



2022 GRAND CHALLENGE

Stakeholder Capitalism + ESG Investing

FOREWORD

For our 2022 grand challenge, the Kenan Institute made the ambitious commitment to explore stakeholder capitalism and ESG investing – complex topics that have required the engagement of our global network of experts to unpack.

We began by enlisting key research faculty at UNC Kenan-Flagler Business School and appointing five internal and external scholars to serve as our class of 2022 Distinguished Fellows. We then hosted top business and policy leaders for roundtables, workshops and one-on-one discussions throughout the year, creating a feedback loop that not only fostered insightful exchanges, but also ensured our work remained grounded in the real-world problems facing businesses today.

As part of our initial research on stakeholder capitalism and ESG investing – and despite the rapid penetration of both terms across the business landscape – the two concepts continue to conjure vastly different things for different people. For many, stakeholder capitalism is simply a better way of conducting traditional business (i.e., by looking through a broader lens of those affected by corporate activity and, critically, considering how such stakeholders should be considered in today’s economy). However, others are more concerned with corporate actions that are not obvious win-win solutions, and seek to understand the inherent trade-offs required to reach a broad set of societal goals. The natural tension between “doing good” at the expense of profits and the fiduciary responsibility of managers and directors is of primary importance.

In this vein, the most important takeaway of our analysis may be that there exists a decoupling of traditional profit maximization and shareholder wealth maximization that is consistent with fiduciary responsibility – and this derives from the increasingly large set of investors whose preferences extend beyond profit-maximizing corporate actions. In short, the fact that some investors care about both the amount of profit as well as how that profit is made means that companies “doing good” in the eyes of investors will

command a premium. To a limited degree, this premium allows them to offset a marginally more costly business model. This key insight has direct implications for corporate managers, investors and policy-makers, and we provide an in-depth analysis of these in the enclosed.

Before diving in, I want to acknowledge this report as the culmination of a year’s worth of work, which has included Kenan Insights, commentaries, webinars, events and more – woven together to provide a detailed exploration of stakeholder capitalism and ESG investing in a post-pandemic world. Contributors across academia, industry and policy have provided their expertise to help us better understand the nuances of the topics at hand, and it is important to note that the report may not reflect the full views of every contributor but rather serves as a collection of their research and experience.

Just as important to our work are the students and staff who assisted in essential tasks such as data collection and analysis, literature searches, website development, event coordination and more.

So, as you consider the results of our work, I hope you will join me in offering a well-deserved thank-you to everyone who has taken part in this effort to generate world-class, evidence-based and actionable advice for businesses and policymakers.

We hope you will find value in the following, which we view as a small step forward in our collective journey toward deeper understanding of these complex issues. As with all Kenan Institute reports, your feedback is most welcome; I invite you to reach out either directly to me or to any of my colleagues to share your thoughts or continue the conversation.



Best,
Greg Brown

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Published Contributors

This report was produced using the work of the contributors below, whose research and writings appeared in Kenan Insights, commentaries, report chapters and white papers throughout our yearlong exploration of stakeholder capitalism. The report may not reflect the full views of every contributor but rather serves as a collection of their research and experience.

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Executive Summary

While a welcome paradigm shift for critics of shareholder primacy, the concept of stakeholder capitalism conjures vastly different problems, prospective solutions and desired outcomes for different populations.

The controversial broadening of a business's mandate beyond maximizing profits to account for its impact on customers, suppliers, employees and societal issues such as climate change and income inequality is exceedingly complex. And as an increasing number of businesses grapple with the adoption of environmental, social and governance (ESG) frameworks and stakeholder capitalism's tenets – along with the inevitable trade-offs between competing stakeholder groups such adoption brings – public and private sector leaders alike need guidance.

Based on our yearlong study of this topic, we believe that jettisoning profit maximization is not a sustainable solution. Rather, incorporating the nonpecuniary preferences of change agents such as shareholders while acknowledging their limited impact will provide the best outcome. Along with this approach comes a renewed appreciation for the role of government policy actions in achieving broad societal goals that we cannot realistically expect private market forces to address. Consequently, our approach is to provide a framework that allows for a clear understanding of the optimization problem facing corporate decision-makers in an economy with investors who value more than just financial returns. We also evaluate what can be expected from private sector adoption of the optimal solution. In short, we find that investor preferences toward ESG factors that are reflected in corporate actions will lead to better societal outcomes. However, the staunchest advocates of

stakeholder capitalism and ESG investing will likely be disappointed by what private sector market forces alone will achieve. It is important to note that our analysis is consistent with – and, in fact, determined by – the fiduciary responsibilities of corporate directors and officers.

Key Takeaways

1. The creation of win-win, stakeholder-focused solutions is simply profit maximization. When considering win-win opportunities, such as meeting consumer demand for socially responsible products, the ESG and stakeholder capitalist framework is, at most, a lens through which shareholder primacy can be more efficient. This is the traditional model and should not be controversial.
2. When no clear win-win solutions exist, the only sustainable model still examines trade-offs through the lens of shareholders' preferences for societal benefits. More specifically, shareholders can, and do, care about a range of other stakeholders but at the same time must balance these preferences with financial gains.
3. Confusion about takeaways (1) and (2), and their embodiment through ESG investing, stems from two sources:
 - Not differentiating traditional profit maximization from the well-documented valuation premium generated by investors who consider ESG factors.
 - Not understanding that returns to investors, and society, will come from both a change in investor preferences for ESG as well as the ultimate premium investors are willing to pay for companies with ESG characteristics they like.

4. Substantial clarity about the returns from ESG investing can be achieved by considering a simple two-by-two framework where we consider pecuniary and nonpecuniary factors versus investment horizon. In the short run (Transitory Period), appreciation of ESG benefits for both pecuniary and nonpecuniary considerations will generate above-average investment returns. In the long run, however, investors valuing nonpecuniary ESG benefits should expect to earn below-average investment returns. This comes from the simple fact that, in the long run, nonpecuniary benefits are available to investors only by paying a premium for certain companies, which must then be reflected in lower expected returns. Or more simply put, in the long run, investors valuing companies that rate highly on ESG are paying more for a dollar of future income (e.g., higher price-to-earnings ratio), and so expected future returns must be lower.

| | Transitory Period | Long Run |
|--|--|---|
| <p>Pecuniary Benefits (Value):</p> <p>Company initiates ESG-related corporate actions that result in larger and/or safer cash flows.</p> | <p>Stock returns will be <i>above average</i> as the company generates unexpectedly high (and/or less risky) cash flows.</p> | <p>Stock returns will be <i>average</i> for new investors because prices already reflect expectations of better ESG-related cash flows.</p> |
| <p>Nonpecuniary Benefits (Values):</p> <p>Company initiates ESG-related corporate actions that <i>do not</i> result in larger or safer cash flows <i>but are still valued by investors.</i></p> | <p>Stock returns will be <i>above average</i> as investors bid up the stock price because of the desired nonpecuniary ESG attributes – thus creating a “greenium.”</p> | <p>Stock returns will be <i>below average</i> for new investors because they are paying a premium for nonpecuniary benefits.</p> |

5. Our model has specific implications for management decision making. Most importantly, a crucial implication of investors valuing nonpecuniary company characteristics is that profit maximization is not the same as maximizing shareholder welfare or even wealth. In other words, managers need to consider how certain actions that **do not** improve cash flows can still positively affect stock valuations. These actions will include activities that affect other corporate stakeholders. Consequently, optimal ESG implementation involves investors and corporate managers determining what nonpecuniary factors are most valuable for a particular company and focusing their efforts accordingly. There will be a trade-off implied by valuations that determines the set of activities companies should undertake. We show that our model properly characterizes the long-run ESG decision-making process because *any alternative model suggesting more or less ESG activity will be suboptimal and thus violate fiduciary responsibilities.*

6. In practice, the magnitude of stock price valuation “greeniums” associated with various ESG activities can vary substantially. This implies that the optimal amount of ESG activity for a particular company will be limited in the (many) cases where greeniums are small. This will disappoint ESG advocates who hope that the framework can deliver large-scale solutions for some of the bigger issues facing society (e.g., decarbonization and climate change).

7. A clear implication of our analysis is that coordinated government policy will be the only viable solution in some cases, especially for environmental issues. Nonetheless, optimal ESG implementation will be effective at addressing many governance and social priorities.

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8. Current frameworks, such as ESG measurement metrics, are not sufficient to support a clear delineation of both trade-offs as well as win-win solutions for businesses and shareholders. This is especially challenging for smaller businesses and retail investors.

Stakeholder Capitalism: What It Is, What It Isn't, and a New Model for Measuring Stakeholder Trade-offs

Throughout 2022, the Kenan Institute explored ESG factors as they relate to the decisions of corporate managers and investors. We have framed this analysis within the broader notion of “stakeholder capitalism,” a model in which business decisions explicitly consider the impact on a broader set of corporate stakeholders.

Before exploring stakeholder capitalism, it is important to discuss the traditional best-practice model: shareholder primacy. The beauty of shareholder capitalism is that, under the right set of conditions, it produces the optimal amount of goods and services at the lowest cost and with the least waste. However,

it is by no means a perfect model because it does not account for harm to common goods, such as pollution, or what economists call negative externalities. However, in theory, all parties – workers, managers, shareholders, consumers and regulators – under shareholder maximization know what companies are up to: They are in the business of making money. As a result, policymakers, investors and consumers can create structures and incentives to shift toward outcomes that solve for negative externalities, such as minimizing pollution or misinformation.

The Textbook Model of Shareholder Primacy

In the textbook model of shareholder capitalism, a firm tries to maximize profits by producing the highest output at the lowest cost. All of management’s decisions are based on that principle: hire the workers with the right skills or train existing workers; invest in plant, equipment, software, and research and development; and produce a good or service (predominantly services these days) that customers want to buy. Demand and supply respond to changes in prices and tastes – such as customers wanting more organic food or electric cars – because firms are chasing those profits. Workers are incentivized through pay, bonuses and perhaps an ownership stake to produce the quality of products the firm chooses to

sell – such as cheap, low-quality offerings like no-frills air travel or, at the other end of the spectrum, luxury resort accommodations. Firms choose the mix of inputs based on cost-benefit analyses, and make long-term investments in capital and labor so that they can keep generating profits. Nothing is wasted because waste eats into profits.

