

PRI ACADEMIC NETWORK CONFERENCE HIGHLIGHTS

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HIGHLIGHTS FROM THE ACADEMIC NETWORK CONFERENCE AND PRI IN PERSON 2019

The PRI Academic Research programme aims to engage and inform signatories and responsible investment practitioners with academic research that analyses current thinking and future trends, provides practical recommendations and is thought-provoking.

The Conference Highlights extracts the essentials and distils key findings from research in a clear and concise manner for investment professionals.

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INTRODUCTION

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The changes to capital markets needed to meet the global sustainability objectives must be underpinned by high quality research. The articles here represent a cornerstone of PRI's efforts to foster research and to build bridges between the academic and practitioner communities.

Many of the articles in this edition come from our recent [Academic Network Conference](#) held in Paris. This was our largest conference to date, attended by 58 academics from 46 institutions, alongside 58 investors.

These articles are representative of the latest research insights that will guide our way towards a sustainable future. If you want to see more than we have space for here, all the available papers and presentations from the conference can be accessed [here](#).

The Academic Network conference would not have been such a success without the help of numerous individuals and organizations. This conference was developed in collaboration with the Research Chair on Sustainable Finance and Responsible Investments (Chaire FDIR) at Toulouse School of Economics and École Polytechnique and we also wish to thank our conference partners Barings, Edmond de Rothschild and NN Group, as well as our conference organising committee, for their significant contributions to this event.



Mikael Homanen
Senior Research Analyst

THE PRI RESEARCH AWARDS



Edmond de Rothschild AM has championed academic research into sustainable finance since 2007. We are convinced that helping students and academics work on responsible investing is key to fostering technical progress and measuring improvements made in the field. Both of these are vital to the legitimacy and institutionalisation of sustainable investment.

Our support for the PRI Academic Network awards in September 2019 showcases this long-term vision and commitment.

In the 1950s and 60s, increasing cooperation between practitioners and researchers, as with the Chicago School for example, were essential in helping traditional finance to progress. The current 2010-20 period is another pivotal period for sustainable finance. In 2003, Professor Michael Porter, in a decisive talk at the Copenhagen Business School, asked researchers to embrace sustainable development and corporate social responsibility as well as responsible investment. Edmond de Rothschild AM is committed to taking on this global sustainable challenge over the long term.

We also showcase research work through our SRI Chronicles, a token of our ongoing commitment to the subject. The last three examples of academic research covered “*Sovereign bond spreads and ESG performance*”, “*What does accounting and fiscal wiggle room mean for investors?*” and “*Corporate Purpose and Financial Performance*”. Another of our engagements is intervening in universities and business schools to raise awareness of sustainable finance among tomorrow’s decision-takers in both the public and private sectors.

While some themes like the link between ESG performance and financial returns have long been covered by academic research, others represent new frontiers. For instance these include essential contributions to strategic asset allocation in the future, climate scenario considerations and asset classes which remain underserved by the extra-financial research, such as small and midcap equities, high yield and emerging markets.



From left to right:
Vaishnavi Ravishankar, Martin Skancke, Muhammad Ullah, Andreas G. F. Hoepner, Xiao Y. Zhou, Laura T. Starks, Fabrizio Ferraro and Mikael Homanen.



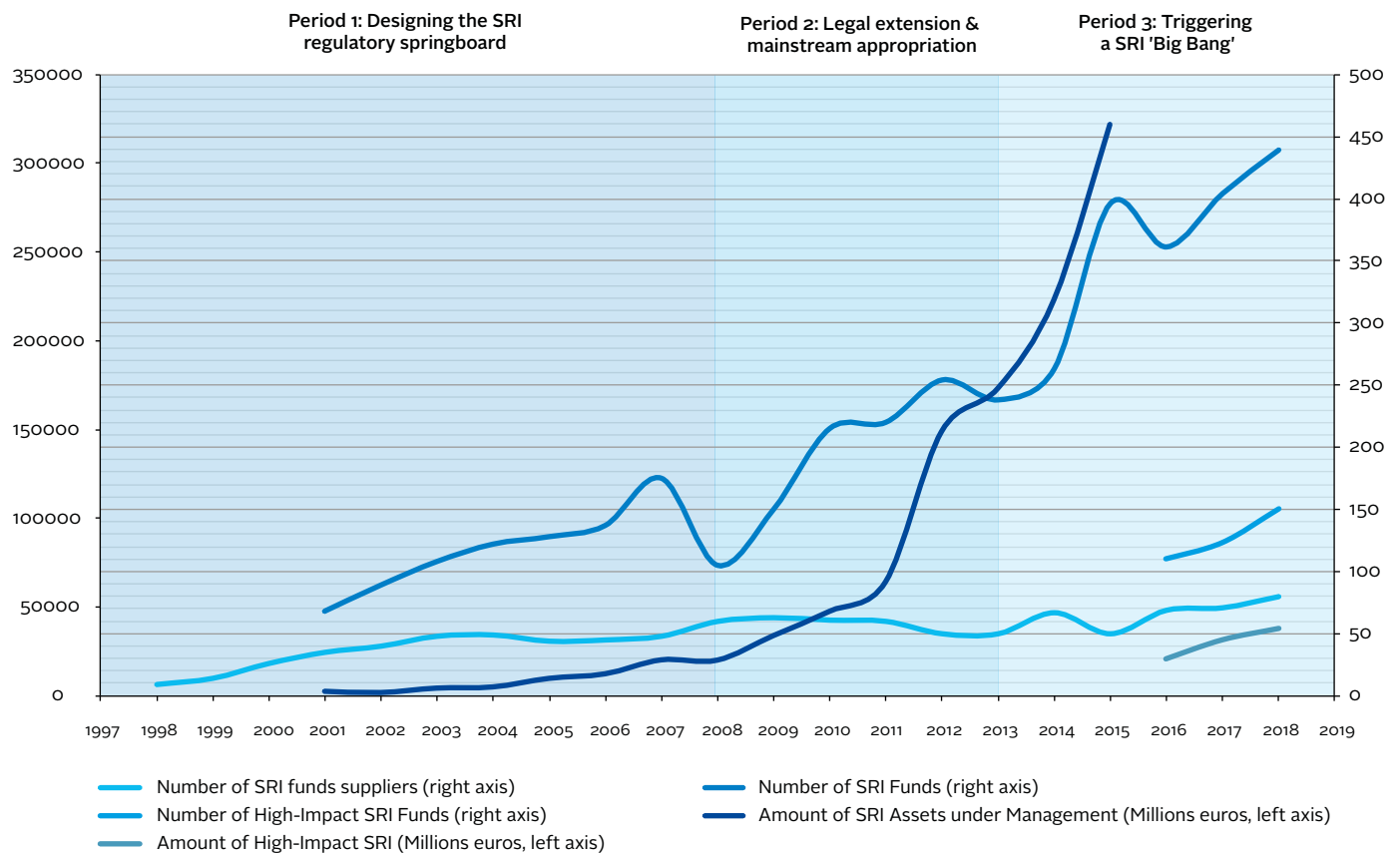
ORCHESTRATING GOVERNMENTAL INTERVENTIONS TO ENHANCE SOCIALLY RESPONSIBLE INVESTMENT: INSIGHTS FROM THE FRENCH EXPERIENCE¹



