INSTITUTIONAL INVESTORS & THE PUSH FOR MORE ROBUST ESG REPORTING

When in May 2017, some major institutional investors[1] voted against the boards of major energy companies in calling for climate risk disclosures, they used their power to counter short-termism. In order to address risks that institutional investors and their clients are sensitive to, this activity should continue and extend beyond climate risks to other economic, social, and governance (ESG) issues that pose long-term risks.

In September 2017, an HSBC study found that more than two-thirds of the 497 institutional investors surveyed were planning to increase their investments related to tackling climate change, but more than half said they were receiving "highly inadequate" information from companies about their risk of disruption from climate change, as well as their ability to benefit from the shift to low-carbon technologies. Daniel Klier, head of strategy at HSBC, said the findings showed green finance is moving beyond the realm of specialist "ethical" funds and becoming a routine part of many investment decisions. However, the survey found a mismatch between investors' growing focus on climate issues and companies' slower progress towards disclosing environmental risks. Of the 507 companies questioned, just over half said they had an environmental strategy in place but only 43 percent voluntarily disclosed that strategy to investors.[2]

Overall, investors need more data from companies in order to be able to accurately anticipate the costs of ESG risks. Recent action to demand more data on climate risks serves as a hopeful example for what must be done to obtain a broader array of information on ESG factors.

MANDATORY ESG DISCLOSURE

In the United States, publicly traded companies are required to disclose information to allow prospective shareholders to make informed investment and proxy voting decisions. Under federal securities laws adopted in the 1930s, information must be disclosed if it is material, or important to investors. In 1976, the Supreme Court crystalized this definition in *TSC Industries v. Northway*, as follows: "[a]n omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in

[1] For the purposes of this paper, the term "institutional investors" covers a variety of different types of organizations: publicly and privately held large asset management companies, like BlackRock and State Street, that manage investments on behalf of widely dispersed beneficial owners for a profit; non-profit and investor-owned mutual funds, like Vanguard; public employee pension funds like CalPERS and the New York State Common Retirement Fund, whose boards typically have some element of political accountability; insurance companies that collect and invest premiums from their customers, using the returns to pay out claims; and sovereign wealth funds, like Norway's Norges Bank Investment Management (NBIM), the largest in the world. Hedge funds are not included as institutional investors within this paper because they tend to have consolidated holdings in select firms (rather than owning a cross-section of the entire market) and industries and their investment strategy is to make gains over and above the market (active, rather than passive).

[2] Andrew Ward, Big investors to put more money into tackling climate change, FINANCIAL TIMES, Sept. 12, 2017, available at: https://www.ft.com/content/0c485f68-96eb-11e7-a652-cde3f882dd7b.

deciding how to vote."[3] If the important or "material" information is falsely stated or omitted, this amounts to securities fraud.

Internationally, a number of jurisdictions have adopted mandatory reporting requirements on non-financial disclosures. In 2014, the European Union adopted a law that requires companies with more than 500 employees to "publish reports on the policies they implement in relation to environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption and bribery, and diversity on company boards (in terms of age, gender, educational and professional background)."[4] The United Kingdom passed the Modern Slavery Act in 2015, which calls on businesses to report on modern slavery in their supply chains.[5] Australia's government has proposed a similar law that will require modern slavery company reporting.

Mandatory reporting initiatives have also emerged in the U.S. The California Transparency in Supply Chains Act of 2010 requires large retailers and manufacturers doing business in California to disclose on their websites their "efforts to eradicate slavery and human trafficking from [their] direct supply chain for tangible goods offered for sale."[6] The U.S. Congress passed the Dodd-Frank Act in 2010, which in part requires companies that use certain minerals to disclose their use of conflict minerals on a new form to be filed with the Securities and Exchange Commission (SEC) and make this information publicly available on its website.[7] However, on April 7, 2017, the SEC ruled that companies would no longer be required to disclose such information on their websites following a court opinion that found the rule violates the First Amendment.[8]

In 2010, the SEC issued a Guidance Regarding Disclosure Related to Climate Change, advising companies to disclose material climate risks.[9] However, the guidance only clarified existing rules, explaining that all material risks—including climate risks—must be disclosed, and did not impose any new mandatory requirements. It has had little effect on companies' disclosures and the SEC has been criticized for failing to enforce it.[10]

The new chairman of the SEC, Jay Clayton, has signaled his support for scaling back the