The Reality of Shareholder Capitalism

In the ideal setting noted above, shareholder capitalism produces an efficient allocation of resources. Competitive markets with widely available information mean that consumers know the quality of the good or service they are buying. Likewise, management is in sync with shareholders. Perhaps most important, governments adjust for externalities and create a regulatory environment that ensures competitive markets and the free flow of information. However, we know we do not live in the ideal, and market failures occur. In some ways, the U.S. of 1970 – when Milton Friedman wrote “A Friedman doctrine

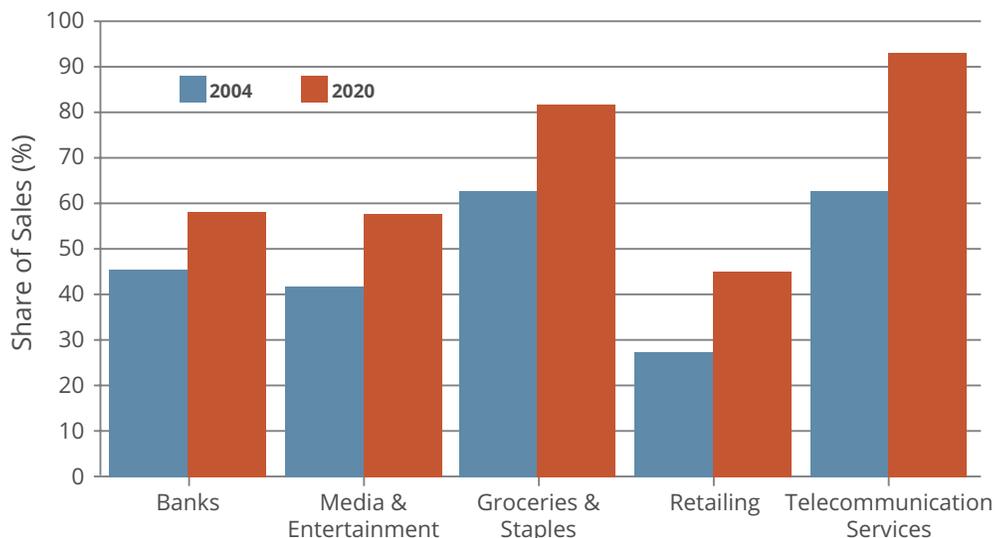
– The Social Responsibility of Business Is to Increase Its Profits,” the op-ed that both proponents and opponents of the shareholder model lean on – may have been closer to this textbook model. For example, Figure 1 below illustrates the meaningful decline in competition during the last 15 years, with research suggesting it goes back much further.¹ The increased firm concentration we see today means higher prices, lower output, less dynamism and fewer startups.²

Moreover, regulators have been unable to keep up with the pace of change during the last 50 years, and in some cases have been “captured” through lobbying efforts by companies, industry trade groups and other special interests. This implies that the public sector may not be acting for the public benefit. Furthermore, the challenging politics around regulatory and, in particular, environmental policies, as well as the global nature of the problem, mean that policymakers are failing to enact policies that deal with nega-

¹ See Shapiro (2019)

² See Shambaugh, Nunn, Breitwieser & Liu (2018)

Figure 1: Industry Share of Sales of Four Largest Firms



Source: MSCI, based on investable market

tive externalities. For example, the economic experts across the political spectrum have long held that carbon pricing can be a significant change agent by creating incentives for businesses and consumers to lower their carbon footprints. Yet after 27 rounds of U.N. climate talks, policymakers are unable to agree on a unified global response.

Operational Issues Within the Shareholder Primacy Model

In the textbook explanation of firms under the shareholder primacy model, firms take a long-term view and thus treat labor, communities, suppliers and customers as long-term partners in the pursuit of profit. A number of issues can attenuate the focus: agency problems, which drive a wedge between management and shareholders; transient investors' pursuit of short-term profits; and operational challenges, which make it difficult for management to focus on the long-term pursuit of profit. Incorporating some ESG principles into the standard shareholder model can be part of the solution. For example, research has illustrated the beneficial effects of employee satisfaction on profitability.³

The primary operational challenge for shareholders and management – to define clear and measurable goals to foster pursuit of long-term profits – is often overlooked. Research suggests that it is difficult to incentivize managers and workers to multitask (i.e., maximize current profits while also investing for the future).⁴ One way of getting there is to provide a clear scorecard and measurements for managers' and workers' objectives, which indicate how much their efforts should be focused on the different metrics. UNC Kenan-Flagler Business School Professor Eva

Labro, a Kenan Institute researcher, has found that many companies do not even attempt to specify weights on the various measures in their scorecards, and those that do often have shifting priorities over time.⁵ Solving internal weights and measurement issues is a key component to standard profit maximization models, and becomes even more pressing when additional maximization goals are introduced (such as a stakeholder capitalism framework). Our work indicates that current ESG weighting schemes are neither developed nor standardized enough to meet the rapidly evolving needs of investors and managers.⁶

No Standard Stakeholder Model

With the understanding that shareholder primacy has its challenges, stakeholder capitalism has emerged as a model that could possibly better serve business and society. But, can the benchmark set by the ideal shareholder model – an efficient allocation of resources – be met by the stakeholder model? In fact, there is no widely accepted model of stakeholder capitalism that illustrates how to define and balance the needs of all stakeholders. Meanwhile, empirical evidence suggests mixed results for stakeholder-focused businesses. Incorporating stakeholder needs via the demands of various change agents – employees, consumers, investors and government – can create that value for firms and society. This inclusion may come at a cost, however, as self-interest and management challenges can mean that change agents may trade long-term benefits for short-term gains.

R. Edward Freeman, a leading developer of stakeholder theory, says, "The task of executives is to create as much value as possible for stakeholders without re-

³ See Edmans, Li & Zhang (2020)

⁴ See Holmstrom & Milgrom (1991)

⁵ See Hemmer & Labro (2017)

⁶ For more, see our Kenan Insight "ESG Measurement: A Surprisingly Complex Issue" at <https://kenaninstitute.unc.edu/kenan-insight/esg-measurement-a-surprisingly-complex-issue/>



sorting to trade-offs.”⁷ Unfortunately, there are nearly always trade-offs to consider. Even when businesses are experiencing explosive growth and investing all their returns back into the business, executives have to consider in which set of people and priorities they should invest. Klaus Schwab, founder and executive chairman of the World Economic Forum, acknowledges that at least “in the short run that may still mean difficult choices need to be made which benefit one stakeholder or its concerns more than another.”⁸ This should be done, Schwab argues, by “separating the consultative process from the decision-making one.”

“In the consultative stage, all stakeholders should be included. ... [whereas] in the decision-making stage, only those mandated to make decisions should be able to do so, which means in the case of companies, respectively the board or the executive management.”⁹

Professor Sarah Kaplan of the University of Toronto’s Rotman School of Management, an expert in stakeholder trade-offs, believes companies can innovate around many trade-offs. “Even when there aren’t innovative solutions, companies can learn to thrive within the tensions created by intractable trade-offs. These tensions, rather than being confusing or

problematic, can actually be a source of organizational adaptability and resilience.”¹⁰ Kaplan and Schwab use specific company cases – for example, how to balance consumerism and sustainability – to illustrate applications of their models.¹¹ Their models can be boiled down to the following: If businesses work hard enough, they can often create win-win solutions.

From an economic modeling perspective, one way of incorporating stakeholder needs is to create an internal market in which the excess value created by each stakeholder is measured, ascribed to the stakeholder, and then allowed to be traded within the firm. Thus, management has clear metrics of stakeholder benefits. A theoretical model that incorporates this market-based model for three stakeholders whose value is easy to measure – employees, consumers and shareholders – leads to an efficient allocation of resources.¹² However, this outcome is only valid if there is only one firm serving the market and the stakeholders have the same abilities and tastes – i.e., they all are equally productive or care about the environment in the same way. If this model is extended to multiple firms or individuals with different tastes, the model suggests that nonshareholder claims must be diminished to maximize society’s creation of goods and services.

⁷ See Stakeholder Theory. (n.d.).

⁸ See Schwab & Vanham (2021)

⁹ See Schwab & Vanham (2021)

¹⁰ See Kaplan (2019)

¹¹ For example, see Gerretsen & Kottasova (2020, May 6)

¹² See Magill, Quinzii & Rochet (2015)

Another modeling effort considers that “stakeholder firms are more concerned with avoiding bankruptcy to protect their employees and suppliers.”¹³ This implies that stakeholder firms are more valuable when cost uncertainty exceeds demand uncertainty. This approach may explain how a stakeholder orientation succeeds in Germany and Japan because those countries have a greater manufacturing orientation, where firms are likely to face more cost versus demand uncertainty – a contrast to heavily service-oriented businesses based in the U.S. This model also incorporates potential competition between stakeholder and shareholder firms and finds stakeholder-oriented firms can thrive as long as the industry faces the right balance of risks and the firms do not tilt too far in the stakeholder direction (which is similar to the model discussed above).

We believe our model, described in detail below, is a more realistic solution because management does not have to weigh potentially competing demands of different stakeholders. Instead, they continue to respond to the incentives provided by shareholders. And, as we know, shareholders are increasingly interested in incentivizing managers to care about ESG-related factors.

Consultants and Businesses Haven’t Solved This Issue

Given the intense interest, it is not surprising that stakeholder implementation has become big business. In an article by Vivian Hunt, Robin Nuttall and Yuito Yamada from McKinsey & Co., “From principle to practice: Making stakeholder capitalism work,” the authors lay out five execution steps: understand who

the stakeholders are; understand stakeholders’ needs and build trust; define and measure ways to serve stakeholders; define and execute a stakeholder capitalism strategy; and build an operating model that can sustain long-term value creation for all stakeholders.¹⁴

The article cites a researcher who identified 435 distinct stakeholder groups, so the authors place the stakeholders into three categories: internal, external who interact directly with the company, and external who define their operating environment (thus putting a limit on how far stakeholders should extend). When thinking about trade-offs, the authors suggest using three attributes to rank the identified ideas, including the extent to which the idea matches the company’s strengths, how well it addresses a specific stakeholder need and how it captures long-term shareholder value. Unfortunately, there are no well-defined metrics or weights to manage conflicting stakeholder needs.