Stéphanie Giamporcaro*, Nottingham Trent University, University of Cape Town, Jean-Pascal Gond, City, University of London and Niamh O'Sullivan, University of Nottingham

In recent years, France has become one of the most dynamic European markets for socially responsible investment (SRI). Figure 1 shows that in 1997, just 7 asset managers supplied a marginal amount of SRI products; in 2012, however, 53 asset managers (including the largest, Amundi) were actively involved in the management of more than 250 SRI products. Between 2012 and 2017 and, in particular, since 2013, the SRI market in France grew hugely both in terms of AuM subject to ESG criteria (from €200 to €322 billion) and the number of new SRI funds created (from 250 to 439 funds).

Figure 1. Overview of the Development of the French SRI Market (1997-2017)



Source: 1) 1997-2001: Muet et al. (2001) report, and secondary sources for the number of funds; and 2) 2003-2018: 2a) Novethic, (2003 to 2015) – annual survey of SRI in France, and survey on a different perimeters for the AuM. 2b) Since 2016, Novethic produces a more focused survey of “so-called” high-impact SRI funds, i.e. SRI funds that obey the strictest definition and standards of SRI practices. Please note: We do not report the SRI AuM for the years 2016-2018, because Novethic has changed its perimeters of SRI evaluation. We thank Novethic for their support in checking the figures used to build this graphic. This figure is reproduced from Giamporcaro, S., Gond, J.-P., and O’Sullivan (2019), Orchestrating governmental corporate social responsibility interventions through financial markets: The case of French socially responsible investment, forthcoming in the Business Ethics Quarterly.

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Long summary for Conference Highlights of the paper published by Giamporcaro, Gond and O’Sullivan’s (2019) in Business Ethics Quarterly.

¹ This paper provides an overview of the core arguments and findings developed in: Giamporcaro, S., Gond, J.-P., and O’Sullivan (2019), Orchestrating governmental corporate social responsibility interventions through financial markets: The case of French socially responsible investment, forthcoming in the Business Ethics Quarterly. An earlier version of this paper, titled “Governing responsible business conduct through financial markets? The case of French socially responsible investing”, was awarded the Best Qualitative Paper Research Award at the Berlin PRI Academic Network Conference in 2017.

How has the French government contributed to the spectacular growth of sustainable finance in recent years?

What role did policy-making play in stimulating this development of the French SRI market?

Although commentators usually attribute this mainstreaming to aggressive policy-making, and in particular the article 173-VI—which remains to date one of the most ambitious regulations of climate change reporting—our historical and qualitative analysis of the French SRI market (1997-2017) suggests that these recent changes reflect deeper transformations in the modes of governmental CSR interventions, capitalise on a legacy of at least twenty years of regulatory activities, and should be analysed in light of the multiple interactions between governmental interventions.

We present these insights, and then discuss two of their key implications of policy-making: first, that there is no silver bullet in the domain of SRI policy-making as interactions between multiple interventions should be diligently orchestrated to enhance their overall market impact; and second, financial markets have become a key regulatory space for promoting socially responsible behaviour.

REINVENTING GOVERNMENTAL INTERVENTIONS: BLENDING STEERING AND ROWING

Traditionally, studies of regulative capitalism have distinguished two types of governmental interventions: *steering* and *rowing*. Steering relates to “governing by setting the course, monitoring the direction and correcting deviations from the course set” (Crawford, 2006: 453), and is regarded as the prerogative of governmental actors. Rowing interventions, on the other hand, relate to the enterprise, products and service provision, and are usually handled by private actors. Our analysis of governmental interventions in the French SRI market suggests reconsidering this dichotomy as well as the neat sharing of tasks between private actors and governments it presumes.

We found that governments move beyond *steering* through the active mobilization of state-owned organizations—a process that we labelled *delegated rowing*—or the capture of labeling initiatives developed by other actors—which we refer to as *microsteering*, as it corresponds to a form of governmental micro-management

which takes place at low cost, by steering actors through specific devices such as labels.

The creation of a SRI label by the French government offers a case in point of the blending of traditional rowing and steering, and the parallel blurring of private and public roles it involves. In order to create this public SRI label, the government enabled and organized deliberations between private actors, specified the criteria of the label to be implemented by private investors, and defined which private auditors were allowed to audit this label while formally remaining the owner of the label.

CAPITALISING ON PRE-EXISTING AND CO-OCCURRING INTERVENTIONS: LAYERING AND CATALYSING

Our analysis also shows that innovative regulations such as the Article 173-VI do not appear in an institutional and legal vacuum. On the one hand, we identified a mechanism of *layering*, which reflects governmental action within a legacy of CSR regulations. In the French case, there were no



omniscient technocrats with a 20-year regulatory “grand plan”. Rather, successive governmental CSR interventions developed the pieces of a multi-faceted regulatory puzzle and, in so doing, developed the breadth and depth of the French SRI market.

On the other hand, *catalyzing* reflects a more pro-active approach to governmental regulation, as it involves leveraging market actors’ power through the alignment of their interests within a predefined regulatory context. In this regard, catalyzing consisted of French governmental actors adding the last decisive regulatory pieces to the puzzle—through dedicated and targeted interventions—to trigger mainstream acceptance.

The mobilization of actors around the creation of the SRI public label and the drafting of Article 173-VI is a good example of *catalyzing*.

From 2012, the French state looked at how to facilitate the transition to a low carbon economy. Part of this analysis involved looking at what players in the SRI market (asset managers, public asset owners and service providers) had developed.

Article 173-VI was developed and implemented against the background of an ongoing dialogue with investors. In addition, the French state built on previous trade-union and state agencies’ efforts to create a label for SRI products. This all came to fruition at the time of the COP 21 and the launch of the Paris Climate Change Agreement in December 2015, when in the space of just 4 weeks, the French state released 3 ground-breaking bills. These were: the public ecological transition label (10 December, 2015), Article 173-VI (29 December, 2015), and finally the public SRI label (8 January, 2016).

