SPECIAL SECTION

Evaluating the SEC's Proposed Carbon Emissions Disclosure Rule

Introduction

BY IKE BRANNON

he Securities and Exchange Commission (SEC) recently proposed that publicly traded firms be required to disclose their carbon emissions and those of their suppliers. The proposal is problematic on several levels. If implemented, it would increase the cost of doing business without providing a discernible benefit for investors.

The SEC's estimated compliance costs for the proposed rule are significant across all industries, but the requirement would doubtless be more complicated—politically and practically—for companies involved in fossil fuels in some way. After all, the intent of the rule is to advance President Biden's agenda item of reducing carbon emissions and slowing climate change. Given that Congress has made it impossible to advance major legislation to do so, the administration is relying on the various agencies to pursue this policy.

In the following essays, several economists comment on the rule. They offer numerous concerns.

For starters, the SEC's estimated economic cost of the rule is likely well below the true cost. Matthew Winden looks at the effects the rule would have on the broader economy, going beyond the SEC's aggregation of the cumulative compliance costs to public corporations.

Indraneel Chakraborty writes that the insertion of additional and somewhat superfluous information in a company's financial statement reduces the value of the statement and makes it more difficult for investors to discover and parse information relevant to a company's long-run profitability. His research shows that when we reduce the usefulness of the information on financial

statements, firms increasingly turn to banks for financing and pay more for capital.

Robert Jennings notes that the academic literature suggests the market already accounts for risk related to carbon emissions. He argues that the real risk exposure is legal and not operational.

Finally, S.P. Kothari and Craig Lewis argue that having the SEC dictate what belongs in financial statements subverts the independent accounting standard-setting process. Heretofore, statements have been concerned with providing succinct and relevant financial information to investors.

The proposed rule is unlikely to improve the environment and could slow economic growth. That, in turn, would diminish the retirement wealth of millions of middle-class Americans with 401(k) plans. Voters might overlook that in a bull market, but not in today's economic environment.

Costs Beyond the Disclosing Firms

BY MATTHEW WINDEN

he Securities and Exchange Commission's new carbon emissions disclosure rule would lead to substantial economy-wide costs exceeding the agency's own estimates, eclipsing the ostensible benefits investors would get from such a rule. The reason the SEC underestimates the costs is because it focused on direct compliance costs of firms and ignored other costs that the rule would impose elsewhere in the economy. Among those are reductions in aggregate economic activity indi-

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The SEC estimates that public companies would incur direct costs of \$6.37 billion to comply with the proposed rule. That far exceeds the estimated \$3.85 billion in compliance costs for *all current SEC regulations*. However, the aggregate effect of the proposed rule on the entire U.S. economy goes beyond the direct compliance costs to the affected firms.

To estimate the total cost (both direct and indirect), I used the Regional Economic Models Inc. (REMI) model of the U.S. economy. REMI is a dynamic, computable general equilibrium model of the interlinkages of components of the economy (e.g., aggregate demand for consumer goods and services, investment, government, net international trade, labor and capital demand of companies, demographics and labor supply, interactions between firms and households) at regional and national levels. By entering the direct compliance cost as a regulatory cost increase (a de facto tax) on businesses, REMI can model the ripple effects of the

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compliance rule throughout the broader economy.

I estimated that by the end of the decade, when implementation is complete, the rule will result in approximately \$25 billion per year in forgone output and 200,000 fewer jobs created each year. The effect would be most severe in capital-intensive sectors and sectors with a high relative number of publicly traded companies, such as large industrial firms and the finance sector. (For a more in-depth discussion of my estimate, see "The Unconsidered Costs of the SEC's Climate Disclosure Rule," Social Science Research Network working paper no. 4156825.)

The increased compliance costs as well as their associated ripple effects throughout the supply chain raise U.S. firms' cost of doing business. The intent of the rule is to incentivize firms to mitigate carbon-intensive activities. While this would help to combat climate change, without a corresponding decline in the *demand* for carbon-intensive activities, more carbon-intensive products would be produced either by non-public firms that aren't directly covered by the rule or in countries without such disclosure rules.

Given that carbon emissions are a global pollutant, simply shifting their emissions overseas ultimately does not lead to improvements in climate change outcomes. However, it does reduce domestic economic activity and employment.

The Costs of (Greater) Complexity

BY INDRANEEL CHAKRABORTY

ver the last two decades, publicly traded firms' financial statements have become longer and less readable. Studies show that investors and sophisticated market participants, including analysts and credit rating agencies, struggle to process these complex reports.