Outside of the academic literature and reports from consulting firms, corporations themselves are weighing in on the topic of stakeholder capitalism. In particular, a milestone in the movement was the Business Roundtable’s 2019 Statement on the Purpose of a Corporation, signed by 181 CEOs of U.S. firms, which states:

“Each of our stakeholders is essential. We commit to deliver value to all of them, for the future success of our companies, our communities and our country.”

Yet the Business Roundtable statement also declares that the purpose of a company includes generating long-term value for shareholders, “who provide the

¹³ See Allen, Carletti & Marquez (2015)

¹⁴ See Hunt, Nuttall & Yamada (2021)

capital that allows companies to invest, grow and innovate.” Unfortunately, the statement provides no direction on whether the interests of other stakeholders may come at the expense of shareholders or how such trade-offs should be managed. If caring about the interests of other stakeholders is only about generating long-run value for investors, then this is no different than the traditional model of shareholder primacy championed by Milton Friedman (among others).

Consequently, the Business Roundtable statement is largely vacuous and could mean almost anything to anyone depending on how it is read – perhaps deliberately. The Business Roundtable’s vision is not unique in this way. To date, there are not any rigorous models of stakeholder capitalism that provide specific methods for how trade-offs between stakeholders should be evaluated. Furthermore, there appears to be little consideration in the discussion around stakeholder capitalism about the fiduciary responsibilities of management and the corporate board of directors. Unless we believe that there will be significant modifications to the legal framework defining fiduciary responsibilities of for-profit companies, any viable model of stakeholder capitalism must be constrained by considering only actions that maximize shareholder wealth.

In sum, stylized models suggest stakeholder orientation can be accretive to firm value under certain conditions, as long as the stakeholder benefits are clearly delineated, measured and not overweighted. While theoretically straightforward, putting the theory into practice is much harder.

Stakeholder Capitalism in Practice

Moving away from the proposed ideal models and vague statements by the Business Roundtable, we

seek to prescribe a model that can work in practice. As noted earlier, stakeholder capitalism is more of the corporate norm in Europe and Japan. An analysis of the 50 most valuable firms in Germany, the Netherlands and France found that the potential benefits of greater environmental (“E”) and social (“S” – in the form of labor) focus was outweighed by the cost of worse governance (“G”).¹⁵ As a result, the European companies on net had lower equity market valuations than similar U.S. and U.K. counterparts. This raises the question of whether bad governance may be separated from good environmental and social investments.

Meanwhile, an analysis of 100 private equity transactions in U.S. states that authorize corporate leaders to give weight to stakeholder interests when considering a sale of their company indicates that corporate leaders used their discretion to obtain gains for shareholders, executives and directors, rather than stakeholders, such as employees who were at greatest risk from the transaction. Moreover, “in the small minority of cases in which some stakeholder protections were formally included, they were generally cosmetic and practically inconsequential.”¹⁶

This is not to say that individual companies have not been successful at integrating stakeholder needs and creating strong market success. Salesforce is seen as one of the exemplars.¹⁷ However, the success is often the result of senior leadership focus or because it was always part of the corporate DNA, which in many cases was built into a firm’s ownership model. For example, Vanguard is a mutual company owned by its investors, while Patagonia is a certified B Corp, which

¹⁵ See Rajgopal (2021)

¹⁶ See Bebchuk, Kastiel & Tallarita (2021)

¹⁷ To learn more, see <https://www.salesforce.com/company/stakeholder-capitalism/>.

must meet certain ESG standards.¹⁸ Sen. Elizabeth Warren has proposed converting all U.S. companies with revenue greater than \$1 billion into benefit-type companies; however, *much* more work is needed to assess the scalability of these models. In general, given the recently renewed interest in stakeholder capitalism, rigorous analyses of the success of stakeholder initiatives are relatively new and the results previously cited should be seen as preliminary.

Stakeholder = Shareholder + Change Agents?

Rather than asking management to solve stakeholder issues, we should consider whether stakeholders themselves can and will act as change agents within the shareholder model. In particular, does the expansion of ESG frameworks among corporations and investors offer an opportunity to embody stakeholder principles within a shareholder model? Later in this report, we explore how ESG could express stakeholder capitalism, and specifically how various stakeholders – as change agents – can drive influence among investors and corporate executives.

But first, it is important to discuss who the potential change agents are. The ones that are most often cited are employees, investors, consumers and governments. Gaining a better understanding of their motivations and tastes can create the win-win situations sought by the formal and holistic models. Incorporating those change agents into the decision-making process may be value accretive to the firm, but change-agent self-interest may also lead to accretive yet inefficient allocation of resources from a societal standpoint.

¹⁸ For a discussion of the potential ESG impact of Patagonia's change in ownerships see <https://kenaninstitute.unc.edu/commentary/is-patagonias-yvon-chouinard-a-stakeholder-capitalist-or-an-altruist/>.

Finally, we have to acknowledge the limitations of the change agents, especially on macro issues such as the environment or yawning wealth disparities. While a narrower gap between CEO and cleaning staff pay may motivate employees and spur consumers to buy a company's products, government policy needs to play an important role through improving educational outcomes, investing in underserved communities, and enacting other motivational progressive tax and spending policies such as the earned income tax credit.

Putting this all together, stakeholders other than shareholders can and should play an important role in making business decisions. However, there is no clear model to incorporate their interests into corporate governance, and real-world examples attempting to do so have led to mixed outcomes.

A New Model for Stakeholder Capitalism

The analysis to this point suggests no room for a stakeholder capitalism model that deviates from traditional shareholder supremacy. Thus, instead of trying to avoid this model, our model harnesses the power of shareholders and their nonpecuniary preferences. This is a new, rigorous and precise model of stakeholder capitalism that deviates from the traditional model of shareholder supremacy by demonstrating how certain corporate actions that benefit other stakeholders can decrease profitability and yet increase shareholder value.¹⁹ While this may seem counterintuitive, this model is quite straightforward and rests only on an intuitive extension to the

¹⁹ This model is based on by Pastor, Stambaugh, & Taylor (2021), and developed by Greg Brown, Lubos Pastor, and Paul Yoo. To learn more, see <https://kenaninstitute.unc.edu/kenan-insight/why-both-sides-of-the-esg-debate-have-it-wrong-and-how-to-get-it-right/>.

traditional model of profit maximization by allowing investors to value more than just financial profits.

In particular, if some investors care about a business's stakeholders, and these preferences are reflected in their valuations of corporate equity, then it is possible for a wedge to open up between corporate profits and shareholder wealth.

The Model at Work

Before diving into a more rigorous analysis, we provide a simple, stylized example to illustrate this model at work. Consider a manufacturing company that needs to build a new production facility and has two options: It can build a traditional facility for \$100 million, or a more environmentally friendly facility for \$115 million. For simplicity, assume there is no difference in the other cash flows (e.g., efficiency) of the environmentally friendly facility – perhaps the only distinction is that it was constructed with more sustainable (and expensive) building materials that are otherwise identical in specifications. In the traditional model of shareholder supremacy, building the environmentally friendly building would cost the company another \$15 million with no cash flow benefits and thus would decrease shareholder wealth by \$15 million. Depending on one's interpretation of the law, this could even be considered a violation of fiduciary responsibility by the company's management and board

But perhaps the issue is not so simple. What if some of the company's shareholders have a preference for the company building the environmentally friendly factory instead of the traditional factory? Suppose, on average, shareholders would be willing to pay 2% more for the stock of the company if it owns and operates the green factory. (This equity price premi-

um is often referred to as a greenium.²⁰) Now, let's assume that the market cap of the company is \$1 billion. If the company builds the green factory, the market value of the company's equity will increase by \$5 million (2% of \$1 billion is \$20 million minus the \$15 million in higher construction costs). This happens even though the company's profits will decline by \$15 million. If the company's management seeks to maximize shareholder value, clearly they should build the green factory *despite the lower profits*.

greenium

A **greenium** is the premium that investors are willing to pay because of their preferences for green energy over brown energy and not because of the financial performance of the companies. *For more on greeniums, see Page 17.*

Critically, our example demonstrates how a corporate action that lowers profits can still be consistent with fiduciary responsibility. That said, it also shows there is a limit to what the company can spend. This limit depends on the size of the greenium, which in turn depends on the preferences of shareholders for non-pecuniary corporate actions. What if the greenium for the green factory was just 1%? In this case, the market value of the company's equity will *decrease* by \$5 million (1% of \$1 billion is \$10 million, minus the \$15 million in higher construction costs). In sum, the key insight is that investor preferences for nonpecuniary actions that benefit different stakeholders will deter-

²⁰ To learn more, see <https://kenaninstitute.unc.edu/kenan-insight/does-esg-investing-generate-higher-returns/>

mine greeniums associated with those actions. The valuation premiums then tell managers the maximum amount they can spend on those actions. Of course, premiums can be zero for some (probably most) nonpecuniary actions – meaning managers should not consider investments associated with those projects or stakeholders. In this way, our model provides exact and prescriptive advice for how managers and boards should consider all corporate stakeholders.

A General Model of Stakeholder Capitalism

We now discuss how to formalize the intuition above by extending the findings of the model presented by Pastor, Stambaugh, and Taylor (2021, henceforth PST), which examines how valuations for “green” companies are determined in a competitive capital market.

We consider an economy in which investors care about the economic profits a company generates as well as the effects the company’s operations have on society. In particular, some companies have what investors consider to be negative impacts while other companies have positive impacts (i.e., positive and negative externalities). Investors may observe and measure these nonpecuniary impacts through tools like ESG factor ratings. The PST model considers just one factor, but we extend this to an arbitrarily large number of possible factors that some investors value. As in the PST model, companies with characteristics that investors feel are beneficial to society will have higher valuations as compared to companies with characteristics that investors feel are harmful to society. The magnitude of the valuation premiums will depend on the strength of investors’ preferences for each factor. The more investors care about a particular factor, the larger the valuation premium will be for that factor.

What are the attributes of a rigorous model of stakeholder capitalism?