FIRST IMPLICATION: A NEED FOR GOVERNMENTAL CSR INTERVENTIONS “ORCHESTRATION”

A first implication of our analysis is that a government can “orchestrate” its policies to maximize its influence on business. We found that orchestration is relevant to making sense of the regulatory efforts of governments; we can see them orchestrating – in part – through a reliance on intermediary organizations (*delegated rowing*), or the creative capture and shaping of standards or labels (*microsteering*). Although subject to a path-dependency effect, this orchestration work can serve to maximise the impact of its interventions while keeping the costs down as they are delegated to intermediaries.

Furthermore, we found that orchestration can result from a mix of naturally developing and deliberately targeted interventions, while this combination can result in improved outcomes.

Neglecting finance as a “regulatory space” can misrepresent governmental capacities to regulate CSR, given how financial markets weigh on governmental choices and policies

SECOND IMPLICATION: FINANCIAL MARKETS AS A SPACE FOR GOVERNMENTAL CSR INTERVENTIONS

Finally, our analysis brings financial markets back into the scope of governmental studies of CSR by showing how financial markets became a relevant space for governmental CSR interventions, notably through the development of robust national SRI markets that put pressure on investors, as well as their investee companies, to adopt socially responsible behavior. Considering financial markets is crucial given their weight in national domestic policy making and the restrictions that may be imposed on governmental capacities to promote CSR. Neglecting finance as a “regulatory space” can misrepresent governmental capacities to regulate CSR, given how financial markets weigh on governmental choices and policies. Our analysis also shows notably the value of recognizing the importance of crucial yet often neglected categories of financial market intermediaries: state-owned, state-designed, and/or state-regulated banks, pension funds and/or financial intermediaries. In the French case, through delegated rowing, the government has actively reoriented a major state-regulated financial actor – the CDC – which has itself financially supported CSR and SRI rating agencies; and the design of SRI-focused public pension funds has also created important peer pressure for SRI activities in the market.

SHAREHOLDER ACTIVISM AND FIRMS' DISCLOSURE OF THEIR EXPOSURE TO CLIMATE CHANGE RISKS

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Caroline Flammer, Associate Professor, Boston University

This article summarizes the key findings of a research project entitled "[Shareholder Activism and Firms' Voluntary Disclosure of Climate Change Risks](#)," that I have co-authored with Michael Toffel and Kala Viswanathan.

Investors increasingly incorporate the climate risk exposure of their portfolio companies in their decision-making. In fact—and as reflected in the record number of climate-related shareholder proposals submitted to U.S. companies in 2019—shareholders progressively pressure their portfolio companies to disclose and manage their exposure to climate change risks ([Wall Street Journal, 2019](#)).

Yet, it is unclear whether such shareholder pressure is effective—that is, are shareholders successful in inducing their portfolio companies to disclose their exposure to climate change risks? And if so, which shareholders are most successful? And what are the value implications for companies disclosing this information? In a [recent study](#), we shed light on these questions.

Let me first provide some background. One reason behind the surge in climate-related shareholder activism is the growing recognition of increased costs and risks associated with climate change (e.g., [New York Times, 2018](#)). Indeed, companies across the world are increasingly bracing for the direct and indirect impacts of climate change on their bottom lines, as extreme weather conditions represent major risks that can hurt the firms' operations and supply chains (e.g., [New York Times, 2019](#)).

For example, flooding and fiercer storms disrupted U.S. drug maker Eli Lilly's manufacturing facilities in Puerto Rico after Hurricane Maria in 2017. Similarly, Hitachi Ltd., a Japanese

manufacturer, reports that increased rainfall and flooding in Southeast Asia has the potential to disrupt its supply chain. Banco Santander Brasil, a large Brazilian bank, expects that increasingly severe droughts in the region might hurt the ability of borrowers to repay loans. California's largest electric utility Pacific Gas and Electric (PG&E) faces increased wildfire risk, partly driven by global warming. The company was held liable (facing at least \$30 billion in fire liabilities) for the 2018 disastrous California wildfire after its power lines sparked what became California's deadliest wildfire to date, and filed for bankruptcy protection in early 2019 ([Forbes, 2019](#)). Google's parent company, Alphabet Inc., expects that rising temperatures could increase the cost of cooling its energy-intensive data centers. All these examples feature direct impacts of climate change. On top of such direct impacts, climate change may also hurt companies indirectly.

For example, a significant financial risk energy companies face pertains to so-called "stranded assets"—coal, oil, and gas reserves that companies list as part of their assets, but might in fact be worthless, since those reserves may never be drilled and instead be left stranded by stricter regulations to curb climate change (e.g., [Financial Times, 2015](#); [Fortune, 2015](#)). Such assets include buildings in high-risk flood zones, power plants that may need to shut down, etc. ([New York Times, 2019](#)).

As these examples illustrate, a firm's exposure to climate change risks is about the threat of damage, injury, liability, loss, or any other negative impact on the company that is caused by a future climate-related event. In particular, climate change risks can entail physical risks (e.g., flooding, fierce storms, drought, extreme temperatures), regulatory risks



arising from current and expected governmental policies related to climate change (e.g., energy efficiency standards, carbon trading schemes), and other climate-related risks (e.g., reputation, changing consumer behavior, increasing humanitarian demands, etc.). Importantly, climate change is a global phenomenon that affects firms across industries and regions.

Despite the growing importance of climate change risks, little is known about companies' exposure to climate change risks and what strategic actions they take to manage and mitigate these risks. A key reason behind this lack of information is the fact that, in many countries (including the U.S.), the disclosure of non-financial information is not mandated by law. For example, the U.S. Securities and Exchange Commission (SEC) currently only recommends that companies disclose their climate change risks, but does not mandate such disclosure nor does it offer any

guidance in terms of what information should be provided. As a result, companies often provide only limited (if any) pertinent information.

Given the lack of mandatory disclosure requirements, it is not surprising that investors are increasingly vocal in demanding companies' disclosure of climate risks. In our study, we examine whether, in the absence of public governance, private governance—in the form of shareholder activism—can elicit greater disclosure of firms' exposure to climate change risks along with information on how firms are managing those risks.

Our results indicate that environmental shareholder activism at U.S. companies induces managers to voluntarily disclose climate change risks. Specifically, we find that, on average, the extent of climate risk disclosure increases by around 4.6% per proposal. Moreover, environmental shareholder activism is particularly effective if it is initiated by institutional investors (that is, investors who have more “power”), and even more so if it is initiated by long-term institutional investors (that is, investors whose request has more “legitimacy”). Finally, we find that companies that disclose climate risk information following environmental shareholder activism achieve a higher valuation post disclosure. This suggests that shareholders value the voluntary disclosure of climate risk information. Overall, our findings indicate that active shareholders can elicit greater climate risk disclosure, thereby improving the governance of their portfolio companies.