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[3] *TSC Industries, Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976).
[4] Non-financial reporting, available at: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en.
[5] Modern Slavery Act, 2015, available at: http://www.legislation.gov.uk/ukpga/2015/30/contents.
[6] Cal. Civ. Code, 1714.43, subd. (a)(1), available at: https://oag.ca.gov/sb657/related-code.
[7] 111th Congress of the USA, 'Dodd-Frank Wall Street Reform and Consumer Protection Act,' Section 1502, available at: http://www.cftc.gov/idc/groups/public/@swaps/documents/file/hr4173_enrolledbill.pdf.
[8] U.S. Securities and Exchange, Statement of Acting Chairman Piwowar on the Court of Appeals Decision on the Conflict Minerals Rule, Apr. 7, 2017, available at: https://www.sec.gov/news/public-statement/piwowar-statement-court-decision-conflict-minerals-rule.
[9] Securities and Exchange Commission, Commission Guidance Regarding Disclosure Related to Climate Change, available at: https://www.sec.gov/rules/interp/2010/33-9106.pdf.
[10] *See*: David Gelles, S.E.C. Is Criticized for Lax Enforcement of Climate Risk Disclosure, N.Y. TIMES, Jan. 23, 2016, available at: https://www.nytimes.com/2016/01/24/business/energy-environment/sec-is-criticized-for-lax-enforcement-of-climate-risk-disclosure.html; and Robert Repetto, It's Time the SEC Enforced its Climate Disclosure Rules, International Institute for Sustainable Development, Mar. 23, 2016, available at: https://www.iisd.org/blog/it-s-time-sec-enforced-its-climate-disclosure-rules.

scope and breadth of disclosure rules, objecting to what he sees as an expansion of the scope of required disclosures beyond materiality.[11] The Trump administration's focus on deregulation (going so far as calling for the repeal of two regulations for any one passed) and announcement that it will withdraw from the Paris Climate Accords suggest climate risk disclosure requirements will not be prioritized. Thus, it is unlikely that the federal government will impose more aggressive requirements or enforcement of disclosure rules in the near future.

In the absence of sufficient mandatory disclosure requirements coming from the federal government, institutional investors should, and have begun to, step up, using their leverage to demand the ESG risk data they say they need to make wise long-term investment decisions.

INSTITUTIONAL INVESTOR INTEREST IN ESG DATA

Institutional investors, including banks, investment advisors, pension funds, hedge funds, mutual funds, and sovereign wealth funds, pool money to purchase assets. The two largest institutional investors in the world are BlackRock and State Street Global Advisors (SSGA). Among the largest government-mandated institutional investors are California Public Employees' Retirement System (CalPERS), which manages the pensions and health benefits of California's public employees and retirees, and Norges Bank Investment Management (NBIM), which manages Norway's two sovereign wealth funds.

Institutional investors own shares in a diverse array of companies and their share of the market is expanding in relation to that of retail investors or individual households. Since 1945, individual households have gone from directly owning 93 percent of outstanding corporate entities to a mere 36 percent.[12]

ESG data is particularly important to institutional investors because of (1) the long-term nature of their investments; (2) their universal ownership; and (3) their fiduciary duties to their clients.

First, compared to the average investor, institutional investors are more concerned with long-term risks because their investments have longer time horizons. Pension funds must preserve an employee's investment through their retirement.

Some institutional investors, such as State Street, have contracts with their clients that require them to purchase conservative products with companies traded on major exchanges and hold those assets for long periods of time. This causes such investors to be concerned about risks whose most serious consequences will be realized in the long-term,

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[11] Sarah N. Lynch and John McCrank, SEC chairman signals plans to scale back corporate disclosure rules, REUTERS, July 12, 2017, available at: http://www.reuters.com/article/us-usa-sec-regulation-idUSKBN19X2AB?il=0.

[12] Shlomitt Azgad-Tromer, Corporations and the 99%: Team Production Revisited, 21 Fordham J. Corp. & Fin. L. 163, 171-72, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2596754.

such as climate change.

Institutional investors serious about pursuing long-term investments over short-term gains face the obstacle of the rise in short-term-focused behavior advocated by hedge funds. Companies have been influenced by activist hedge funds to deliver quarterly earnings, shareholder dividends, and stock buybacks over sustainable growth in the long-term. Now, companies link CEO compensation to shareholder value and have increased shareholder power over corporate boards. This strain of short-termism can generate significant negative externalities. For example, a 2012 review commissioned by the UK government drew a direct link between shareholder pressure on BP P.L.C. to drive down costs and the company's insufficient investment in safety and risk evaluation which resulted in the Deepwater Horizon oil spill in 2010.[13]

Failing to address and adapt to the risks of climate change is predicted to have detrimental effects on the economy, particularly during times of extreme climate shocks. In July, Schroders, the U.K.'s largest publicly listed asset manager, warned that if warming trends persist, the world will experience up to a 50 percent long-term loss in global GDP.[14] Schroders reports that the impacts of climate change are not adequately "priced in" to companies' valuations, which they warn creates enormous financial risks, characterizing this failure as "accelerating towards a cliff edge." Schroders' head of sustainable research Andy Howard warns, when the market starts pricing in climate considerations, it will happen quickly, and investors cannot afford to ignore the impacts of climate change any longer.[15]

Delaying climate action will be risky to businesses and the entire economy in the long-run. Matthew E. Kahn explains in the Harvard Business Review that new empirical evidence supports the long-held belief that "if companies are required to disclose their climate risk exposure, as the SEC had planned, then this discovery process would be reflected in asset prices, which would incentivize companies to build up their climate resilience."[16]

An report produced in 2017 by McKinsey Global Institute in cooperation with FCLT Global found that companies operating with a true long-term mindset have consistently outperformed their industry peers across most important financial measures between 2001 and 2015.[17] Among the firms identified as being focused on the long-term using the

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[13] John Kay, The Kay Review of UK Equity Markets and Long-Term Decision Making, July 2012, available at: http://www.ecgi.org/conferences/eu_actionplan2013/documents/kay_review_final_report.pdf.