- **Rational actors** who understand the decisions they are making and seek to optimize their behavior with respect to some objective. In fact, the key driver of our results rests on a very straightforward extension of the traditional model of shareholder primacy where we allow investors to care about ESG factors as well as profits.
- **A stable and robust equilibrium** where outcomes do not rely on managers acting on behalf of many other stakeholders (which could potentially create conditions in which benevolent companies are driven out of business).
- **Intuitive and practical** with easily understood forces at work so it can be used by real-world managers and boards to understand the trade-offs they face.
- **Consistent with fiduciary responsibility** so that management and board actions of for-profit corporations will not deviate from a mandate to maximize the financial wealth of shareholders.



This model holds implications not only for portfolio holdings of investors but also for corporate actions. Most importantly, corporations have an incentive to invest in some projects with positive social impacts because these will have a positive effect on their stock price. In fact, this is a self-reinforcing feature of the model – it generates a stable equilibrium because the higher stock price implies a lower cost of capital for the company. And in effect, that lower cost of capital makes some otherwise financially unviable projects viable, because investors have a preference for the social impact.

This model of stakeholder capitalism has several important implications:

1. If sufficiently precise estimates of social impact and corporate valuation effects can be obtained, managers will use the estimates to optimize decision-making. In particular, only projects where the positive valuation effects on stock prices exceed the costs of generating the social impact should be undertaken. *This is the key result of the model.* Investor preferences for socially beneficial corporate actions are reflected in a company's stock price, and tell managers exactly what they should focus on and how much they can spend. In short, the stock valuation premium for each stakeholder project implies an upper bound for

the value of nonpecuniary ESG projects that investors are willing to bear.

2. Overall stock valuation effects will be the sum of individual effects. For example, companies will likely vary in how well they meet investors' assessments of different factors. Consider the scoring of different ESG factors: One company may do well on "E" and poorly on "G" (Tesla) whereas another may do well on "S" and poorly on "E" (Apple). There will still be financial incentives for both companies to improve on individual factors regardless of their overall ESG score. The challenge is knowing how to disentangle those individual effects. For instance, is there a high greenium for Tesla because investors expect it to do more "E," or improve "G"?
3. The company's size matters. Should every company pay attention to every ESG factor? Our model says no. Smaller companies with lower equity valuation will optimally spend less on stakeholders for a given percentage valuation premium. If there are fixed costs associated with stakeholder projects, some will be cost prohibitive for small and midsize companies. Likewise, if communication to shareholders about stakeholder actions is costly, companies may want to limit their stakeholder projects to a manageable number. This

can explain why even large companies seem to concentrate on individual signature stakeholder projects such as U.S. Bank's Access Commitment to focus on closing the racial wealth gap.

4. A company's investor base matters. Because our model works by way of the preferences of shareholders, heterogeneity in the investor base implies that valuation premiums for specific stakeholder projects can vary by company. This could be especially important for companies in various geographies given the well-documented home bias of equity investors – a feature that can explain why similar companies in Europe, North America and Asia have very different stakeholder priorities.
5. Corporate capital structure can also be affected. While we do not explicitly consider corporate debt, it is now well documented that some green bonds also command a greenium.²¹ To the extent that the pricing of corporate debt also depends on the nonpecuniary preferences of investors, this will generate additional (pecuniary) incentives for stakeholder projects favored by bond investors.

Finally, we note that this model of stakeholder cap-

²¹ See Baker, Bergstresser, Serafeim, & Wurgler (2018) and Zerbib (2019)

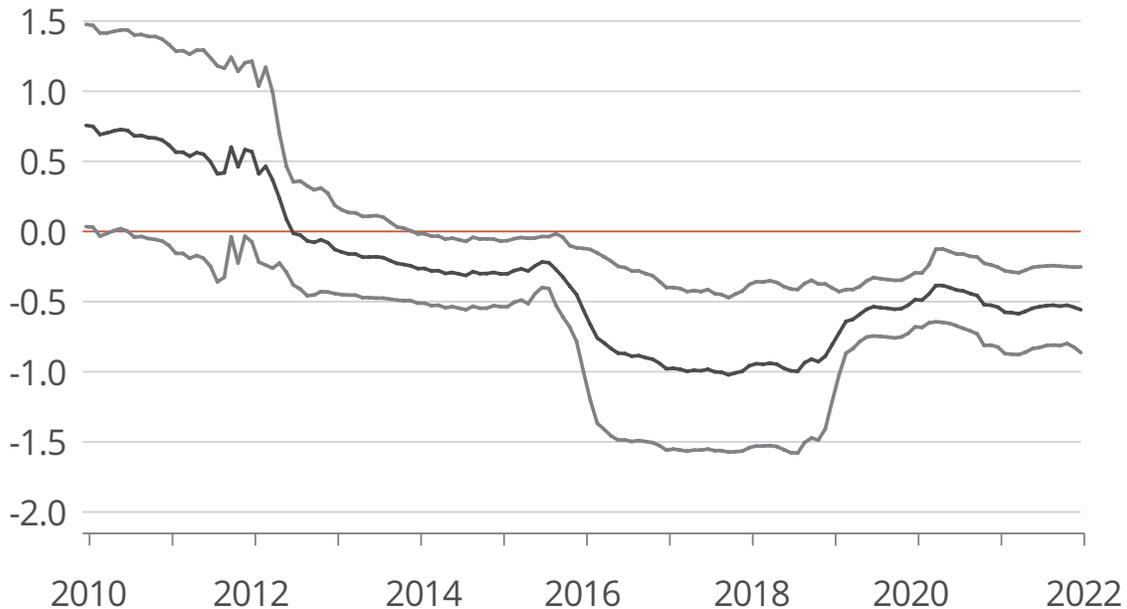
italism should make investors of all types as happy as they can be in a world where some investors have nonpecuniary preferences. For example, the strongest advocates of ESG can buy the highest-rated companies for the factors they care most about – and feel good about their investments while providing a lower cost of capital for the projects that are most important to them. In contrast, investors who do not care about nonpecuniary corporate actions can invest in companies with low commitments to other stakeholders and, in turn, these investors will earn higher financial returns in equilibrium.

Is This Happening in the Real World?

The discussion so far begs the question of whether this is really happening. Or, more precisely stated, can we actually observe the valuation premiums associated with nonpecuniary investor preferences that will serve as the inputs to corporate decisions? Research is digging into this exact question more deeply, but recent evidence summarized below suggests the answer is yes.

A second paper by Pastor, Stambaugh, and Taylor (2022) finds evidence of a growing and economically significant greenium associated with climate concerns. Likewise, Van Der Beck (2021) finds the recent outperformance of an aggregate ESG portfolio in the U.S. was driven primarily by investment flows, which

Figure 2: Effect of Nonpecuniary ESG Factors on Expected Returns



The ESG greenium (solid line) is based on MSCI's Intangible Value Assessment (IVA) data and is estimated over 36-month rolling windows. The vertical axis represents the change in one-month-ahead expected returns (in annual %) associated with three standard deviations increase in IVA ratings (i.e., bottom-to-top quartile IVA change). Dashed lines represent the 95% confidence interval. The sample focuses on S&P 500 stocks. Details are provided in Yoo (2022).

suggests investors are paying an increasing premium for nonpecuniary factors. Results of new research by Yoo (2022) use option-implied expected returns to uncover valuation effects. The findings suggest a nonpecuniary ESG greenium exists in the U.S. public equity market, on top of any other ESG-related premiums stemming from pecuniary concerns (e.g., regulatory ESG risks). This option-implied measure (plotted in Figure 2) has been evolving over the last decade in a way that suggests a significant move from 2010 to 2015 toward a 1%-2% lower cost of capital for large U.S. companies that rate highly on MSCI's Intangible Value Assessment.

However, existing results do not provide the granu-

lar view of how investors value different stakeholder groups or specific projects that provide nonpecuniary benefits. The method for generating these measures is straightforward, though – at least in theory. Specifically, with data on corporate valuations and ESG ratings, one can estimate the coefficients of the following cross-sectional regression:

$$V_i = \alpha + \beta_1 \times ESG_i^1 + \beta_2 \times ESG_i^2 + \dots + \beta_j \times ESG_i^j + controls + \varepsilon_i,$$

where V_i denotes an appropriate firm-level valuation measure (such as the market-to-book ratio) for company i and ESG_i^j are company-level ratings for j different ESG factors. The estimated β_j s tell us whether a given ESG factor carries a significant greenium, and if so, how large it is. These estimates then serve as a



guide to managers and boards about exactly which ESG factors to focus on.

In sum, this model for stakeholder capitalism generates a precise framework for corporate decision-makers to use in evaluating nonpecuniary projects. The model – which is consistent with widely accepted fiduciary standards for corporate managers and boards – derives from a simple and intuitive extension of the traditional model of shareholder supremacy. Simply

put, we assume that some shareholders care about more than profits when making investments. This assumption is validated by observing the significant recent inflows to funds that have explicit ESG mandates. Yet that is the only nonstandard assumption needed to generate a model in which managers will undertake projects that benefit corporate stakeholders at the expense of lower profits, but *to the benefit* of shareholder value.

What Is a “Greenium” and How Does It Play Out in the Markets?

To better understand the concept of a “greenium,” let’s start with an example that includes a simple, stylized stock market with just two companies.¹ The companies are identical except for a single crucial difference: One company, which we will call Green Inc., uses power generated only from renewable energy sources, whereas the other company, which we will call Brown Inc., uses power generated only by burning coal. To keep things simple for now, we assume that both power sources have the same cost, reliability, etc., and this information is common knowledge. Of course, there are other market and ESG considerations, so we will relax this strong assumption later. We also assume that investors make investments consistent with their preferences and that markets are competitive.²

To more easily understand how ESG investing affects returns through time, we also want to assume three distinct eras of investing, which are based solely on the preferences of investors. First is an era before investors care about ESG factors – we will call this the pre-awakening era. Second is an era when many investors start to care about ESG factors and are willing to pay a

premium for companies that score well on ESG factors – we call this the “ESG awakening” era. This means that ESG investors care about both monetary and ESG returns. The third and final period is the post-awakening, when investor preferences have settled into a new equilibrium around ESG – many care about ESG but some don’t, and the sizes of these camps are fairly stable.