The findings of our study have important implications for practice as they highlight the ability of investors to elicit greater corporate transparency with respect to firms' climate change risks and thereby contribute to their portfolio companies' governance.

Overall, our findings indicate that active shareholders can elicit greater climate risk disclosure, thereby improving the governance of their portfolio companies.

In the absence of mandatory disclosure requirements imposed by the government, this greater ability also implies a greater responsibility of investors (especially of long-term institutional investors) to be

active owners and engage with the management to elicit the disclosure of climate risks. On this note, we caution that, while our results indicate that shareholder activism is effective in eliciting the disclosure of climate change risks, it need not substitute for mandatory disclosure requirements imposed by the government. Indeed, the latter is likely more effective in improving the quantity and quality of disclosure; fostering the standardization of disclosure (thereby facilitating investors' assessments of their portfolio companies); and ultimately achieving progress in the fight against climate change.

As such, long-term institutional investors may want to both pursue shareholder activism and engage with government to impose mandatory climate change risk disclosure.



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PEDRO MATOS

Pedro Matos is the academic director of the Richard A. Mayo Center for Asset Management, holds the John G. Macfarlane Family Chair in Business Administration and is a professor of business administration (Finance) at the University of Virginia Darden School of Business. His research focuses on the growing importance of institutional investors in financial markets worldwide. His work has been published in top academic journals and featured in the press, including in The Economist, Financial Times, The New York Times, The Washington Post, Fortune and Forbes. Matos is a research associate at the European Corporate Governance Institute (ECGI), and his work has received numerous research grants and awards.

Professor Matos holds a Ph.D. in finance from INSEAD in Fontainebleau (France). Prior to his doctorate, he worked with the Portuguese Ministry of Finance and consulted for the World Bank.

One of the key challenges is to assess whether these institutional investors truly “walk the talk” and whether the rise in ESG investing is actually making a difference.

WHAT ARE THE KEY CHALLENGES TO RESPONSIBLE INVESTMENT (RI)?

RI is now prevalent among a large number of institutional investors around the world and is no longer a niche phenomenon. But one of the key challenges is to assess whether these institutional investors truly “walk the talk” and whether the rise in ESG investing is actually making a difference. To examine this rigorously, we also need to ask how we can better measure the impact of different strategies of sustainable investing (screening, integration, thematic, engagement)?

WHAT BENEFITS CAN THE ACADEMIC NETWORK AND THE PRI'S WIDER RESEARCH PROGRAMME BRING TO THE FIELD OF RI?

The PRI Academic Network can be a bridge between scholarship research and practice in RI. In a rapidly growing field like this, it is important to ensure the best research informs developing practice, rather than assumptions and well-intentioned guesses.

WHAT WOULD YOU LIKE YOUR CONTRIBUTION TO BE IN THIS WORK AND WHAT WOULD YOU LIKE TO BRING TO OUR PROGRAMME?

I hope to contribute a more global perspective on RI practices around the world. I would also like to elevate the profile of RI research topics among academics .



Pedro Matos

John G. Macfarlane Family Chair and Professor of Business Administration, Darden School of Business, University of Virginia

ESG SHAREHOLDER ENGAGEMENT AND DOWNSIDE RISK



Andreas G.F. Hoepner, University College Dublin, Ioannis Oikonomou, University of Reading, Zacharias Sautner, Frankfurt School of Finance, Laura T. Starks, University of Texas at Austin and Xiao Y. Zhou, University of Oxford

Direct institutional investor engagement on environmental, social and governance (ESG) issues has become increasingly prevalent in financial markets worldwide. Most of the research to date suggests reducing the downside risks related to ESG factors is a major driver of direct shareholder engagement, as the shareholders are concerned about substantial legal, reputational, operational, and financial risks arising from ESG issues.

Reducing the downside risks related to ESG factors is a major driver of direct shareholder engagement

In this paper, we examine whether these ESG engagements can be associated with subsequent reductions in downside risk at portfolio firms by looking at data provided by a

large institutional investor with more than \$500 billion in assets under advisement. The data include 1,712 engagements across 573 targeted firms worldwide, covering the years 2005 through 2018.

The engagements covered environmental, social and governance issues in different proportions. Corporate governance accounts for 43% of all the engagements, frequently centring on executive pay and board structure.

Engagements over environmental issues constitute about 22% of the engagements. These engagements have a primary theme of climate risk, a theme that has become an important topic for engagement among many major institutional investors.

The third most common types of engagements cover social issues (20%), which mainly involves health and safety issues, supply chain topics, and illegal acts such as bribery and corruption.

Finally, 16% of the engagements centre on strategy topics, which are typically driven by concerns over a firm's business strategy and corporate risk management.

The investor uses four milestones to track the success of each intervention. These milestones reflect:

- Milestone 1** whether the investor raises a concern with a target company
- Milestone 2** whether the company acknowledges the concern that was raised
- Milestone 3** whether the company takes actions to address the concern
- Milestone 4** whether the investor successfully completes the engagement

While it takes the investor, on average, six months to reach Milestone 2, it usually takes an average of 35 months until the entire engagement is successfully completed. Out of the 1712 engagements for which the investor raises a concern, 538 (31%) successfully achieve all four milestones by the end of the sample period, 888 (51.8%) achieve Milestone 3, and 1410 (82.4%) reach Milestone 2.

Engagements and topics covered



Among the 11,254 documented interactions, more than 45% take the form of private in-person meetings (5,117), followed by substantive emails (2,055), conference calls (1,748), and letters (1,524).

We used two methods to examine whether and how ESG engagement reduces a portfolio firm's downside risk: Lower Partial Moment (the average of squared deviations below a target return) and Value at Risk.

The first approach uses difference-in-differences (DiD) regressions to test whether ESG engagement is related to future downside-risk reduction. We use the second approach - stock return analysis - to explore changes in the engaged firms' stock-return loadings on a downside-risk factor.

Across all 1,712 engagements, we do not detect significant reductions in downside risk as a result of a single engagement. However, this changes sharply once we distinguish between engagements that are judged successful and those that are brushed off by the target company.

Among the 11,254 documented interactions, more than 45% take the form of private in-person meetings (5,117), followed by substantive emails (2,055), conference calls (1,748), and letters (1,524).

Notably, we show a substantial risk-reduction effect of ESG engagements for those targets where at least Milestone 2 was achieved, meaning the company management at least acknowledged the existence of an ESG issue.