The Securities and Exchange Commission, which mandates these reports and what they contain, itself has recognized that their increasing complexity is a problem. For example, the SEC recently revised the rules for the management discussion and analysis section in financial statements so that if the risk factor section exceeds 15 pages, firms must provide a summary of no more than two pages.

Nonetheless, the SEC is now proposing to further increase the complexity of these statements by requiring firms to report the carbon emissions of their operations and their suppliers. Such a rule would degrade the value of financial statements and impose a higher cost of capital on public corporations.

Research has shown that firms take actions to mitigate the costly consequences of financial statement complexity, including issuing voluntary disclosure and increasing expertise within boards of directors. Both are costly, although neither shows up in the SEC's cost–benefit calculus that accompanies the proposed emissions disclosure rule.

The complexity of a financial statement also affects the source and cost of financing. In a recent *Accounting Review* article, my co-authors and I document that higher financial statement complexity correlates with firms' increasing reliance on bank financing. Also, banks ameliorate information frictions using loan contractual terms that depend on the source of the complexity. Ordinary investors are shying away from buying the firms' bonds, and firms are increasingly resorting to borrowing money from banks at a higher cost than if they had issued a bond.

In the context of the proposed carbon disclosure rule, the complexity of the task that firms face in reporting emissions is considerable. For instance, evaluating a firm's own emissions, let alone its suppliers', is far from elementary. It would require the firm—or a consulting firm it hires for the task—to make various modeling assumptions that the SEC will be hard-pressed to specify. If some firms make aggressive assumptions while others make conservative ones, the rule may

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reduce the ability of investors and consumers to differentiate between the firms, which would be an example of the classic game theoretic strategy of signal jamming. In such a case, the inaccuracies likely to be contained in emission disclosures would significantly diminish any value the SEC hopes to pass along to investors. While the SEC insists that its rule will help standardize the *reporting* of emissions caused by public firms, that is altogether different from standardizing how emissions *are estimated* by those firms.

The actual value to investors of the proposed rule remains unclear. If it lowers their ability to process firm-level informa-

The rule may reduce the ability of investors to differentiate between firms that make different assumptions.

tion, then it will increase the cost and change the terms of financing of firms. In turn, these higher capital costs will reduce shareholder returns and employee wages because higher capital costs will diminish investment, productivity growth, and wages. As for any environmental effects of the rule, it is easy to imagine a situation where capital flows *toward* heavy emitters that are artful in their disclosures and away from environmentally conscious firms that disclose earnestly.

Financial statements should serve solely to convey the information needed by investors to make rational decisions about the fiscal health of a company. Requiring the reporting of carbon emissions threatens to make the financial statement an ideological bulletin board, with the costs of doing so borne by investors and workers alike.

READINGS

- "Complexity of Financial Reporting Standards and Accounting Expertise," by Roman Chychyla, Andrew J. Leone, and Miguel Minutti-Meza. *Journal of Accounting and Economics*, 67(1): 226–253 (2019).
- "Financial Statement Complexity and Bank Lending," by Indraneel Chakraborty, Andrew J. Leone, Miguel Minutti-Meza, and Matthew A. Phillips. *Accounting Review* 97(3): 155–178 (2022).
- "Guiding through the Fog. Financial Statement Complexity and Voluntary Disclosure," by Wayne Guay, Delphine Samuels, and Daniel Taylor. *Journal of Accounting and Economics*, 62(2): 234–269 (2016).
- "Measuring Readability in Financial Disclosures," by Tim Loughran and Bill McDonald. *Journal of Finance*, 69(4): 1643–1671 (2014).
- "The Impact of Narrative Disclosure Readability on Bond Ratings and the Cost of Debt," by Samuel B. Bonsall and Brian P. Miller. *Review of Accounting Studies*, 22(2): 608–643 (2017).

Is the Mandate Necessary?

BY ROBERT JENNINGS

he Securities and Exchange Commission's new requirement that publicly traded firms report climate-related risks as part of their shareholder disclosures is ostensibly motivated by the desire for investors to have consistent, comparable, and reliable disclosures so they can better assess risks and make decisions consistent with their risk preferences. Mandating reporting assumes that these climate-related risks are of the same level of importance as financial and operational risks to investors, voluntary reporting is not adequate, and financial asset markets are incapable of addressing climate-related risk.

The academic literature calls each of these assumptions into question.