What do the paths of the Green and Brown stock prices look like over these eras? The figure on the following page shows that the valuations in the pre-awakening era are basically the same – as they should be, since the companies are identical from a purely financial perspective. During the ESG awakening, however, investors start to care more and more about ESG factors and so Green Inc. starts to trade at a premium to Brown Inc. This wedge is the greenium because it is driven solely by investors’ preferences for green energy over brown energy and not the financial performance of the company. In the post-awakening era, investor preferences have stabilized; thus, valuations will stabilize and there will be a more stable, but still positive, greenium.

¹ The model discussed here draws largely on Pástor, Stambaugh & Taylor (2021).

² These are fairly standard assumptions and consistent with investors being rational and risk-averse, transaction costs being low, etc.

What does the figure below mean for *relative stock returns* for Green Inc. and Brown Inc.? Of course, in the pre-awakening era, prices are about the same and so returns will be about the same as well. It is also clear that during the ESG awakening, the stock of Green Inc. will outperform that of Brown Inc. What may be less obvious is that in the post-awakening era, the stock of Green Inc. will generate lower returns than the stock of Brown Inc. This comes from the fact that we have assumed that the stocks have identical financial performance – i.e., both companies have the same dollar value in earnings and pay the same dollar value in dividends before and after the ESG awakening but the

valuation of Green Inc. is higher. Consequently, it must be that the post-awakening returns are expected to be lower. This is simply a mathematical fact deriving from the definition of return being measured as a percent of price paid for an asset. ESG investors are comfortable with this new equilibrium because they are willing to accept lower monetary returns in order to receive higher ESG scores. We see evidence of this with “green bonds,” where, for example, investors can hold nearly identical German government bonds, but with some that are designated as “green,” given how the proceeds are invested. These German green bonds have higher prices and lower yields (i.e., lower expected returns).³

³ See Pástor, Stambaugh & Taylor (2022)



Application of ESG Investing

Our model above details a framework for how corporate managers can evaluate nonpecuniary projects that some investors may value as part of their personal preferences. But when we turn the lens toward the investor, what is happening in ESG investing?

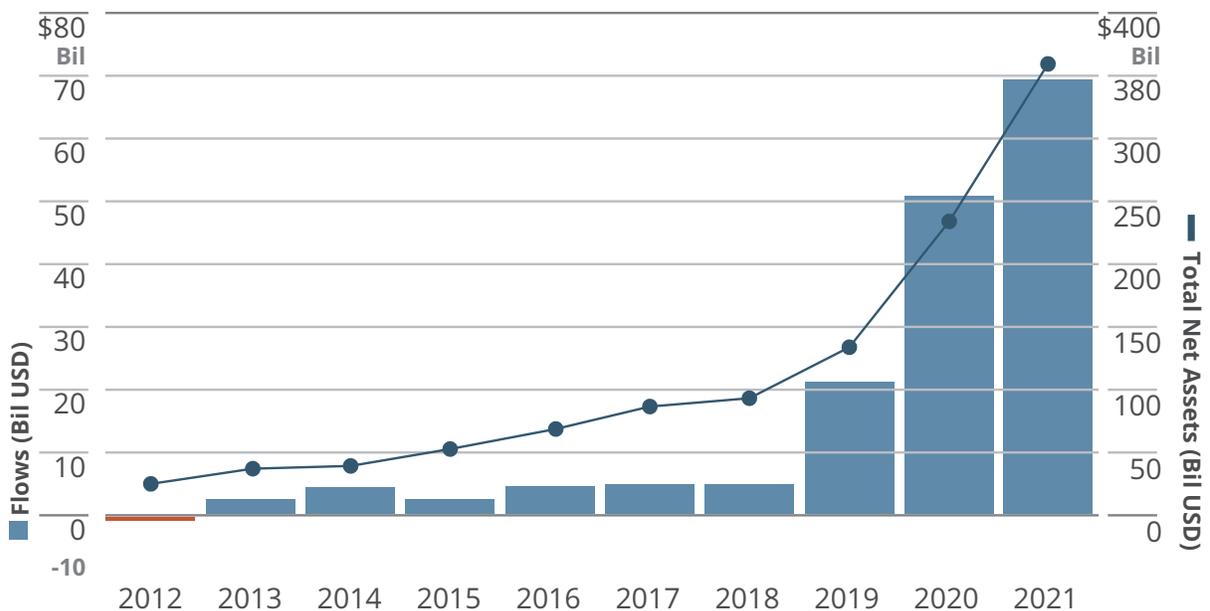
Broadly speaking, ESG investing refers to an investment process that (in an ideal setting) integrates environmental, social and governance objectives along with more traditional risk/return metrics. Over the past decade, interest in ESG investing has exploded. In the United States, ESG investing has moved from a niche market to the mainstream during the last few years (see Figure 3). Wall Street has increasingly been advocating for investment strategies based on

ESG factors, arguing these generate “more stable and higher long-term returns.” This has also been a global movement. Internationally, as of the end of 2021, there were more than 3,800 signatories to the United Nations’ Principles for Responsible Investment, representing major asset owners, investment managers and service providers from around the world, with assets under management of nearly \$30 trillion USD (and continuing to grow).²²

As ESG investing has grown in popularity, it has also become the subject of increased scrutiny and debate. Proponents of ESG investing tout the potential benefits to the corporate bottom line that also align with

²² To learn more, see the Principles for Responsible Investment 2022 Annual Report at <https://www.unpri.org/annual-report-2022/signatories>

Figure 3: Growth of ESG Investment in the U.S.



Source: Morningstar Direct as of Dec. 31, 2021. Includes Sustainable Funds as defined in Sustainable Funds U.S. Landscape Report, January 2022. Includes funds that have liquidated, but excludes funds of funds.

their broader societal goals, concocting a “doing well by doing good” rhetoric. However, detractors worry that the benefits of ESG are overstated and that ESG can result in muddled outcomes and unwarranted economic dislocation in certain industries (e.g., oil and gas), including lower employment, competitiveness and perhaps investment in green technologies.²³

What is ESG Investing, Really?

Before dissecting the controversy behind ESG, and what the evidence to date shows about its legitimacy, let’s define and discuss the individual components as well as how these components are combined into one unified investing approach. The “E,” “S” and “G” buckets are quite disparate and may themselves potentially engender challenging cross-bucket conflicts of interest, both for investors and, as discussed later, for management. To better understand this, it is important to separate these out.

The environmental criteria that ESG investors may perceive as relevant range from energy use to pollution to natural resource conservation and more. Further, some investors may explicitly focus on downside environmental or climate risks, from the potential costs associated with negative climate shocks to perhaps more proximate adverse regulatory or policy changes. Social criteria can range from a company’s working conditions with regard to the safety of its employees to progress on workforce diversity to the engagement of the firm in the challenges of the community within which it operates. Finally, governance criteria focus on the degree to which companies engage in transparent accounting, facilitate board representation and ensure minority shareholders are well represented in important business decisions.

With the wide scope of the individual elements of “E,” “S” and “G,” it is not surprising to find that ESG investing still means wildly different things to different people, and different strategies are employed. To some, ESG investing may simply resemble an earlier iteration called “socially responsible investment” – which largely focuses on the avoidance of undesirable industries (e.g., coal and fossil fuels, tobacco products or weapons manufacturers) through divestment. Here one is still trying to maximize standard risk/return metrics, but subject to some important investment exclusion restrictions. Alternatively, some investors may employ a positive portfolio tilt by weighing problematic firms less without completely divesting from them. This strategy allows diversification across sectors and retains the investor’s ability to vote and engage with companies to pressure them toward better behavior. A more controversial option is to short-sell stocks with poor ESG records. Some research shows that divesting has little long-run impact because other investors with weaker ESG preferences will necessarily replace the seller. Yet, as discussed above, if enough investors divest from, or even short-sell, a stock, it can affect stock prices and influence management decisions. Finally, at the other extreme is true “impact investing,” where a steward of capital is endeavoring to engender an explicit social or environmental outcome that is potentially quite divorced from the pecuniary return. And, of course, ESG can reflect everything in between.

Taken together, this wide variation in intention and application, coupled with an imprecision with which ESG is defined in practice, begs the question – what really are the objectives of ESG integration? We provide a few specific thoughts:

1. Some investors focus heavily on the potential for material risk mitigation. Specifically, they contend there are downside environmental, labor or

²³ See for example Cohen, Gurun & Nguyen (2021)

Divestment vs. Investment in the Fight for a Clean Economy

As the planet warms and the consequences of climate change continue to intensify, the need to develop solutions that will swiftly achieve deep carbon reductions is ever more pressing. Climate policy efforts are starting to see some success, but inaction and delays have motivated stakeholders to search for complementary solutions as well. A burgeoning fossil fuel divestment movement has thus emerged with the aim of spurring businesses to implement cleaner practices and invest in green innovation. The idea is that, since firms in pollution-intensive industries typically do not pay for all the costs they impose on society, so-called dirty firms have little economic incentive to improve their environmental performance without intervention. The goal of divesting, then, is to starve these firms of capital unless they clean up their act. More than 1,500 institutions have committed to some form of divestment so far.¹

Whether divestment will actually work comes down to whether it can put enough upward pressure on dirty firms' cost of capital – that is, how much it costs to borrow money. Kenan Institute Distinguished Fellow Jacquelyn Pless recently reviewed the existing literature (which is detailed in a chapter written for a National Bureau of Economic Research book), which sug-

gests that the effects of divestment on the cost of capital might be quite small, raising questions about whether firms will sufficiently and quickly respond.²

Alternatively – and perhaps surprisingly – continuing to invest in pollution-intensive industries might offer a promising avenue toward hastening the transition to greener business practices under the right conditions. Doing so allows socially minded investors to leverage their proverbial seat at the table and influence organizations' strategies, practices and innovation pursuits, as long as they actively engage with leadership and management. A Deloitte survey from 2021 found that shareholder concerns were the top motivator for executives to turn to more sustainable practices.³

Governing through “voice” inherently requires continued investment rather than divestment, of course, since investors relinquish their seat, and thus their influence, when they sell their shares. And if they sell to someone who is less socially conscious, divestment might even worsen a firm's chances of going green.⁴ To learn more, check out [“Getting Dirty Firms to Clean Up Their Act: Should You Invest or Divest?”](#)

¹ These include pension funds, educational institutions, for-profit corporations, government, and more. For example, in 2020, the University of California system became the largest university system to fully divest from fossil fuels. More recently, the state of New Jersey is deliberating whether to similarly divest its \$92 billion employee pension fund from all fossil fuel investments. Others have made partial commitments, like divesting only from coal or only a proportion of their current fossil investments overall. See divestmentdatabase.org for a complete list.