[14] Schroders, Climate change: calibrating the thermometer, July 2017, p. 2, available at: http://www.schroders.com/globalassets/global-assets/english/pdf/c00140-climatedashboard_section.pdf.

[15] Josie Cox, World leaders on track to miss climate change targets and it could cost billions, warns Schroders, INDEPENDENT, July 17, 2017, available at: http://www.independent.co.uk/news/business/news/world-on-track-to-miss-climate-change-targets-paris-agreement-accord-global-warming-cost-billions-a7845051.html.

[16] https://hbr.org/2017/02/requiring-companies-to-disclose-climate-risks-helps-everyone

[17] McKinsey Global Institute, "Measuring the Economic Impact of Short-Termism: Discussion Paper," February 2017, available at: http://www.mckinsey.com/global-themes/long-term-capitalism/where-companies-with-a-long-term-view-outperform-their-peers.

proprietary Corporate Horizon Index, average revenue growth was 47% higher, earnings growth was 36% higher, market capitalization grew faster, and revenue growth was less volatile. They were better able to withstand the economic stress of the 2008-2009 financial crisis, seeing smaller declines in revenue and earnings and continuing to increase investments in research and development while others cut back. The researchers estimate that if the whole economy had performed at the level of these investors with true long-term mindsets, over the past decade the U.S. GDP would have grown an additional $1 trillion. The report concludes that companies with a long-term orientation tend to perform better than similar but short-term-focused firms, and characterizes addressing persistent short-termism as an urgent issue for investors, boards, and policy makers alike.[18]

Second, institutional investors own a representative cross-section of the entire economy, making them "universal owners." Ownership of a portfolio that spans across the entire market is then reliant on the success of the entire market, rather than only specific industries or companies. Robert Monks, who first coined the term "universal owner" in 1994, and Nell Minow explained that universal owners' "holdings are so diversified that they have the incentive to represent the ownership sector (and the economy) generally rather than any specific industries or companies. This endows them with a breadth of concern that naturally aligns with the public interest. For example, pension funds can be concerned with vocational education, pollution, and retraining, whereas an owner with a perspective limited to a particular company or industry would consider these to be unacceptable expenses because of competitiveness problems."[19]

This kind of ownership may motivate the owner to curtail the negative externalities of some of the firms in its portfolio if the costs of their externalities might not have a significant impact on those firms, but would negatively impact the health of the entire portfolio. In the context of climate risks, institutional investors would be incentivized to call for accurate carbon pricing because, while it will lead to declines in fossil fuel industry stock, it will also bear long-term benefits to the entire economy, and thus universal owners' portfolios on the whole.

Finally, institutional investors are driven to care about ESG risks because they tend to have legal fiduciary duties to their promote the bests interests of their clients, or fiduciaries. This can lead to them being held accountable for failing to adopt longer-term economic thinking which would endanger the client's long-term well-being. For example, CalPERS should be interested in advocating for corporations to reduce their climate risks because their clients, government employees of California, will likely be harmed by effects of climate change such as sea level rise and water shortages. This view embraces a shareholder view of the corporation.[20]

[18] Dominic Barton, James Manyika, and Sarah Keohane Williamson, "Finally, Evidence that Managing for the Long Term Pays Off," Harvard Business Review, Feb. 7, 2017, available at: https://hbr.org/2017/02/finally-proof-that-managing-for-the-long-term-pays-off.

[19] Robert Monks and Nell Minow, Watching the Watchers: Corporate Governance in the 21st Century, Cambridge, Mass.: Blackwell Publishers, 1996, p. 121.

[20] *See generally*: Paddy Ireland and Renginee G. Pillay, "Corporate Social Responsibility in a Neoliberal Age," *Corporate Social Responsibility and Regulatory Governance*, UNRISD, Eds: Peter Utting and Jose

In fact, some institutional investors that are tied to governments have mandates to consider ESG factors beyond those that are material. In the Netherlands, for example, the chairwoman for ABP, one of the world's largest pension funds, reports there is a consensus that pension funds have broader societal responsibilities[21] and the Government, banks, and civil society groups recently agreed to the "Dutch Banking Sector Agreement on international responsible business conduct regarding human rights."[22] NBIM has a long investment horizon and its management mandate from the Government of Norway requires it to integrate responsible investment, taking ESG issues which would impact the fund's performance over time, into the management of the fund.[23] CalPERS' mandate puts a particular emphasis on climate change and overall environmental responsibility. One of CalPERS' investment beliefs that outline its vision for fund management requires CalPERS to "consider risk factors, for example climate change and natural resource availability, that emerge slowly over long time periods, but could have a material impact on company or portfolio returns."[24] The language indicates the bar is lowered from the Supreme Court standard by explicitly calling for consideration over long time periods and inclusion of factors that *could* be material, rather than requiring a substantial likelihood.