For instance, in a 2020 *Review of Financial Studies* article, Philipp Krueger, Zacharias Sautner, and Laura Starks conducted what is perhaps the most comprehensive survey of institutional investors' interest in climate-related risk disclosure. Their sampling is deliberately biased toward investors who care about climate risk and are pessimistic about the effect of climate change.

They ask respondents to rank six risks: financial risk, operating risk, governance risk, social risk, climate risk, and other environmental risks. Climate risk and environmental risks rank fifth and sixth, suggesting that these risks are not viewed by even climate-sensitive investors as on par with the more traditional information in mandated disclosures. Likewise, the most common reasons given for considering climate risk—reputation and moral/ethical—have little to do with the typical return—risk assessment entrusted to professional investors.

Several papers suggest that the capital markets already price in climate-related risks. A 2017 *Contemporary Accounting Research* article by Paul Griffin, David Lont, and Estelle Sun gathers information from voluntary disclosers' involvement with the Climate Disclosure Project to model the risk faced by non-disclosers. The authors find that the market discounts equity valuations of the non-disclosers slightly more than that of the disclosers, and that the non-discloser discount is only about 0.5% of market capitalization.

A 2021 *Journal of Financial Economics* article by Patrick Bolton and Marcin Kacperczyk finds that stocks of firms with higher emissions and higher changes in emissions earn higher returns than low-emission firms. They note that this "carbon premium" did not exist in the 1990s.

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In a 2021 Review of Financial Studies article, Emirhan Ilhan, Zacharias Sautner, and Grigory Vilkov find that uncertainty about regulatory climate risk is priced in the option market, with volatilities higher for large carbon-emitting firms. This volatility premium varies with the political environment, suggesting that much of the market's assessment of climate-related risk is legal liability risk versus operational risk.

Academic studies also conclude that the debt market is currently capable of assessing and pricing climate-related risks. A 2019 working paper by Manthos Delis, Kathrin de Greiff, and Steven Ongen finds that, after the 2015 Paris Accords in which most of the world's nations agreed to limit carbon emissions, the interest rate on syndicated loans for fossil fuel industries has been higher than other industries with similar non-climate risks. A 2020 *Journal of Financial Economics* article by Marcus Painter finds that firms located in counties more likely to be affected by climate change pay higher debt underwriting fees and initially sell for higher yields than bonds issued by firms less exposed to climate change. In a 2020 working paper, Lee Seltzer, Laura Starks, and Qifei Zhu find that firms with poor environmental profiles and high carbon footprints receive lower credit ratings and pay higher rates.

Finally, there is evidence that companies have a market incentive to disclose climate-related risks voluntarily. In a 2016 *Journal of Business, Finance and Accounting* article, Andrea Liesen, Frank Figge, Andreas Hoepner, and Dennis Patten find that voluntary disclosure via the Carbon Disclosure Project is value relevant. Firms with complete carbon emissions reporting earn excess returns over those that do not. Thus, in a world where the market rewards voluntary disclosure, it is unclear whether mandatory disclosure is needed.

Conclusion/ There is considerable evidence that the current voluntary principles-based disclosure regime, where companies report climate-related risk if they view it as material, works well and that financial markets can assess climate risks from available information and enforce financial penalties. By relying on the capital markets to incentivize disclosure via demonstrated discounts in market valuations of non-disclosing firms, the SEC can rely on market forces to achieve its disclosure goals.

READINGS

- "An Inconvenient Cost: The Effects of Climate Change on Municipal Bonds," by Marcus Painter. *Journal of Financial Economics* 135(2): 468–482 (2020).
- "Being Stranded with Fossil Fuel Reserves? Climate Policy Risk and the Pricing of Bank Loans," by Manthos Delis, Kathrin de Greiff, and Steven Ongen. Working paper, 2019.
- "Carbon Tail Risk," by Emirhan Ilhan, Zacharias Sautner, and Grigory Vilkov. Review of Financial Studies 34(3): 1540–1571 (2021).
- "Climate Change and Asset Prices: Are Corporate Carbon Disclosure and Performance Priced Appropriately?" by Andrea Liesen, Frank Figge, Andreas Hoepner, and Dennis Patten. *Journal of Business, Finance and Accounting* 44: 35–62 (2016).
- "Climate Regulatory Risk and Corporate Bonds, by Lee Seltzer, Laura Starks, and Qifei Zhu. National Bureau of Economic Research working paper no. 29994, 2020.
- "Do Investors Care about Carbon Risk?" by Patrick Bolton and Marcin Kacper-

czyk. Journal of Financial Economics 142(2): 517-549 (2021).