² See Pless, “To Starve or to Stoke? Understanding Whether Divestment vs. Investment Can Steer (Green) Innovation,” in NBER's Entrepreneurship and Innovation Policy and the Economy, Volume 2.

³ See Deloitte, “2021 Climate Check: Business' Views on Environmental Sustainability.”

⁴ Note that this is distinct from investing in companies that are developing clean tech solutions as their primary business (which also needs to be part of the solution). This refers to the implications of continuing to invest in polluting industries.

customer risks that ESG considerations help to alleviate. This is certainly possible, but if there are material investment risks related to these issues, shouldn't a thorough traditional process already internalize them? Or, is it instead the case that recent years have unearthed important risks (or forced a better appreciation of those risks)? While certainly plausible, it is not all that novel an idea that unexpected but consequential risk realizations require more careful thought about risk management going forward. If this is the case, then standard shareholder value maximization retains its primacy.

2. Beyond risk, could elevated value creation associated with sustainable investments be achieved in a corporate setting? (Think capital expenditure, supply chain management, workforce diversity, etc.) Or, could asset managers who integrate ESG into their investment processes deliver superior risk-adjusted returns (what investors call α)? Of course, investments that generate (nonpecuniary) impact can create significant value for investors in a more holistic sense, but that impact is generally associated with financial trade-offs through elevated costs elsewhere. Some have argued, however, that ESG integration represents an opportunity for *financial* value creation and elevated investment returns through, for example, customer acquisition (e.g., those who value sustainable products) or increased employee retention and productivity.^{24,25}

Acknowledging Trade-offs

Unfortunately, there are some situations where a win-win solution can't be found. As a result, it is criti-

cal to the ESG debate to recognize the trade-offs that managers and investors alike face. Some of the most essential questions that outline and inform these trade-offs are listed below.

- **What is the company's purpose?** Due to the rise of interest in stakeholder capitalism, most firms today feel a need to state a purpose away from pure profits to a grander vision of why they are in business. For example, the Clorox Co.'s purpose is "We champion people to be well and thrive every single day." For Novozymes, it is "Together we find biological answers for better lives in a growing world." Few companies will attract top talent (or outside investment) today with the purpose statement "We want to make money." Nonetheless, a company must also make money if it is to survive in a competitive marketplace.
- **What organizational boundaries does the company have?** Where does corporate responsibility end? This one is particularly challenging in response to climate change and calculating carbon footprint: Will the company take control of Scope 1 and Scope 2 emissions, or also Scope 3 emissions? By some estimates, the majority of some companies' carbon footprints – north of 70% of all emissions – lie in Scope 3.²⁶
- **Which ESG issues to address?** Myriad issues fall under the umbrella of ESG. Should a company only focus on those material to its business (e.g., as identified by the Sustainability Accounting Standards Board) or go further and respond to issues that the society wants us to engage with (e.g., DEI)?

²⁴ See Edmans (2011)

²⁵ See Boustanifar & Kang (2021)

²⁶ For more, see Deloitte's report on Scope 1, 2, and 3 emissions at <https://www2.deloitte.com/uk/en/focus/climate-change/zero-in-on-scope-1-2-and-3-emissions.html>

- **Which stakeholders to listen to and engage?**

This is a potentially difficult issue and may vary by whether the firm is private or public. Shareholders (and other investors) are certainly still an important stakeholder in the business, but so are employees and customers, as well as supply chain partners and governments as the continuing recovery from the COVID-19 recession demonstrates.

- **What kinds of harms to avoid?** When viewed through this prism, action or inaction on ESG issues may result in known or potential harm. It can be direct physical harm to third parties today or indirect economic harm in the future. As with many of these trade-offs, strategizing here means making both ethical and business decisions.

- **How to integrate ESG?** What resources and capabilities does a company need to integrate sustainability? Which organizational functions shall be a priority? As empty talk or greenwashing is being exposed more and more, resulting in reputational and financial losses, firms need to understand how to design and implement ESG strategy function by function. Strategic, operational and cultural sustainability integration inside the firm is not easy – it takes time and effort – and it is not a destination but a journey, as ESG issues and stakeholders change and firms need to dynamically adjust.

- **Which sustainability goals are given highest priority?** And, what are their timelines? Similar to choosing ESG issues and stakeholders to focus on, creating ESG goals is necessary to help guide the organization. They can be linked to the U.N.'s sustainable development goals or the purpose of the firm, but it is only with the strategic focus and integration that companies can achieve them. For

example, many firms now have net-zero goals but no idea how to get there.

- **How are ESG factors measured?** What do companies need to evaluate and disclose? Will the company produce an integrated report of financial and nonfinancial information?²⁷

- **How do you correctly incentivize managers?** As we noted earlier, it is difficult to incentivize managers and workers to multitask (i.e., maximize current profits and invest for the future).²⁸ Therefore, providing a scorecard and measurements could help them prioritize.

- **Who are the potential partners?** While firms have limited resources and capabilities to address ESG issues, collaboration can assist in achieving goals. Figuring out who among competitors or nongovernmental organizations to collaborate with and how to make the partnership more effective can help companies be more effective and more efficient in reaching their goals.

Evidence: What Does the Literature Say About ESG Investing Outcomes?

At a fundamental level, evaluating the effects of ESG efforts is complex because it depends on how ESG is being used and measured. Throughout the report we provide insights into these questions by investigating the empirical evidence. Here we provide a summary of some of the most important research to date.

Two large meta-analyses of ESG impacts examine the

²⁷ To learn more, see Kenan Insight “ESG Measurement: A Surprisingly Complex Issue” at <https://kenaninstitute.unc.edu/kenan-insight/esg-measurement-a-surprisingly-complex-issue/>

²⁸ See Holmstrom & Milgrom (1991)



relationships between ESG factors and both operating and investment performance. The first, by Friede, Busch and Bassen (2015), is an analysis of over 2,200 studies between 1970 and 2014. The meta-analysis finds that 57% of studies document a significant positive relationship between ESG and firm-level operating performance while most of the rest were neutral or mixed. A more recent analysis by Whelan, Atz, Van Holt and Clark (2021) of over 1,000 studies between 2015 and 2020 finds that 58% of these studies showed a significant positive relationship for operating performance.

In contrast, the relationships between ESG factors and investment returns are more mixed, with roughly an equal number of studies documenting significant positive and significant negative relations. A caveat to the findings in the empirical literature is that individual studies in this space can be hard to interpret because ESG criteria are not understood and measured in the same way across studies. Consequently, it is unclear whether good ESG behavior leads to good performance or whether better-performing firms simply have more resources to conduct ESG activities. But overall, the research suggests that ESG investing is unlikely to bring substantial negative operating or financial effects.

ESG and Firm Performance Through a Strategy Lens

Strategy scholars have been studying the relationship between ESG and firm performance for several decades. As noted, meta-analyses tend to show positive effects on operating performance but more neutral effects on investment performance. Yet the meta-studies don't sufficiently address the important questions of (1) are the ESG effects causal and large enough to matter, and (2) what actually accounts for differences in performance?

The first question is crucially important, because if ESG does not cause value gains, there is no reason for further study. Likewise, if the effects are small, then ESG might not be worth the effort. The causal effects from ESG have been examined by recent studies such as Eccles et al. (2014) and Flammer (2015) that look at future performance of companies using matched sample methods.

In terms of magnitude, Margolis et al. (2009) find that ESG factors can account for 2.2% of the variance in subsequent firm performance. This effect is larger than that for board composition and share ownership among officers and directors; smaller than that for

organizational configurations, high-performance work practices and market orientation; and roughly equivalent to that of strategic planning and slack resources. Consequently, ESG importance seems to be on par with other well-documented effects related to value-increasing corporate strategies.

Research examining ESG value-creation channels includes more positive analyst recommendations²⁹, insurance-like risk protection³⁰, greater innovation³¹, lower wage requirements³², higher employee engagement³³ and retention³⁴, greater access to finance³⁵, better procurement contracts³⁶, reduced employee turnover³⁷ and assistance in mitigating knowledge leakage.³⁸ Altogether, the empirical evidence suggests that the relationship between ESG and firm performance is positive and results in financial, operational and strategic benefits.

ESG Evidence: Do Investors Value Nonpecuniary Factors of ESG?

A critical component to ESG investing is the investors themselves – and whether they place any substantial value on nonpecuniary factors assumed in ESG. To better understand this dynamic, first we need to explore what investors expect their ESG investments' returns to be. If some market participants expect lower returns, then they are willingly choosing ESG over profits. Fortunately, some new financial models provide a mechanism for doing this with some preci-

sion, at least for the subset of companies with listed options.³⁹

A recent research paper by UNC Kenan-Flagler Business School finance doctoral student Paul Yoo examines expected market returns derived from option prices across companies with different ESG attributes.⁴⁰ Specifically, the analysis looks at how expected returns relate to two types of ESG factors, profit-maximizing (pecuniary) risk measures and intangible (nonpecuniary) measures. The pecuniary risk (Risk) measures companies' exposure to ESG risk factors such as climate, human capital or regulation, which if realized would have material consequences to a firm's profitability. As a result, this provides a good measure of the financial benefits related to hedging against ESG risks. The intangible measure (Intangible) corresponds to investors' nonpecuniary preference such as nonmonetary benefit from investing in a socially responsible manner.⁴¹ Since investors' ESG considerations are multidimensional, this approach allows us to understand to what extent two inherently distinct preferences affect U.S. public equity prices.⁴²

The results of the analysis show that both the pecuniary (Risk) and nonpecuniary (Intangible) ESG ratings

²⁹ See Ioannou et al. (2015)

³⁰ See Koh et al., 2014 and Shiu et al. (2017)

³¹ See Flammer et al. (2016)

³² See Burbano (2016)

³³ See Flammer et al. (2017)

³⁴ See Bode et al. (2015)

³⁵ See Cheng et al. (2014)

³⁶ See Flammer (2018)

³⁷ See Carnahan et al. (2017)

³⁸ See Flammer et al., (2019)

³⁹ New models include Martin and Wagner (2019) and Kadan and Tang (2020)

⁴⁰ See Yoo (2022)

⁴¹ By construction, the *Risk* and *Intangible* ratings contain information that is more relevant to pecuniary and nonpecuniary ESG considerations, respectively. This is because the former intentionally confines its scope to gauge firms' exposure to future ESG-related pecuniary risk events, while the latter puts emphasis on evaluating the gravity of firms' ESG pledges, commitments and strategies in place.