In light of these interests, institutional investors have been publicly calling upon companies to disclose more on ESG risks.

WAVE OF INSTITUTIONAL INVESTORS DEMANDING ESG DISCLOSURE

In the past several years, institutional investors have increased their pressure on companies to disclose information on their ESG risks. Some are calling the events of 2017 a "shareholder upheaval" and a tipping point in shareholder activism.[25]

In 2016, Laurence Fink, the CEO of BlackRock drew attention with a letter that urged the CEOs of the world's largest companies to pursue long-term growth over "quarterly earnings hysteria." Fink cited ESG issues as having real and quantifiable financial

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Carlos Marques, pp. 77-104.

[21] United Nations Environmental Programme, Fiduciary Duty in the 21st Century, p. 7, http://www.unepfi.org/fileadmin/documents/fiduciary_duty_21st_century.pdf.

[22] Social and Economic Council of the Netherlands, Dutch Banking Sector Agreement on international responsible business conduct regarding human rights, Oct. 2016, available at: https://www.ser.nl/~/media/files/internet/publicaties/overige/2010_2019/2016/dutch-banking-sector-agreement.ashx.

[23] Norges Bank Investment Management, Responsible Investment: Government Pension Fund Global 2016, p. 11, available at: https://www.nbim.no/contentassets/2c3377d07c5a4c4fbd442b345e7cfd67/government-pension-fund-global---responsible-investment-2016.pdf.

[24] CalPERS Beliefs, Investment Belief 9, p. 10, available at: https://www.calpers.ca.gov/docs/forms-publications/calpers-beliefs.pdf.

[25] Climate Week NYC, A Tipping Point: Investors Prompt Companies to Disclose and Manage Climate Risk, available at: http://www.climateweeknyc.org/event/tipping-point-investors-prompt-companies-disclose-and-manage-climate-risk; *see also*: George Serafeim and Sakis Kotsantonis, ExxonMobil's Shareholder Vote is a Tipping Point for Climate Issues, Harvard Business Review, June 7, 2017, available at: https://hbr.org/2017/06/exxonmobils-shareholder-vote-is-a-tipping-point-for-climate-issues.

impacts in the long-term and serving as a signal of operational excellence within a company. Fink emphasized the need for more transparency about companies' strategic frameworks for long-term value creation and what measures they are taking to implement them.

In his speech entitled "Breaking the Tragedy of the Horizon," delivered in 2015, Bank of England governor Mark Carney acknowledged that capital markets currently lack the long-term focus needed to adequately address climate-related risks.[26] In December 2016, Carney and Michael Bloomberg jointly urged disclosure of exposure to global warming risks so that investors will be able to allocate capital to those companies with the best ideas to hit the 2 degree target. They wrote, "Without the necessary information, market adjustments to climate change will be incomplete, late and potentially destabilising… A properly functioning market will price in the risks associated with climate change and reward firms that mitigate them. As its impact becomes more commonplace and public policy responses more active, climate change has become a material risk that isn't properly disclosed."[27]

Until very recently, institutional investors would virtually never take an outspoken position on proposals by activist hedge funds and tended to always side with the board on shareholder resolutions.[28] As such, during the 2016 proxy season shareholder resolutions that called for disclosure of business risk under a 2 degree Celsius scenario (in which warming is limited to the target of the Paris Accords) received an average of 37.73 percent shareholder support.[29] However, in May of 2017, for the first time, some of the world's largest institutional investors voted against the boards of two major energy companies and a utility company, successfully passing measures requiring the boards to undergo and disclose their climate risks.

First, CalPERS led an effort that was later joined by BlackRock to pass a shareholder resolution calling upon Occidental Petroleum Corp. to annually assess the long-term financial risks of a lower carbon economy and regulation designed to address climate change. This resolution represented the first time one of the world's biggest investment management firms had ever overrode the board in approving a climate proposal. BlackRock said it took action because Occidental failed to improve its climate change-related reporting following a similar unsuccessful proposal last year.[30]

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[26] Bank of England, "Breaking the tragedy of the horizon – climate change and financial stability – speech by Mark Carney," Sept. 29, 2015, available at: http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx.

[27] Mark Carney and Michael Bloomberg, How to make a profit from defeating climate change, The Guardian, Dec. 14, 2016, available at: https://www.theguardian.com/commentisfree/2016/dec/14/bloomberg-carney-profit-from-climate-change-right-information-investors-deliver-solutions.

[28] Robert C. Pozen, The role of institutional investors in curbing corporate short-termism, Brookings, Aug. 11, 2015, available at: https://www.brookings.edu/articles/the-role-of-institutional-investors-in-curbing-corporate-short-termism/.