For these successful engagements, we found a risk-reduction effect roughly equalling 38% of the variable's standard deviation in the pre-engagement period.

We determine which types of ESG engagements appear to be most effective in reducing downside risk by examining how the effects vary across engagement themes. Taking Milestone 3 as the success threshold, we find that engagement on environmental topics (primarily over climate change) delivers the highest benefits in terms of downside-risk reduction.

We then test whether after the achievement of an engagement milestone there is a reduction in sensitivity to downside risk. We find that it does significantly decrease after Milestone 2, and especially Milestone

3, have been achieved, suggesting that the firms that respond to the investor are less sensitive to aggregate downside risk.

In conclusion, engagement does reduce downside risk in portfolio firms, with greater impact the more successful the engagement. This supports previous studies showing that engaged institutional ownership can improve outcomes for companies by reducing the likelihood of negative events.

Engaged institutional ownership can improve outcomes for companies by reducing the likelihood of negative events.



WHEN INVESTORS CALL FOR CLIMATE RESPONSIBILITY, HOW DO MUTUAL FUNDS RESPOND?



Marco Ceccarelli, University of Zurich, Stefano Ramelli, University of Zurich and Alexander F. Wagner, University of Zurich

The 2015 Paris Agreement recognizes finance as a central element of a successful transition to a low carbon economy. In that agreement, world leaders established “making financial flows consistent with a pathway towards low greenhouse gas emissions” (Article 2) as one main long-term objective.

“making financial flows consistent with a pathway towards low greenhouse gas emissions”

Paris Agreement, article 2

One way policy-makers are trying to achieve this is by improving the information available to investors about the climate impact of their investments. The success of such policies, however, relies on the twin assumptions that investors will respond to more transparency by demanding more climate-conscious products and that fund managers and other intermediaries will in turn shift their assets towards more climate-friendly holdings.

In this paper (Ceccarelli, Ramelli, and Wagner 2019), we investigate whether these assumptions hold, exploiting a quasi-experimental situation in the mutual funds industry.

In April 2018, the investment platform Morningstar introduced an eco-label for mutual funds, the Low Carbon Designation (LCD). This event represented an unexpected increase in the level of information available to investors on the climate performance of mutual funds. Using data for both European and US funds, we establish two key results.

1. Investors showed a preference for LCD funds: From May through the end of December 2018, funds that were awarded the LCD enjoyed significantly higher monthly flows than conventional funds. This effect is at least partially driven by non-pecuniary preferences for climate-conscious investment products, as opposed to considerations of future performance.
2. Fund managers' behaviour changed significantly following the release of the LCD: Managers of active funds that missed the label at its initial release shifted their holdings to more climate-friendly firms, in the attempt of obtaining the designation in subsequent updates.

To receive the LCD, a mutual fund has to comply with two criteria: (1) a 12-month trailing average “Portfolio Carbon Risk Score” below 10 (out of 100); (2) a 12-month trailing average “Fossil Fuel Involvement” below 7%. The portfolio scores are based on firm-level variables from the research provider Sustainalytics, which are updated on a yearly frequency.

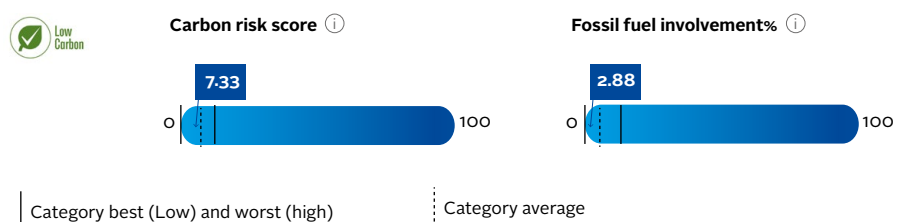
“Carbon Risk” quantifies the exposure of portfolio companies to material risk related to their carbon emissions as well as how well they are managing these risks (Morningstar, 2018). Morningstar computes the fund-level Carbon Risk scores by weighting the firm-level scores by the total investment (debt and equity) that a mutual fund holds at the end of the quarter in a given company. As of April 2018, having a Portfolio Carbon Risk Score below 10 represents being amongst the 29% of funds with the best performance on this dimension.

“Fossil Fuel Involvement” measures the percentage of portfolio firms that derive a significant share of revenues from activities related to fossil fuels. As of April 2018, having a 12-month trailing average fossil fuel involvement below 7% represents a 33% underweighting of fossil fuel-related companies relative to the global equity universe.

INTRODUCTION OF THE LOW CARBON DESIGNATION

On April 30, 2018, Morningstar introduced the LCD identifying mutual funds that have a portfolio aligned with the transition to a low-carbon economy. This label is depicted as a green leaf icon, which is visible on the fund's report, as shown in Figure 1 below. While it is not the first type of sustainability evaluation for funds, the LCD is particularly interesting because it is focused on climate change, and specifically aimed at helping clients easily identify low-carbon funds.

Figure 1 – LCD on the Morningstar investment platform



Carbon metrics as of dec 31, 2018 | Category: US Equity as of Dec 31, 2018 | Based on 75% of AUM | data is based on long positions only.

REWARDS FOR LCD

If receiving the Low Carbon Designation is desirable, we should observe that, when faced with two similar funds in terms of size, general sustainability ratings, and other financial characteristics, investors will choose the LCD fund over the Non-LCD one. If this is the case, we should observe an abnormal increase in fund flows for Low Carbon funds after the label is released.²

Figure 2 illustrates the average assets-weighted monthly flows into or out of European funds that were categorized as Low Carbon at the end of April 2018 and into or out of European funds that did not (No Low Carbon), from April 2017 through December 2018.³ Importantly, information about the LCD became available to investors only from the beginning of May 2018.

Before the LCD was published, the variation over time of flows into funds that would be later designated low carbon are very much in line with the average flows in other funds. In other words, the two groups show common trends. With the release of the LCDs at the end of April 2018, low carbon designated funds started enjoying a clear and persistent increase of flows compared to other funds. A formal test (using a difference-in-differences specification) confirms this finding: funds that received the label in April, experienced a flow premium of around 2% in assets under management over the eight months from May to December 2018. These findings are robust to the inclusion of several controls, e.g., past returns, fund size, volatility, age, and Morningstar star ratings. This even includes Morningstar's generic sustainability "Globes" label, which themselves have an impact on fund flows.⁴

MOVING TOWARDS LCD

We have seen that investors in the mutual fund industry prefer climate-conscious investments. Do mutual fund managers react to these revealed preferences? Specifically, do managers of funds that did not receive the label shift their portfolios towards more climate-friendly firms?