⁴² For some evidence for each preference, see Riedl and Smeets (2017), Hartzmark and Sussman (2019), and Humphrey et al. (2021) for nonpecuniary preference and Albuquerque et al. (2018), Hoepner et al. (2022), and Seltzer et al. (2021) for risk-mitigating preference.

explain variation in the expected-return measures in a way consistent with the ESG greeniums described earlier in our proposed stakeholder model. That is, more favorable ESG ratings result in lower expected future returns. Moreover, the size of the effects can be substantial. For example, over the last decade, low-Risk and high-Intangible stocks are generally expected to underperform high-Risk and low-Intangible stocks by roughly 3.3% a year based on the most conservative estimate.

Over the last decade, as ESG has been more widely measured and investors have adopted ESG into their process, differences in expected returns have evolved as well. As shown in Figure 4, the effect of ESG-related Risk on one-month-ahead expected returns over

a rolling window of the past five years was decidedly positive (about 0.5% to 2%) between 2012 and 2017, but the effect has decayed in recent years to near zero. This is consistent with the pecuniary risks associated with ESG factors being internalized by companies (or at least for the large companies with listed options represented in the sample). These risks are potentially more apparent to companies or more easily addressed than nonpecuniary factors (which might, for example, be more intrinsic to a company or industry).⁴³

⁴³ Notice the countercyclical trend of ESG Risk premiums: high (low) in periods with (without) recessions — the Great Financial Crisis and COVID-19 crisis. That the academic literature has long documented higher risk compensations during bad times confirms ESG Risk premiums arise from pecuniary ESG factors.

Figure 4: ESG Risk Premiums



**The Risk measure is based on RepRisk index. The vertical axis represents the change in one-month-ahead expected returns (in annual %) associated with one standard deviation increase in RepRisk index. The sample focuses on S&P 500 stocks. Details are provided in Yoo (2022).

In contrast, Figure 5 shows that the nonpecuniary Intangible factor has changed from having a variable effect on one-month-ahead expected returns (between 0.5% and -1.5%) over five-year rolling windows in the early 2010s to being associated with a consistently lower return of around -3% in recent years. This finding is consistent with a growing greenium associated with nonpecuniary ESG factors. Moreover, it suggests companies' costs of capital are likely to be meaningfully and persistently different based on these factors.

The evidence of substantial valuation effects for nonpecuniary ESG preferences has important value implications for businesses and investors. For managers, even though setting out and committing to social

objectives has upfront costs, the latest evidence suggests that efforts to develop certain ESG characteristics will have significant impact on the firm's cost of capital. Yet for investors, this is a double-edged sword in that the lower cost of capital is synonymous with lower future returns. Thus, these results caution against the "doing (financially) well by doing good" rhetoric. Finally, for the ESG skeptics, these results suggest that they are fighting not an extraneous force that seeks to change how businesses operate but instead the preferences of investors, which directly affect shareholder valuation. In this sense, directors must acknowledge the potential impact of ESG factors (and increasingly nonpecuniary factors) on valuations as they exercise their fiduciary responsibilities.

Figure 5: ESG Intangible Premiums



**The Intangible measure is based on MSCI's Intangible Value Assessment (IVA) data. The vertical axis represents the change in one-month-ahead expected returns (in annual %) associated with one standard deviation increase in IVA ratings. The sample focuses on S&P 500 stocks. Details are provided in Yoo (2022).

Can It Live Up to the Hype?

Despite ESG's potential for the creation of financial value, we caution that there is an important distinction between recent realized investment returns and prospective, forward-looking expected returns.⁴⁴ If there is a rapidly growing demand for ESG or socially responsible investments (as we have witnessed during the last decade), then the prices of those assets will increase, generating outsized – albeit temporary – returns. In the long run, assets that are demanded for their high ESG ratings will instead carry lower expected returns going forward, perhaps because investors enjoy holding them for their non-pecuniary impact or else because they may help to hedge important downside risks. For example, under this argument, the purported outperformance of ESG funds during the COVID-19 pandemic is instead a manifestation of a sizable, demand-driven repricing that will eventually yield lower returns in equilibrium.

Even the most optimistic view of ESG must acknowledge several challenges in implementation. First, we remain far from consensus on sustainability accounting. Specifically, there remains a tremendous degree of disagreement among ESG data providers. How can we credibly manage outcomes if we cannot agree upon what to measure? A critical next step for the evolution of ESG investing will be an evolving consensus on sustainability accounting.⁴⁵ We delve deeper into the challenges of ESG measure measurement below.

Second, there is also deep skepticism among some that ESG integration is nothing but window dressing. For instance, Bebchuk and Tallarita (2021) show that

the Business Roundtable firms have done little to nothing in terms of fundamentally transforming their operations in any meaningful way as promised in their 2019 proclamation. Further, Tariq Fancy, former BlackRock global chief investment officer for sustainable investing, went so far as to call ESG a “dangerous placebo” through which we think we are making progress even though we are not.⁴⁶ This illusion permits a kind of complacency, allowing us to avoid more consequential (but costlier) reforms. In addition, there are many high-cost investment products that look like little more than a repackaging of poor-performing funds under different names. This sort of greenwashing is an unfortunate and potentially costly distraction for both investors and policymakers as it may hinder an appropriate policy response.

Finally, as we noted in the Trade-offs section earlier, there are some real economic trade-offs that will be debated. Consensus on how to weigh and address these trade-offs may be hard to find, especially in our increasingly polarized political environment. For example, when addressing climate risk, there are clearly growth opportunities in technological solutions that will help to address global warming, but we still need to internalize collective costs. Forcing those who are imposing an externality on others, like carbon emissions, to face the costs of their actions is the only viable mechanism to solve such a problem; doing so would not only offer a solution but also support related technological growth opportunities. Accordingly, then, where are the policymakers? While ESG integration may help on the margin, nothing will replace a carbon tax (widely accepted by economists) to force change. And, in fact, recent research suggests that the majority of carbon emissions are not generated by public firms, so a global solution must include a

⁴⁴ See Pástor, Stambaugh & Taylor (2021)

⁴⁵ For a recent illustration of the accounting challenges see <https://www.wsj.com/articles/banks-promised-to-cut-funding-for-arctic-oil-drilling-money-flowed-anyway-11634468580>

⁴⁶ See McCord (2021, August 24)



policy initiative broader than corporate ESG alone.⁴⁷ Research has illustrated, however, that carbon taxes must be well designed and deployed in proper contexts, as some of the carbon reduction benefits can be offset by other policies such as R&D tax credits.⁴⁸

A Deeper Dive into the Complexities of ESG Measurement

Of the three challenges noted above, ESG measurement is the most tangible – and creating clearer standards could positively impact the latter two challenges through better, uniform information gathering and sharing practices. Below, we propose ways of refining ESG measures to produce structures that could potentially meet the needs of multiple stakeholders; designing reporting that is free from political influence and agendas; and illustrating the promise and risks of impact accounting.

The Crucial Role of Performance Measurement in Legitimizing ESG Strategies

Long-running literatures in accounting, economics, finance and business practice examine the powerful role that performance measurement plays in shaping behavior – as well as the potentially deleterious effects caused by schemes that measure the wrong things, miss important factors or specify performance

measures that poorly map to the underlying factors of interest.⁴⁹ Given that, it is useful to consider ESG measurement in the context of performance measurement systems more generally. Such systems include accounting standards developed by the Financial Accounting Standards Board and International Financial Reporting Standards, innovative costing methodologies such as activity-based costing, and a wide range of nonfinancial performance measures directly used in compensation contracts as well as strategic tools such as balanced scorecards.

The corporate organizational form has benefited from these standards and proved to be a powerful and dynamic mechanism for driving economic growth and prosperity. Well-designed performance measurement and disclosure systems play a central role in this success. Characterized by a separation of decision-makers from suppliers of finance, the success of the corporate form relies on the presence of effective incentives that deter managers from cheating investors out of the value of their investments, and that motivate managers to maximize firm value instead of pursuing personal objectives. Audited financial statements and related disclosures support the existence of vibrant capital markets and form the foundation of the firm-specific information set available to investors, boards, internal corporate managers and other stakeholders to monitor and discipline the actions and statements of insiders.

⁴⁷ See Atta-Darkua, Glossner, Krueger & Matos (2022)
⁴⁸ See Pless (2022)

⁴⁹ See for example Bushman (2021), Kerr (1995), Baker (2000), and Ariely (2010).

The Ideological Struggle Behind the ESG Debate for Standardized Measurements

As we move forward to create standardized measures, it is paramount to consider the ultimate objectives of ESG measurement and how such measurement could optimally fit into the existing corporate order and information regime. The challenge is that ESG measurement is inextricably tied to diametrically opposed views on the purpose of the corporation, and directly related to debates about whether shareholder primacy or stakeholder governance should prevail.⁵⁰ This debate is reflected in the evolving demand for ESG information from clientele with diverse objectives and incentives, including:

- Corporate executives managing internal capital allocation decisions and dealing with pressure from investors and myriad stakeholder groups.
- Investors seeking ESG information to enhance the risk-adjusted returns of their investments, or to incorporate their social and environmental preferences into their investment portfolios, even if it lowers return performance.
- Billionaires, regulators, activists, nongovernmental organizations and others seeking to transform existing economic and political institutions and/or implement political objectives outside of normal political channels.⁵¹
- Financial service firms, rating agencies, proxy

⁵⁰ For further discussion, see <https://kenaninstitute.unc.edu/kenan-insight/is-money-left-on-the-table-when-we-dont-listen-to-stakeholders/>.