[29] Hank Boerner, Climate Change Resolutions / and Investors' Voting – "Hurricane" Coming in 2017 Shareholder Voting?, Governance & Accountability Institute, Mar. 21, 2017, available at: http://ga-institute.com/Sustainability-Update/tag/2-degree-scenario/.

[30] Emily Chasan, Occidental Holders Override Board in Approving Climate Proposal, Bloomberg, May 12,

Then, the New York State Common Retirement Fund spearheaded a successful resolution urging the management of PPL, a major utility that derives 60 percent of its power mix from coal, to publicly report how climate change will affect the company's earnings under a scenario in which warming is limited to 2 degrees Celsius.[31] This was the first time shareholders of a U.S. elective utility voted in favor of such a resolution.[32]

Soon after, on May 31, a majority of Exxon shareholders, including Blackrock and Vanguard, supported a similar resolution.

Overall this year, according to Proxy Monitor, as of June 2017, 56 percent of all shareholder proposals were related to environmental or social issues, the highest share since the database began keeping records in 2006.[33]

In August of 2017, under reported pressure from Walden Asset Management,[34] Vanguard Group announced it was urging companies to disclose how climate change could affect their business and asset valuations.[35] While State Street and BlackRock had made their positions on this topic previously known, this was the first time Vanguard gave detail about its thinking on climate risks. Action on the part of Vanguard is meaningful and has the potential to set corporate agendas because the group manages about $4 trillion in assets and its massive index funds secure its place as the top shareholder in many large U.S. corporations. Vanguard's investment stewardship officer explained: "Our support for these proposals is not a matter of ideology, it's a matter of economics."[36]

In August 2017, Vanguard released its voting record for the last six months, which revealed it had, for the first time, defied management to vote in favor of enhanced climate disclosures in a number of key shareholder votes, including the one at ExxonMobil.[37] Vanguard expressed it intends to take more "public positions on select governance

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2017, available at: https://www.bloomberg.com/news/articles/2017-05-12/blackrock-to-back-climate-shareholder-proposal-at-occidental.

[31] Robert Walton, PPL shareholders pass resolution for climate strategy assessment, May 23, 2017, available at: http://www.utilitydive.com/news/ppl-shareholders-pass-resolution-for-climate-strategy-assessment/443319/.

[32] Anthony Salamone, Temperature's rising on PPL to support shareholder resolution on climate change, THE MORNING CALL, Utility Dive, July 1, 2017, available at: http://www.mcall.com/business/energy/mc-ppl-shareholders-climate-change-vote-20170701-story.html.

[33] James R. Coplan and Margaret M. O'Keefe, Proxy Monitor 2017 Finding 1: Climate-Change Proposals Break Through, Proxy Monitor, available at: http://www.proxymonitor.org/Forms/2017Finding1.aspx.

[34] Ross Kerber, Vanguard seeks corporate disclosure on risks from climate change, Reuters, Aug. 14, 2017, available at: https://www.reuters.com/article/us-vanguard-climate-idUSKCN1AU1KJ.

[35] Carl Surran, Vanguard enhances push for corporate disclosure on climate change risk, Seeking Alpha, Aug. 14, 2017, available at: https://seekingalpha.com/news/3289303-vanguard-enhances-push-corporate-disclosure-climate-change-risk?dr=1&uprof=14&utoken=f6abedced4a45da04e996c1ea889df02f4f4853e#email_link.

[36] Id.

[37] Vanguard, "Investment stewardship 2017: How Vanguard advocates for investors," Aug. 31, 2017, available at: https://institutional.vanguard.com/VGApp/iip/site/institutional/researchcommentary/article/NewsInvestmentStewardship.

topics," naming climate risk as one of its top priorities.[38]

In addition to joining shareholders in proxy votes, investors have joined together in various coalitions to demand more robust disclosures. CalPERS joined a group of 200 investors with a total of $15 trillion in assets to urge G7 governments to uphold commitments on climate, fearing inconsistent climate policy could erode the value of their investments.[39]

Institutional investors managing $17 trillion in assets (including BlackRock, Fidelity, and RBC Global Asset Management) created a new corporate governance framework, the Investor Stewardship Group. The principles of the group constitute moves that have the potential to enhance the activism of sustainable and responsible investors in proxy votes and engagement with companies.

After the devastation of Hurricanes Harvey and Irma in September, a coalition of institutional investors managing more than $1 trillion in assets sent letters to the chief executives of sixty of the world's largest banks demanding they disclose more regarding their exposures to climate-related risks and their plans to ensure compliance with the Paris Accords. The letters ask bank leaders to provide details of their plans to support the transition to a low-carbon economy, "which could require up to $93 trillion of investment by 2030."[40]

Financial institutions managing assets of around $25 trillion have expressed support for the final recommendations of the G20-affiliated Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (TCFD).[41] The recommendations call for disclosure of the actual and potential impacts of climate related risks and opportunities on organizations, including the potential impact of different scenarios, ranging from a 2 degree C global temperature rise scenario to a business-as-usual scenario. Among the Task Force members are Barclays, BHP Billiton, Tata, and Dow Chemical.

