

Is Mandated Climate-Related Risk Disclosure Necessary?

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The Securities and Exchange Commission (SEC) has proposed a mandatory reporting of climate-related risks in registered firms' financial statements (with the resulting liability associated with such formal reporting). This proposal is supposedly motivated by the needs of investors and the desire to produce consistent, comparable, and reliable disclosures so that investors can better assess risks and make decisions consistent with their risk preferences. Mandating reporting in the firm's financial filings assumes that these climate-related risks are of the same level of importance as financial and operational risks to investors, that voluntary reporting cannot be useful, and that the financial asset market is currently incapable of addressing climate related risk. In the paragraphs below, I cite papers from the academic literature that call each of these assumptions into question.

In light of the findings of the academic literature I discuss below, I believe that the SEC should withdraw its climate risk reporting proposal. This literature demonstrates that the current system of voluntary disclosure combined with a competitive capital market pricing these risks can work well.

What do Investors Want and Can it be Achieved without a Mandate?

Krueger, Sautner, and Starks (2020) is perhaps the most comprehensive survey of institutional investors' interest in climate-related risk disclosure. Their sampling of institutional investors is deliberately biased toward investors who care about climate risk – 41% of their respondents' assets under management consider climate risk compared to 15% in another, more general, survey (see Amel-Zadeh and Serafeim (2018)). In addition, their respondents are pessimistic about the effect of climate change, with 40% saying that temperatures are going to rise more than two degrees Celsius and 12% saying more than three degrees. Thus, with the IPCC (2018) using a baseline of 1.5 degrees warming, their survey cannot be dismissed as sampling investors who are not concerned with environmental issues.

They ask respondents to rank six risks: financial risk, operating risk, governance risk, social risk, climate risk, and other environmental risks (e.g., pollution). Climate risk and environmental risk rank fifth and sixth respectively 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. Possibly the most interesting finding from the survey found that these investors' beliefs regarding the financial market's under appreciation of the financial implication of these risks. In general, they find that respondent's view financial assets with large climate risks only moderately overvalued relative to the market as a whole. That is, the market is doing a reasonably good job, according to these investors, pricing climate risk into stock prices.

In addition, the SEC's decision to mandate climate-related risk exposure and elevate it to the same level of reporting liability as the more traditional financial and operating risks assumes that they cannot meet their goals of increased consistent, comparable and reliable disclosures on a voluntary basis. Tauringana and Chithambo (2015) calls this assumption into question. They examine the response of 215 members of the FTSE 350 Index traded on the London Stock Exchange to the UK's Department of Environment, Food, and Rural Affairs 2009 voluntary guidance regarding measurement and reporting criteria for reporting greenhouse gas emissions. They find that the voluntary disclosure guidelines had a positive effect on reporting and conclude "...that non-mandatory guidance could increase disclosure as much as do mandatory requirements."

Can the Market Assess Risks without Mandated Disclosure?

Several academic papers suggest that the capital markets are already assessing and pricing climate-related risks. Griffin, Lont, and Sun (2017) gather information from voluntary disclosers' involvement with the Climate Disclosure Project to model the risk faced by non-disclosers. They find that the market discounts equity valuations of the non-disclosers slightly more than that of the disclosers. The non-discloser discount is only about 0.5% of market capitalization.¹ Again, not a particularly material mis-valuation. Bolton and Kacperczyk (2021) find that stocks

¹ Similar findings are reported in Matsumura, Prakash, Vera-Munoz (2014).

with higher emissions and higher changes in emissions earn higher returns (adjusted for all other systematic risks) than low emission firms to compensate for climate risk. This “carbon premium” did not exist in the 1990s. Ilhan, Sautner, and Vilkov (2021) find that uncertainty about regulatory climate risk is priced in the option market with volatilities higher for large GHG emitting firms and that this volatility premium varies with the political environment. The latter finding suggests 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 apparent climate-related risks. Delis, de Greiff, and Ongen (2019) find that the interest rate on syndicated loans for fossil fuel industries is higher than other industries with similar non-climate risks after the Paris Accords. Painter (2020) 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. Seltzer, Starks, and Zhu (2020) 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. Ziegler, Busch, and Hoffmann (2011) form portfolios of disclosures and non-disclosers of Carbon Reduction Measures statements. They find that disclosing European firms and some disclosing US firms outperform those firms that do not disclose during their 2001-2006 sample period. Liesen, Figge, Hoepner and Patten (2016) find that voluntary disclosure via the Carbon Disclosure Project are value relevant. Firms with complete GHG 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

A review of the academic literature provides evidence that the current voluntary principles-based disclosure regime where companies report climate-related risk if they view it as material works well. There is ample empirical evidence that financial markets are able to assess climate risks from available information and enforce financial penalties.

I believe that the SEC could achieve its goals of providing investors with “consistent, comparable, and reliable disclosures” regarding climate-related risks without mandating disclosure at the same level as financial and operating risks, which might simply produce more “boiler-plate” language to minimize legal risk. By providing guidelines to voluntary disclosure metrics and methodologies in the form of an update to the SEC’s 2010 guidelines and 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

Amel-Zadeh and Serafeim, 2018, Why and how investors use ESG information: Evidence from a global survey, *Financial Analyst Journal* 74, 1-17.

Bolton and Kacperczyk, 2021, Do investors care about carbon risk?, *Journal of Financial Economics* 142, 517-549.

Delis, de Greiff and Ongen, 2019, Being stranded with fossil fuel reserves?: Climate policy risk and the pricing of bank loans, available SSRN.

Griffin and Sun, 2013, Going green: Market reaction to CSRnewswire releases, *Journal of Accounting and Public Policy* 32, 93-113.

Griffin, Lont, and Sun, 2017, The relevance to investors of GHG emission disclosure, *Contemporary Accounting Research* 34, 1265-1297.

Ilhan, Sautner and Vilkov, 2021, Carbon tail risk, *Review of Financial Studies* 34, 1540-1571.

IPCC, 2018, Special Report: Global Warming of 1.5° C.

Krueger, Sautner, Starks, 2020, The importance of climate risk for institutional investors, *Review of Financial Studies* 33, 1067-1111.

Liesen, Figge, Hoepner and Patten, 2016, Climate change and asset prices: Are corporate carbon disclosure and performance price appropriately, *Journal of Business, Finance and Accounting* 44, 35-62.

Matsumura, Prakash, Vera-Munoz, 2014, Firm-value effects of carbon emissions and carbon disclosures, *Accounting Review* 89, 695-724.

Painter, 2020, An inconvenient cost: The effects of climate change on municipal bonds, *Journal of Financial Economics* 135, 468-482.

Seltzer, Starks, and Zhu, 2020, Climate regulatory risk and corporate bonds, available from the National Bureau of Economic Research.

Tauringana and Chithambo, 2015, The effect of DEFRA guidance on greenhouse gas disclosure, *The British Accounting Review* 47, 425-444.

Ziegler, Busch, and Hoffmann, 2011, Disclosed corporate responses to climate change and stock performance: An international empirical analysis, *Energy Economics* 33, 1283-1294.