- "The Importance of Climate Risk for Institutional Investors," by Philipp Krueger, Zacharias Sautner, and Laura Starks. *Review of Financial Studies* 33(3): 1067–1111 (2020).
- "The Relevance to Investors of GHG Emission Disclosure," by Paul Griffin, David Lont, and Estelle Sun. *Contemporary Accounting Research* 34(2): 1265–1297 (2017).

Keep Politics Out of Accounting Standard-Setting

BY S.P. KOTHARI AND CRAIG M. LEWIS

he Securities and Exchange Commission's proposed rule on climate-related disclosures would require several quantitative metrics be incorporated in the notes to firms' financial statements. We are concerned that this proposal disregards the independence of the accounting standard-setting process. It would seriously compromise the integrity of the financial statements that investors rely on to make important investment decisions.

For decades, our financial accounting system has been built on a joint responsibility system whereby an independent, expert, private-sector body produces accounting standards under the SEC's oversight. This structure was deliberately chosen after

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careful consideration and for good reason. While the SEC has authority under the 1933 Securities Act and the 1934 Securities Exchange Act to promulgate accounting standards, private sector standard-setting bodies have historically fulfilled this responsibility. The first of these bodies was the Committee on Accounting Procedure, established in 1939, which was succeeded by the Accounting Principles Board in 1959, and finally by the Financial Accounting Standards Board (FASB) in 1973.

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FASB was formed following a recommendation from the Wheat Committee, chaired by the renowned corporate securities lawyer Francis Wheat and formed in 1971 by the American Institute of Certified Public Accountants. The committee specifically examined whether accounting standards should be set by a private sector body or the government. It concluded that standards should be set by the private sector to protect from political pressures and guard against serving the will of special interest groups instead of investors. The SEC endorsed FASB's creation and announced it would consider the board's standards as having substantial authoritative support, a position the SEC holds to this day.

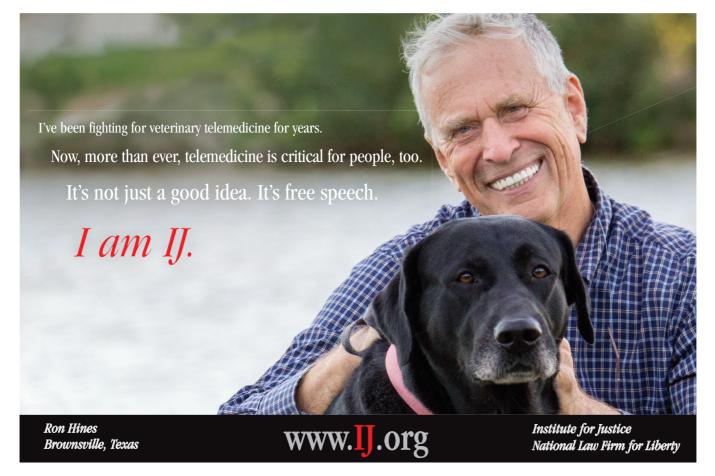
FASB's structure was designed to counteract political and special interest pressures. Board members serve full-time, are appointed by Financial Accounting Foundation trustees to five-year terms, and they come from a variety of backgrounds related to the financial reporting field. Funding for FASB is provided from the private sector, not the government, and primarily comes from accounting support fees paid by public companies.

SEC oversight of FASB is a critical part of the board's structure. Interaction between FASB and the SEC includes the SEC recommending items for FASB's technical agenda. The fact that the SEC has the ultimate authority to promulgate accounting standards and can take on this role at any time ensures continued productive relations between the two entities.

FASB's standard-setting process is held to a strict protocol to ensure only the highest quality standards are adopted. The board's Rules of Procedure set out a deliberative standard-setting process that is designed to seek the input of all stakeholders, including through public roundtables and board deliberation at public meetings. Cost-benefit analysis is integrated throughout the standard-setting process.

Rather than acting pursuant to this system that has worked well for decades, the SEC's climate proposal seeks to subvert FASB's authority. The removal of accounting standard-setting from an independent process creates a precedent that threatens the integrity of the financial statements and their continued usefulness to those who need them to make investment decisions. Many of the concerns the Wheat Committee expressed regarding government accounting standard-setting are implicated by the proposal. Furthermore, the envisioned carbon disclosure standards would not benefit from the extensive due process prescribed by FASB or the expertise that board members bring to the process.

In arguing this, we do not criticize the Biden administration's desire to combat climate change. Rather, we stress that pursuing environmental policy by infringing upon long existing and successful finance policy attempts to address one problem by opening the door to a host of others.



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