Some of the largest investment managers have explicit policies on ESG and climate change, some offer specific ESG and ethical funds, and Swiss Re reinsurance provider shifted its entire $130 billion portfolio to ethical indices.[42] TD raised $1 billion when it issued a green bond in the U.S. for the first time.[43] Proceeds from the sale will fund lending to North American projects that support the transition to a low-carbon economy

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[38] Id.

[39] Attracta Mooney, 200 large investors urge G7 to keep climate change promises, Financial Times, May 8, 2017, available at: https://www.ft.com/content/3cf1bb58-3171-11e7-9555-23ef563ecf9a.

[40] Chris Flood, Big investors take aim at banks over climate change risk, Financial Times, Sept. 14, 2017, available at: https://www.ft.com/content/a2616a52-988b-11e7-a652-cde3f882dd7b.

[42] John Revill, Swiss Re shifts $130 billion investments to track ethical indices, Reuters, July 6, 2017, available at: https://www.reuters.com/article/us-swissre-ethical/swiss-re-shifts-130-billion-investments-to-track-ethical-indices-idUSKBN19R22Y.

[43] Jon Hill, TD Bank Prices Its First US Green Bond at $1B, Law360, Sept. 8, 2017, available at: https://www.law360.com/articles/962031/td-bank-prices-its-first-us-green-bond-at-1b (subscription required).

through renewable energy generation, energy efficiency management, or green infrastructure and sustainable land use.[44]

In June, a number of large investors and companies—including Unilever, Pepsico, and Nestle—moved to report non-financial performance, including environmental impact, through the Coalition for Inclusive Capitalism. They pointed to the impacts such factors have on long-term value of businesses as well as the impact on stakeholders, rather than just shareholders.

Despite this wave of demands for further disclosure, companies' ESG disclosure is currently patchwork and fails to provide investors with the information they need. Because companies are not committing to voluntary disclosure initiatives, some institutional investors have developed their own proprietary aggregators, which use information disclosed in 10k filings with the SEC. The information in these filings, however, is often overly broad and fails to provide details, including data on risks to physical assets. Many climate-related investor initiatives focus on how companies are contributing to climate change rather than how they will be affected by it, despite the clear benefit to understanding material risks that can be acquired from the latter.

LEVERAGING INSTITUTIONAL INVESTOR POWER TO IMPROVE DISCLOSURE

Institutional investors appear to be taking ESG risks more seriously and all identify the need for more data to assess ESG risks. However, they can do more to push companies to disclose the information on their ESG risks that investors need to make decisions. Institutional investors may be able to use their leverage with companies plagued by inaction on climate change and other ESG risks to disclose more and ultimately bring about more responsible long-term financial performance.

There are three major tools institutional investors employ to change company behavior: engagement, voting, and divestment. State Street has called upon companies to integrate sustainability into their long-term strategies, and both State Street and BlackRock report that they take sustainability integration into consideration in their engagements with companies. They also determine their voting positions on shareholder resolutions and management elections based on ESG factors.

In their engagement with companies, institutional investors should make it clear that the old notion of materiality is no longer sufficient and encourage companies to employ a more expanded view that considers long-term risks. They should push companies to extend their strategic planning horizons to be sensitive to the time horizons of their investors. Institutional investors should also make sure companies explain their materiality determination process, which boards should have the ultimate responsibility over, rather than sustainability departments. In general, boards should be determining new business strategies to address climate risks and should hold the ultimate accountability for such matters.

[44] Id.

Institutional investors can also encourage companies to abandon practices that lead to inappropriate focus on the short-term. Institutional investors can call for companies to abandon quarterly earnings reporting, as food and beverage giant Unilever has done.[45] Other short-term incentives could be forgone, such as quarterly incentives for fund managers and basing CEO compensation on short-term performance. For example, three-year performance periods can be used to determine cash bonuses of directors. In 2016, BlackRock and Vanguard voted in favor of a $17.5 million compensation package for a CEO despite flagging corporate performance.[46] On the other hand, Barclays has linked compensation awards to senior executives with the meeting of climate strategy goals.[47] Institutional investors can also make sure companies express a vision of sustainable long-term growth and support the nominations of directors with long-term approaches to corporate growth.