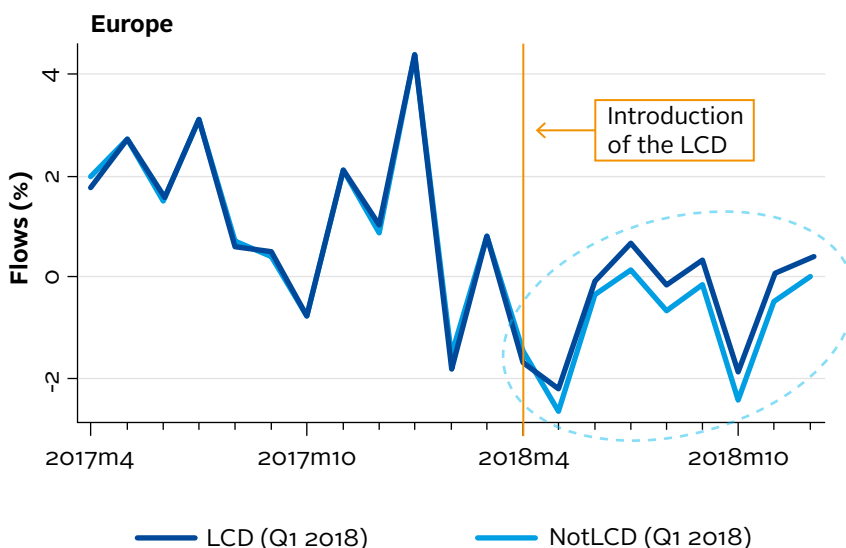
In Figure 3, we plot Carbon Risk of active mutual funds over our sample period. The figure shows two things.

First, *before* the introduction of the LCD, Carbon Risk follows a parallel trend in funds receiving and those not receiving the LCD at its introduction. This fact suggests that fund managers were not aware of the impending introduction of the label, or at least of the criteria upon which it was awarded.

Second, *after* the introduction of the label, both groups of funds decreased their carbon risk, but the drop in carbon risk is much more pronounced in the NotLCD group.

These findings again hold in a formal difference-in-differences regression and are robust to the inclusion of several control variables. Compared to funds that did receive the LCD, non-receivers decreased their Carbon Risk by an average of 0.26. They achieved this improvement by increasing their holdings of negligible and low Carbon Risk firms by 0.60% and 0.82% of assets under management (AUM) and by decreasing their holdings of high and severe Carbon Risk firms by 0.26% and 0.19% of AUM, respectively.⁵

Figure 2 - Boost to Low Carbon Designation (LCD) funds



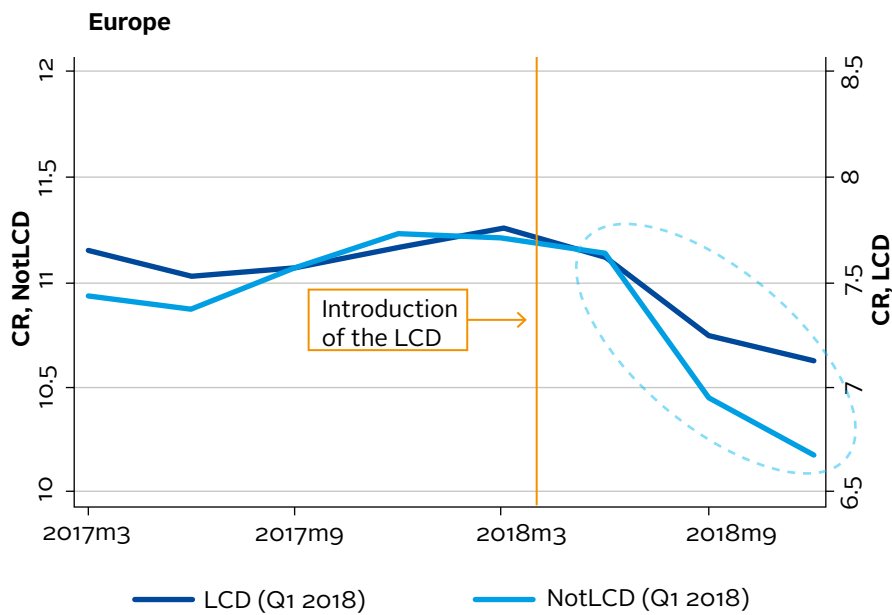
2 Ammann, Manuel, Christopher Bauer, Sebastian Fischer, and Philipp Muller, 2018, The impact of the Morningstar sustainability rating on mutual fund flows, European Financial Management 1, 1–34.

3 Ceccarelli, Marco, Stefano Ramelli, and Alexander F. Wagner, 2019, [When investors call for climate responsibility, how do mutual funds respond? CEPR and SFI Working Paper](#)

4 Hartzmark, Samuel M., and Abigail B. Sussman, 2019, Do investors value sustainability? A natural experiment examining ranking and fund flows, The Journal of Finance, Forthcoming.

5 Morningstar, 2018, [Morningstar Low Carbon Designation](#)

Figure 3 - Shift to more climate-friendly fund holdings



CONCLUSION

Around the introduction of Morningstar’s Low Carbon Designation (LCD) label in April 2018, mutual fund flows demonstrated investors’ preference for climate-responsible investments: Keeping other factors constant, funds labeled as Low Carbon enjoyed 24 basis points higher monthly net flow of money than funds that were not labeled as Low Carbon.

Investors’ call for climate responsibility did not fall on deaf ears: mutual funds that did not receive the LCD subsequently reduced their holdings in high carbon-risk and fossil fuel-related companies and instead shifted their holdings towards more climate-responsible firms.

Overall, our findings suggest that, as investors call for climate-conscious investment products, financial intermediaries use the vehicles at their disposal to compete for this change in demand. These results have important

practical implications: First, they alert active mutual fund managers to the importance of sustainability -- and especially climate responsibility -- as a key competitive edge, particularly valuable to an industry under strain from the rise of passive investment. Second, they encourage policy-makers looking to eco-labeling schemes to re-orient capital flows towards the transition to a low-carbon economy.

As investors call for climate-conscious investment products, financial intermediaries use the vehicles at their disposal to compete for this change in demand

REFERENCES

- Ammann, Manuel, Christopher Bauer, Sebastian Fischer, and Philipp Muller, 2018, The impact of the Morningstar sustainability rating on mutual fund flows, *European Financial Management* 1, 1–34.
- Ceccarelli, Marco, Stefano Ramelli, and Alexander F. Wagner, 2019, When investors call for climate responsibility, how do mutual funds respond? CEPR and SFI Working Paper
- Hartzmark, Samuel M., and Abigail B. Sussman, 2019, Do investors value sustainability? A natural experiment examining ranking and fund flows, *The Journal of Finance*, Forthcoming.
- Morningstar, 2018, [Morningstar Low Carbon Designation](#).



