of the timing and quantum of their impact.

Indeed, a significant number of organisations conclude that these future cash flows are not even possible, but remote, and therefore the majority of issuers do not even disclose climate-risk-related contingent liabilities. We believe that this contrasts with many organisations in the oil and gas, transportation, and chemicals sectors making public commitments to achieve net-zero, or significantly reduce their greenhouse gas (GHG) emissions, within a timeframe that suggests at least some cash outflows are possible or even probable today.

The provision of more comparable, reliable, relevant, and accessible accounting information on entity-specific matters relating to climate change, as well as forward-looking information on future climate related factors could enhance the analysis of creditworthiness. Credit analysis could also be facilitated by more rigorous contingent liability disclosures. More detailed, risk-based, comparable information would contribute to better informed estimates of future liabilities, additional capex requirements, or other transition costs. Increased visibility of such risks and their financial impact would advance credit risk analysis even if issuers believe that the likelihood of any payment today is remote.

Incremental Changes Will Help

Changing the probability threshold for a liability

Under current accounting rules, a company can keep off its balance sheet a liability that could in theory be so large, if it crystallised, as to significantly weaken the company. Climate-related litigation is an example. Yet this is how accounting works for "provisions"--liabilities of uncertain size and likelihood.

The problem is especially acute in the U.S., where the probability threshold for recognizing a provision is higher than for IFRS. When applying US GAAP, an entity recognises a loss contingency if it is "probable" that a liability has been incurred and that amount can be reasonably estimated. For entities defending lawsuits, "probable" is interpreted to include only those "relatively few clear cases" in which "the prospects of the claimant not succeeding are judged to be extremely doubtful and the prospects for success by the client in its defence are judged to be slight." This means that in the U.S., a company's management, having consulted with legal counsel, could theoretically keep off balance sheet a multi-billion dollar liability that would render the entity insolvent, even if management concluded that a payment of that scale is more likely than not to be required.

Under IFRS, the threshold for "probable" is defined as "more likely that not", meaning that a provision must be recognized on balance sheet if the likelihood of payment is greater than 50%. Although this means that in theory IFRS issuers on average tend to provide more meaningful risk-based contingent liability disclosures than US GAAP issuers, it can still be problematic: an extremely large potential liability can remain off balance sheet when the assessed likelihood of payment is just under 50%.

As a result, climate change transition risk-related liabilities may not be made in a sufficiently timely manner and might only appear on balance sheet when very close to crystallization. We believe that such important potential liabilities would be better understood, more prominent, and easier to forecast if the provision recognition criteria were set at a lower threshold than "probable" crystallization of the liability. Earlier liability recognition would also provide useful and relevant information to stakeholders and could enrich dialogue about, and the understanding of, climate risk management and mitigation plans, even if cash outflows were not probable. We believe the probability factor should be built into the measurement of the liability, as is the case with existing fair value accounting.

Provisions: discount rates

IAS 37 requires a risk-free pre-tax rate, but also allows an increase in the discount rate for risk associated with a liability if the risk is reflected in future cash-flow projections. In our experience, this is quite common because building risk into forecast cash flows can be a significant challenge. The process of determining such a change in the applicable discount rate hinges on judgment, and may lead to big variances in discount rates, including some very generously high discount rates. We would prefer the risk-free rate be used, with any risk reflected in future cash flow projections. This in turn would contribute to better comparability (and be closer to the requirements of IAS 19).

Impairment and stranded assets

Generally, the disclosure of tangible and intangible asset impairments does not affect our rating on an entity because such write-downs generally follow weaker performance data, which we have already reflected in our historical and forecast credit analysis. Write-downs themselves are non-cash and therefore do not impact the cash-flow-related financial metrics that typically drive our assessment of an entity's ability to repay debt.

However, impairments lower overall profitability and equity, and therefore increase gearing. Measured as debt to equity, gearing is a widely used ratio for setting financial policy and therefore material changes in it may result in directional change in management's behavior. Changes can include loosening financial policy, altering dividend payments, or in certain cases curtailing capex. These strategic management shifts can affect an entity's creditworthiness in the longer term.

If management believes that the probability of cash outflows--due to, for example, future changes in climate-related regulation--is remote, it is unlikely to factor such flows into the relevant forecasts underpinning impairment assessments. This may contribute to inflating asset values today, but also obscure the existence of stranded assets in the near future.

Pollutant-pricing mechanisms (PPMs)

With the EU proposing net-zero GHG emissions by 2050, and political consensus growing for pollutant pricing in general, we think the International Accounting Standards Board and the Financial Accounting Standards Board should prioritize developing a new standard to address this area of accounting. Following the introduction and withdrawal of IFRIC 3: Emission rights, we observed diversity, in practice, regarding the recognition and measurement of rights and obligations associated with PPMs. The effect on today's financial statements may not be material in all cases. However, as the use of PPMs increases, the information will become more relevant.

We also believe that greater disclosure of forward-looking information-- explaining how potential future carbon-pricing risks affect an issuer's income and cash flow statements--could notably

enhance the understanding of credit-relevant risks and, in turn, their likely effect on the entity's ability to repay debt.

Bolder Could Be Even Better

We believe a bolder reimagining of financial reporting is needed for capital markets to be driven by sustainability considerations.

Harvard Business School has recently developed a concept called Impact Weighted Accounts. These are line items in a set of financial statements (including the income statement, balance sheet, and statement of cash flows) that supplement the standard picture of a company's financial health and performance with additional information about how the company is affecting employees, customers, the environment, and wider society.

London-based initiative, Rethinking Capital, is developing a model based on the deductive theory for normative accounting. It believes incremental reporting is needed to show the fair view of intangible assets with both positive and negative effects on stakeholders, including the environment. Deductive theory is founded on the observation that an entity is subject to social norms that can change outside of its control and that the entity's decisions with respect to those norms should be represented in its accounting. It aims for a fair and comparable view of the impact of those decisions on the entity's intangible assets, intangible liabilities, and positive and negative effects on the entity's stakeholders.

All companies affect--in good ways and bad--people and the planet. Yet many externalities are not currently measured comparably or comprehensively. While these factors remain unmeasured and not disclosed, sustainability considerations are more likely to be absent from, or a lower priority in, the decision-making processes of investors and other market participants. The new initiatives' aspiration is for financial statements to deliver an integrated view of performance that allows investors and managers to make informed decisions based not just on a company's private profits but on the broader impact a company has on society and the environment.

S&P Global Ratings supports financial accounting initiatives that would lead to the provision of more comparable, reliable, relevant, and accessible historic and forward-looking information on entity-specific matters relating to climate change.

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