To clarify how companies should go about disclosing ESG risks, institutional investors should mandate that specific disclosure initiatives be used. Since the TCFD's final recommendations were published, BlackRock expressed its plan to "engage companies most exposed to climate risk to understand their views on the TCFD recommendations and to encourage them to consider using this reporting framework as it is finalized and subsequently evolves over time."[48] Having all expressed their desire for more data, the largest institutional investors who have recently coalesced on climate issues – BlackRock, State Street, and Vanguard – could join together in mandating a particular minimum disclosure requirements for companies. The TCFD's final recommendations are a good place for companies to start. In Australia, for example, Origin Energy shareholders are demanding implementation of TCFD, namely by disclosing scenario analysis, and metrics and targets that would allow investors to assess the company's resilience across a predicted 2 degree Celsius rise in the global thermostat by the end of the century.[49]

As discussed above, this proxy season invited a wave of major institutional investors joining shareholders and winning majorities on resolutions demanding expanded disclosures. Institutional investors should continue this pattern by holding companies accountable when they fail to take ESG risks into consideration, as BlackRock reports doing by supporting the Occidental resolution. If institutional investors vigorously advocate a long-term approach to shareholder value, they should be able to block

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[45] Paul Polman, Business, society, and the future of capitalism, May 2014, available at: https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/business-society-and-the-future-of-capitalism?cid=soc-web.

[46] Gretchen Morgenson, Dubious Corporate Practices Get a Rubber Stamp from Big Investors, N.Y. TIMES, May 19, 2017, available at: https://www.nytimes.com/2017/05/19/business/gretchen-morgenson-arconic-activist-investors.html.

[47] Chris Flood, Big investors take aim at banks over climate change risk, Financial Times, Sept. 14, 2017, available at: https://www.ft.com/content/a2616a52-988b-11e7-a652-cde3f882dd7b.

[48] BlackRock, Our engagement priorities for 2017-2018, available at: https://www.blackrock.com/corporate/en-us/about-us/investment-stewardship/engagement-priorities.

[49] Origin Energy faces three shareholder resolutions on climate, REneweconomy, Aug. 23, 2017, available at: http://reneweconomy.com.au/origin-energy-faces-three-shareholder-resolutions-climate-31194/.

programs that do not meet that objective and beat out short-term-thinking activist hedge funds which tend to have smaller percentages of a company's stock. They need to continue pushing for more disclosure and action to address climate risks by vigorously opposing hedge funds in proxy fights when their proposals thwart a company's long-term growth strategy.

To maintain actively engaged based on their long-term investment principles, institutional investors should stop outsourcing voting decisions to proxy advisory firms that might not share their long-term perspectives. They should maintain control over their investment decisions and stay active and involved in proxy voting.

As for divestment, in contrast to hedge funds, institutional investors' mandates that require them to invest for the long-term deprive them of the option of using the threat of divestment as leverage against companies in which they invest. NBIM, however, considers risk-based divestment an important tool in shaping companies' long-term strategies. The fund reports that it divested from 23 companies in 2016 alone, following assessments that ESG risk factors, such as greenhouse gas emissions and water risks, would have a negative impact on the portfolio over time.[50] CalPERS generally prohibits divesting, but in 2015, the California Assembly voted to order the fund to remove all holdings in companies that obtain at least half of their revenue from coal mining by July 2017.[51]

Additionally, institutional investors should lobby governments and stock exchanges to impose mandatory disclosures. As of 2015, there are mandatory non-financial disclosure regulations in Denmark, South Africa, China, Malaysia, Brazil, Hong Kong, and India.[52] Mandatory measures can help institutional investors access the information necessary to make sustainable investment decisions, while also leveling the playing field for companies.

Finally, while institutional investors have been hesitant in the past,[53] they should begin to join securities class action lawsuits against companies who fail to disclose their climate risks in order to encourage transparency and action.

DESIRED DISCLOSURE

[50] Norges Bank Investment Management, Responsible Investment: Government Pension Fund Global 2016, p. 76-77, available at: https://www.nbim.no/contentassets/2c3377d07c5a4c4fbd442b345e7cfd67/government-pension-fund-global---responsible-investment-2016.pdf.

[51] Katie Valentine, The Nation's Most Populous State Just Voted to Divest From Coal, ThinkProgress, Sept. 3, 2015, available at: https://thinkprogress.org/the-nations-most-populous-state-just-voted-to-divest-from-coal-693cabd4feb1.

[52] Shlomitt Azgad-Tromer, Corporations and the 99%: Team Production Revisited, 21 Fordham J. Corp. & Fin. L. 163, 194, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2596754.

[53] James D. Cox and Randall S. Thomas, Leaving Money on the Table: Do Institutional Investors Fail to File Claims in Securities Class Actions?, 80 Wash. U. L. Q. 855, available at: http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1724&context=faculty_scholarship

Eliza Robert, lead of Ceres' agricultural water stewardship programme, said: "Water management is an imperative for companies like never before… Investors need to know that we are coming to the end of cheap, plentiful water. It will change expectations for quarter-to-quarter growth and companies need to radically rethink their water risks."[54]

While this paper has widened the scope of this project by looking at ESG risks generally, there are specific gaps in disclosure that were discovered through the other research produced as part of this project. A major constraint on all of the elements of this project has been the lack of data. In order to better understand water risks in the mining industry, investors would benefit from having access to more data, which requires knowing what specifically to ask for. Hopefully, institutional investors like NBIM who wish to more accurately consider water risks in the mining industry will be able to use the following list of data that would have been informative in predicting financial risks to drive their engagement with mining companies to demand better disclosure.