INSTITUTIONAL INVESTORS' VIEWS AND PREFERENCES ON CLIMATE RISK DISCLOSURE⁶

[BACK](#)

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Financial market efficiency relies on timely and accurate information regarding firms' risk exposures. An increasingly important risk exposure relates to climate change. Climate risks can originate from more severe and more frequent natural disasters, government regulation to combat a rise in temperature, or climate-related innovations that disrupt existing business models (Litterman 2016; Krueger, Sautner, and Starks 2019). Consequently, high-quality information on firms' climate risk exposures is necessary for making informed investment decisions and efficient pricing of the risks and opportunities related to climate change.

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While many regulators and investors acknowledge the fact that firms' climate risk exposures are important, they also believe current climate risk disclosure practices are insufficient. For example, Mark Carney, Governor of the Bank of England, called for more to be done *"to develop consistent, comparable, reliable, and clear disclosure around the carbon intensity of different assets"* (Carney 2015). In a similar spirit, Yngve Slyngstad, CEO of Norges Bank Investment Management,

commented on the difficulty of obtaining climate risk-related data by saying that *"the only surprise [...] is how hard it is to get the data [...] I think it will take years to get good data from the majority of companies we are invested in."* (Reuters 2018)

On a more positive note, there have been attempts by regulators, governments, and NGOs to address the shortcomings in current climate risk disclosures. For instance, in 2015, the Financial Stability Board initiated the Task Force on Climate-related Financial Disclosures (TCFD), with the objective of developing voluntary climate-related financial risk disclosures. On behalf of investors representing over \$87 trillion in assets under management, CDP collects climate-related information through a questionnaire. In addition to these initiatives, some countries have started to mandate climate-related disclosures. For instance, since 2013 the U.K. has required quoted companies to disclose their carbon emissions (Krueger 2015; Jouvenot and Krueger 2019), a requirement that has been extended to include unquoted companies from 2019 onwards. Since 2016, France requires

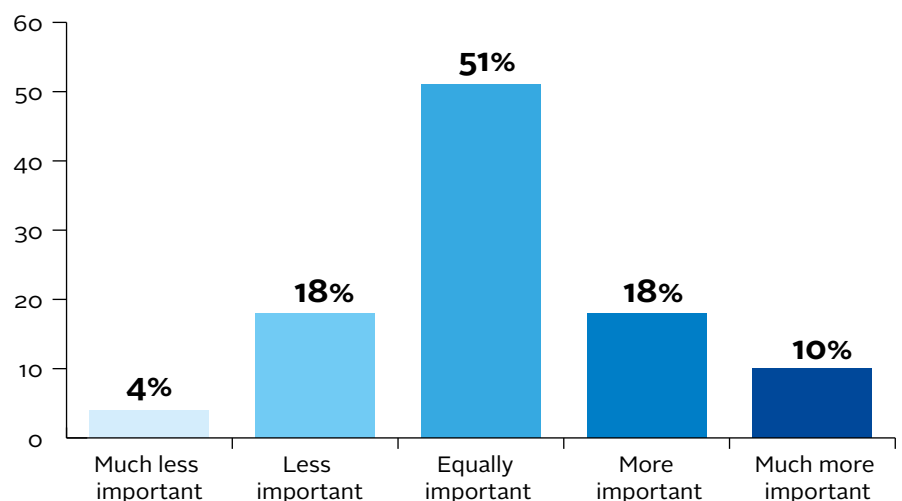
institutional investors to report the carbon footprints of their investment portfolios.

While these initiatives suggest that investors increasingly demand climate-related information for their decision making, little systematic evidence exists on how institutional investors think about such disclosures. To fill this gap in knowledge, we surveyed institutional investors about their views and preferences with respect to climate-related disclosures.

IMPORTANCE OF CLIMATE RISK REPORTING

We found that the survey respondents share a strong general belief that climate disclosure is important. As Figure 1 illustrates, 51% of respondents believe that climate risk reporting is as important as traditional financial reporting, and almost one-third considers it to be more important. Only 22% of respondents regard climate reporting as less (or much less) important than financial reporting.

Figure 1: Importance of climate risk disclosure relative to financial disclosure



⁶ The research paper underlying this article is available here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3437178

The risks climate change poses on firms are frequently divided in three distinct categories: physical risks, technological/transition risks, and regulatory risks. In terms of their relative importance, concerns about physical climate risks matter the most for the perceived importance of climate reporting, while regulatory risks matter the least. The emphasis on physical risks may be because such risks tend to be more firm and location specific, requiring relatively precise information about a firm's exposure to evaluate them. The investors would then have lesser ability to gather the information and greater need for firm disclosure. In contrast, regulations tend to apply the same way to all firms in a given industry and often even in a country.

INVESTORS' VIEWS ON CURRENT DISCLOSURE PRACTICES

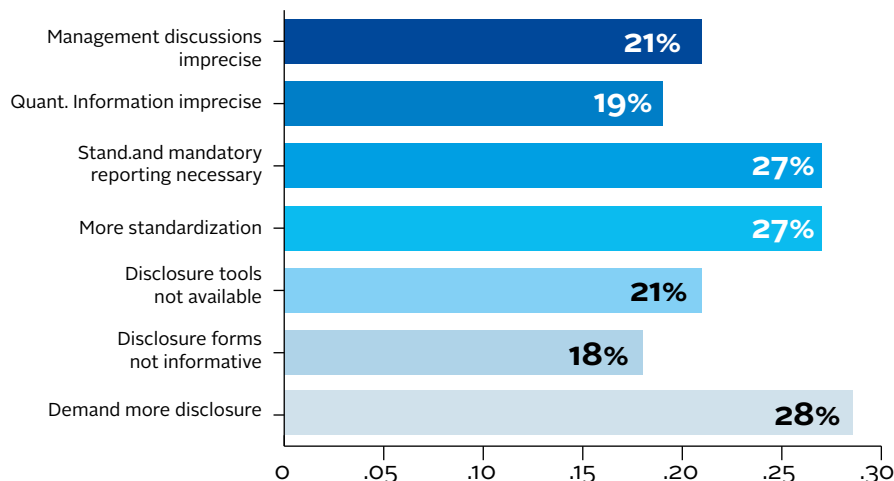
In order to better understand investors' views on the informativeness of climate risk disclosures, we asked the investors a series of questions on how they perceive current qualitative and quantitative disclosure practices.

Figure 2 shows the responses to these questions. The figure displays the percentage of investors who "strongly agree" with the given statement on the current disclosure practice.