Asset level data, provided as time series for each asset (except for climate, design, and TSF material), on:

- The climate (precipitation in particular) records used to assess flood and scarcity risks;
- The losses associated with climate events (e.g., business interruption due to infrastructure damage or to water input restrictions);
- The losses associated with conflict;
- The water-related OPEX and CAPEX (for pumping, trucking water in);
- The number of tailings dams, the dates when each dam was raised, and for what purpose (CDP will include a question on this in their next questionnaire);
- The volume time series of tailings ponds;
- The design levels of various elements of tailings dams (e.g., spillway);
- The material of tailings dams; and
- The time series of clean-up costs.

<u>Tailings Storage Facilities (TSF)</u>: The researchers studying TSFs would have benefitted from standardized databases providing data on tailings dams. The International Commission of Large Dams (ICOLD) has a registry of more than 50,000 dams worldwide that includes details on their characteristics and is updated regularly, but currently it does not include tailings dams. An international registry of TSFs similar to ICOLD is needed to assess the risks of a particular project or a region.This database would be used to (1) perform qualitative exposure analyses, at multiple scales depending on the intended use (asset, portfolio, regional, country, or global); (2) inform the risk enhanced approach, particularly for portfolio management; (3) inform nearby communities about the potential risks posed by the TSFs; and (4) improve the existing methodologies to estimate probabilities of failure modes.

The minimum information that this database has to include is:

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[54] Anya Khalamayzer, Nestle, Coca-Cola top list of companies disclosing water risk, GreenBiz, Sept. 14, 2017, available at: https://www.greenbiz.com/article/nestle-coca-cola-top-list-companies-disclosing-water-risk.

- Mine name/owner;
- Type of ore;
- TSF coordinates;
- Current and design height;
- Number of rises;
- Year of construction;
- Projected life;
- Current and design storage capacity, type of construction (e.g. upstream, downstream, centerline);
- Material of construction;
- Information about the nature of the tailings (inert, acid drain generating, toxic, etc.);
- Status (active, closed, abandoned); and
- Information about any past incidents.

<u>Remote sensing of TSFs</u>: A more accurate risk assessment could be performed if the following information was disclosed: the number of TSFs for each mining project; TSF feature descriptions including the dimensions, materials, and location.

<u>Closure costs estimates analysis</u>: The dearth of information in this area made it difficult to benchmark between different projects, and to understand what is driving the changes in closure costs. Critical information includes: closure plans that are made publicly available; methodology followed to obtain closure cost estimates; provisions for reclamation/rehabilitation by project level rather than company level.

<u>Water quality impacts</u>: Researchers would have benefitted from access to the following information to better facilitate the risk analysis:

- In one location, a list of all mines' names, previous names, partial owners, and previous owners (SNL's new portal appears to provide this information, but it was not available when researchers completed their analysis and remains publicly inaccessible);
- Estimated production of artisanal mining, even if on a more coarse scale than a single mine;
- Water quality data of receiving bodies and effluent concentrations that mines measure;
- EIAs would ideally be available in a common format where tailings dam coordinates would be located in the same place within the EIA or searchable using keywords, so that a one-by-one search is not necessary. Additionally, EIAs should provide more meaningful water quality data;
- In the United States, 303(d) and 305(b) data is required to be reported to Congress by states, but is voluntary to upload to the major database (STORET, and thereby the Water Quality Portal). Ideally, this data should be integrated (available on the ATTAINS database) into the other portals;
- Superfund water quality measurements, available in an online database rather than via requesting forms/documents, to help analysis of the riskiest areas;

- Water quality reporting from mines to government done with raw data, not just PDFs with trends, and government or mines making that available; and
- In Peru, the production data provided online should include the mine's coordinates, and the water quality data and production data should be provided in .csv instead of .xlsx (currently it has merged cells, which makes use and analysis difficult).

Social risks: The researchers who studied the influence of diminished water availability and quality on social conflicts in Peru would have benefitted from more data in the following areas:

- Up-to-date rainfall data to test whether competition for water during dry seasons is a determinant for conflicts;
- Country gini coefficients (Peru does not compile this) and poverty statistics (only available from 2001-2010) to explore whether mining investments generate increased inequality by only benefitting few, resulting in tensions;
- Purchasing power parity to explore whether local inflation due to mining projects leads to conflict (Peru only compiles this data by region);
- Data on water quality, which may be a primary source of conflict (Peru water authority doesn't have water quality indicators for all of the river basins across time);
- Corruption perception index (only available at the national level), to explore failure to use of tax revenue to invest in mining communities and corruption→obscure process of obtaining permits→distrust of the population towards the mine and government→tension within the locality;
- Data on irrigated land to explore whether competition for water destined to the agriculture sector increases tensions (data only available for one year);
- Data on fines from regulatory agency to test whether conflicts arise due to mining companies not complying with the law (time series data limited in Peru); and
- Data on the cost of compliance to test the risk of regulatory changes on mining company operations (crude and limited data in the US; not available for Peru).