The responses demonstrate a widespread perception that current quantitative and qualitative disclosures are imprecise and insufficiently informative. These responses imply that the current voluntary reporting regime does not fully enable informed investment decisions by investors, at least for firms with large exposures to climate risks. This could be one reason why climate risks are considered difficult to price in equity markets, an issue we next address in more detail.

A widespread perception is that current quantitative and qualitative disclosures are imprecise and insufficiently informative

Figure 2: Institutional investors' views on current climate risk disclosure practices

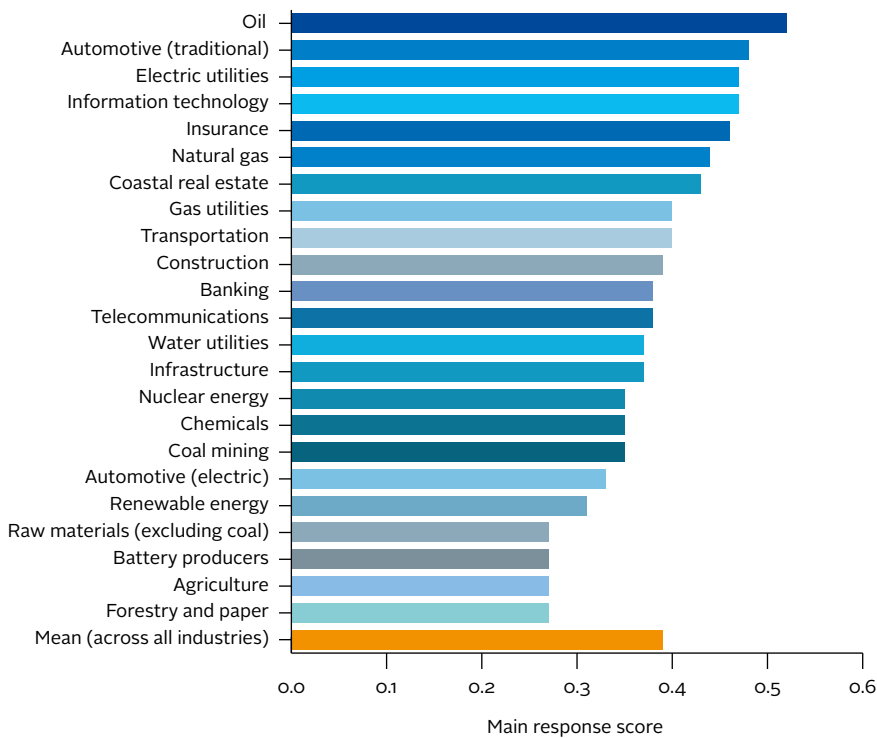


INVESTORS' VIEWS ON CLIMATE RISK MISPRICING

We first asked the investors how much mispricing they see in different sectors of the economy. The responses could range between "valuations are much too low" (coded with a score of -2) and "valuations are much too high" (coded as +2). We specifically asked about misvaluations related to climate risks and opportunities. Figure 3 shows that the respondents generally believe that current equity valuations are too high across all sectors of the economy, as reflected in the positive average response scores. Overvaluations are perceived as strongest in the sectors Oil, Traditional Automotive, Electric Utilities, and Insurance.

We then studied whether the investors' opinions on the availability and quality of current climate reporting are related to the perceived underpricing of climate risks in equity markets (i.e., climate-related overvaluation of firms). We found that respondents who believe that current reporting is lacking also perceive more mispricing in current equity valuations. An important consequence of this finding is that better disclosure may contribute to a more efficient pricing of climate risks. In fact, this implication is consistent with a view expressed by Michael R. Bloomberg, Chair of the TCFD, who stated that "increasing transparency makes markets more efficient, and economies more stable and resilient."

Figure 3: Institutional investors' views on climate risk mispricing



CONCLUSION

Our analysis indicates that investors find climate risk reporting highly important for their investment decisions. However, current disclosure practices are seen as insufficient, both in terms of quality and quantity. Likely as a result of this, many investors perceive that equity valuations do not fully reflect the risks related to climate change. More and better reporting on climate risks may be helpful in improving the correct pricing of climate risks and may, as a result, preserve financial stability.

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REFERENCES

- Carney, Mark, 2015, Breaking the tragedy of the horizon-climate change and financial stability, Speech 29 September, Bank of England, Lloyds of London.
- Christensen, Hans B., Luzi Hail, L., and Christian Leuz, 2019, Economic analysis of widespread adoption of CSR and sustainability reporting standards, Working Paper, Chicago Booth School of Business.
- Jouvenot, Valentin and Philipp Krueger, 2019, Reduction in corporate greenhouse gas emissions under prescriptive disclosure requirements, Working Paper, University of Geneva.
- Krueger, Philipp, 2015, Climate change and firm valuation: Evidence from a quasi-natural experiment, Working Paper, Swiss Finance Institute.
- Krueger, Philipp, Zacharias Sautner, and Laura T. Starks, 2019, The importance of climate risks for institutional investors, *Review of Financial Studies*, forthcoming.
- Litterman, Bob, 2016, *Climate Risk: Tail Risk and the Price of Carbon Emissions---Answers to the Risk Management Puzzle*. Hoboken, NJ: John Wiley & Sons.
- Matsumura, Ella M., Rachna Prakash, and Sandra C. Vera-Munoz, 2014, Firm-value effects of carbon emissions and carbon disclosures, *The Accounting Review* 89, 695-724.
- Plumlee, Marlene, Darrell Brown, Rachel M. Hayes, and R. Scott Marshall, 2015, Voluntary environmental disclosure quality and firm value: Further evidence, *Journal of Accounting and Public Policy* 34, 336-361.
- Reuters, 2018, [Norway wealth fund builds tool to analyse climate risk to portfolio](#)
- Verrecchia, Robert E., Essays on disclosure, *Journal of Accounting and Economics* 32, 97-180.

The Principles for Responsible Investment (PRI)

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: www.unpri.org



The PRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact.

United Nations Environment Programme Finance Initiative (UNEP FI)

UNEP FI is a unique partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions that are signatories to the UNEP FI Statement on Sustainable Development, and a range of partner organisations, to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

More information: www.unepfi.org



UN Global Compact

The United Nations Global Compact is a call to companies everywhere to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals and issues embodied in the Sustainable Development Goals. The UN Global Compact is a leadership platform for the development, implementation and disclosure of responsible corporate practices. Launched in 2000, it is the largest corporate sustainability initiative in the world, with more than 9,500 companies and 3,000 non-business signatories based in over 160 countries, and more than 70 Local Networks.

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