⁵¹ Some argue that the ESG movement represents a libertarian response based on the view that government lacks credibility and is not a likely source of solutions to broad societal problems like social injustice and protecting the environment (e.g., Macey, 2021).

advisors, accounting and consulting firms, and academics seeking to benefit from providing ratings and investment products, consulting on ESG issues and attesting to ESG disclosures.⁵²

Clearly, a single ESG measurement structure cannot satisfy such diverse objectives. Moreover, it is not clear that all of these objectives are desirable. Because of this, developing a neutral set of standards is critical to create a basis to understand the value created by different stakeholders and, therefore, to allow an unbiased perspective to help managers make difficult trade-offs across the interests of various stakeholder groups.

Are Companies Either Good or Bad?

Much of the discussion surrounding ESG is couched in terms of differentiating between “good” and “bad” companies, but there is unlikely to be agreement on which companies fall into which category. Further, such a stark good-versus-evil view of the world can have unintended consequences.⁵³ Our perspective on corporations is exacerbated by the current state of the ESG reporting landscape, which is characterized by many ESG ratings firms, idiosyncratic voluntary disclosures by corporations and mandatory reporting requirements that vary by jurisdiction. A recent study reveals this complexity by analyzing ESG rating

⁵² The potential for conflicts of interest when a firm both provides ESG ratings and consults on how to raise ESG ratings was highlighted in a recent Wall Street Journal article. (<https://www.wsj.com/articles/wall-streets-green-push-exposes-new-conflicts-of-interest-11643452202>)

⁵³ For example, Cohen, Gurun, & Nguyen (2021) find through the examination of green patents that oil, gas and energy-producing firms are key innovators in the green patent landscape. However, these firms are explicitly excluded from many ESG funds and are often the targets of divestiture campaigns focused on stimulating green energy innovation – campaigns that may actually discourage green innovation.

data from six prominent ESG ratings agencies.⁵⁴ The study finds that such ratings from different providers disagree substantially, with correlations between the ratings ranging from 0.38 to 0.71. Digging deeper, it finds that the six agencies combined report **709** individual ESG indicators, where the indicators used vary substantially. Such divergence makes it difficult for investors and other stakeholders to evaluate the ESG performance of companies. This also imposes significant challenges for companies managing competing pressures from various stakeholder groups. How does a firm make inevitable trade-offs across categories that are valued differently by different clienteles? Do managers view ESG scores as a problem to be managed rather than as a tool to solve social issues and mitigate climate change?

Refining the Objectives of ESG Measures

Instead of the multiple-stakeholder focus of current ESG ratings and disclosures, perhaps it makes sense

to create narrower versions of ESG that focus on specific clienteles. Consider the demand for information by investors for value-relevant information about firms. This demand is supported by mandated public reporting, securities laws and enforcement mechanisms that prohibit false and misleading information, highly developed accounting standards and sophisticated financial intermediaries. Current ESG reporting embeds information that is immaterial from an investor standpoint but still important to other stakeholders. Our recommendation is to tailor ESG reporting to financially material sustainability information. Alternative measurement structures could then be designed to meet the needs of other stakeholders.

This is indeed consistent with the approach that the Sustainability Accounting Standards Board has taken in defining material issues with evidence of both financial impact and wide interest from a variety of user groups. The SASB materiality criteria can be used to create tailored sustainability measures or be overlaid on existing ESG ratings reports to separate financially material and immaterial measures.

⁵⁴ See Berg, Kölbel, & Rigobon (2019)

Figure 6: Correlations Between ESG Ratings

Correlations between ESG ratings at the aggregate rating level (ESG) and at the level of the environmental dimension (E), the social dimension (S), and the governance dimension (G) using the common sample. The results are similar using pairwise common samples based on the full sample. SA, SP, MO, RE, KL, and MS are short for Sustainalytics, S&P Global, Moody’s ESG, Refinitiv, KLD, and MSCI respectively.

| | KL SA | KL MO | KL SP | KL RE | KL MS | SA MO | SA SP | SA RE | SA MS | MO SP | MO RE | MO MS | SP RE | SP MS | RE MS | Average |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|
| ESG | 0.53 | 0.49 | 0.44 | 0.42 | 0.53 | 0.71 | 0.67 | 0.67 | 0.46 | 0.70 | 0.69 | 0.42 | 0.62 | 0.38 | 0.38 | 0.54 |
| E | 0.59 | 0.55 | 0.54 | 0.54 | 0.37 | 0.68 | 0.66 | 0.64 | 0.37 | 0.73 | 0.66 | 0.35 | 0.70 | 0.29 | 0.23 | 0.53 |
| S | 0.31 | 0.33 | 0.21 | 0.22 | 0.41 | 0.58 | 0.55 | 0.55 | 0.27 | 0.68 | 0.66 | 0.28 | 0.65 | 0.26 | 0.27 | 0.42 |
| G | 0.02 | 0.01 | -0.01 | -0.05 | 0.16 | 0.54 | 0.51 | 0.49 | 0.16 | 0.76 | 0.76 | 0.14 | 0.79 | 0.11 | 0.07 | 0.30 |

Source: Berg, Koelbel and Rigobon, 2022

This focus provides an opportunity for researchers and others to evaluate the efficacy of measures with respect to their valuation consequences. Research to date has yielded mixed results.⁵⁵ But, it has been limited by the fact that much sustainably reporting is voluntary and thus suffers from self-selection issues, the difficulty in distinguishing the measures from the underlying real behavior of firms, and the necessity of relying on third-party ratings that, as discussed above, are far from perfect.⁵⁶ Moreover, until there is widespread acceptance by accounting standards boards and government agencies, there will be questions about whether SASB is an unbiased measure.

Designing ESG Reporting Free from Political Influence and Agendas

ESG reporting requirements should be managed more like the process of accounting standard setting. Accounting standards are the product of well-defined objectives and a transparent process designed to mitigate the influence of political pressure and achieve widespread acceptance. Standard-setters like the Financial Accounting Standards Board solicit input from business leaders, academic researchers and regulators around the world. Comment letters to the board are made publicly available, and many board meetings are publicly broadcast. It is also imperative that accounting standards adopt the principle of neutrality, where standard-setters view themselves as providers of unbiased information to facilitate social and economic activity by others, rather than

as agents to promote (or discourage) social and economic change.⁵⁷ In order to create neutral ESG reporting standards, it is paramount that the funding structures of the standards be transparent and that the standard-setters themselves be chosen and compensated in a manner than minimizes capture by outside interests.

The good news is that there seems to be some serious movement in the regulatory sphere. Finance policies and regulations related to sustainability have quickly risen in the past few years, reaching over 700 policies across 86 countries by August 2021. In Europe, the EU Commission on Sustainable Finance is looking at oil and gas as well as nuclear issues, standards on green bonds, corporate disclosure of climate info and sustainability-related disclosures for some asset managers. As we will discuss in greater detail, in the U.S., an SEC proposal on mandated climate disclosures is being hotly debated. One big question is whether it will include requirements for private firms.

Thus, there is a clearly a lot of work yet to be done in the areas of ESG measurement and impact accounting. These endeavors hold great promise but pose significant challenges in balancing economic prosperity with the solutions to the many complex issues facing our global population.

What's Next for ESG Investing?

With all of its challenges, ESG investing still holds a lot of promise for many investors and corporate leaders alike. But with its growth in popularity, there is also a need for greater rigor around its reporting standards to ensure that ESG initiatives are in fact keeping their promises. In the next section, we high-

⁵⁵ This includes papers that specifically examine valuation implications of the SASB materiality criteria (e.g., Kahn et al., 2016; Berchicci and King, 2021; Grewal et al., 2021), and carbon disclosures (e.g., Bolton and Kacperczyk, 2021a, 2021b).

⁵⁶ Christensen, H.B., Hail, L., & Leuz, C. (2021). *Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review* (European Corporate Governance Institute - Finance Working Paper No. 623/2019). SSRN. <https://ssrn.com/abstract=3427748>

⁵⁷ See Solomons (1991)



light how different stakeholders – as change agents – can wield their influence within each ESG bucket and meet larger shared societal goals.

ESG Change Agents

As we previously noted, the “E,” “S” and “G” buckets are quite disparate – and each can encompass a wide range of topics and issues important to different stakeholder groups. These buckets also each hold their own risks and opportunities. The challenges companies and investors face are how to prioritize the different needs of these stakeholder groups while mitigating their risks and accounting for trade-offs. But done properly and with the right measurements in place, could an ESG framework incorporate many of the principles of stakeholder capitalism while still maximizing value for shareholders? As other sections of the report note, a key component is the premium that investors are willing to pay for positive ESG outcomes. But in other cases, stakeholders can drive companies’ ESG practices through positive means such as fostering better governance and innovation, or by creating a potential risk to a company’s growth opportunities such as customer boycotts or stricter regulation.

Below, we document how some key stakeholders affect environmental, social and governance issues, and, in particular, how employees, managers, board directors, consumers, investors and government

(among other stakeholders) can serve as change agents, to encourage companies to be better stewards of broader societal aims. We also acknowledge and address the many trade-offs companies and investors make when evaluating stakeholder wants and needs.

In particular, we investigate:

- **E:** The role of policy and regulation in moving toward a cleaner economy and corporate actions to address climate change.
- **S:** Employees as critical contributors to their firms – and an increased need to develop equitable growth opportunities for workers.
- **G:** Stakeholders within a company’s governance structure (e.g., shareholders, board directors and CEOs) who drive the agenda for other ESG initiatives.

E - Environmental

The “E” often gets an outsized focus in the discussion of ESG – and it also leads to some of the greatest controversy. A primary emphasis of the environmental goals of ESG is to address the private sector’s role in combating climate change (although this is not the only goal). The gravity and scale needed to address climate change requires sweeping societal solutions

– and both the public and private sectors play a part, often in collaboration with each other. To be clear, the private sector alone will not be able to adequately address climate change. Rather, government intervention will be key to ensure that companies meet ambitious climate goals set by international bodies, such as the Paris Agreement, an international treaty on climate change signed by 196 parties.

Governments have multiple tools in their toolbox to encourage (or force) the private sector to support these shared climate goals, including tightening regulatory oversight of climate-related risk, setting new regulations and funding innovation.

Tighter Regulatory Oversight

In early 2023, the Securities and Exchange Commission is expected to finalize its first ruling on mandatory climate risk disclosures for public companies. The proposed rules, introduced last March as a way to improve transparency for investors, expand the requirements for corporate disclosure of financial risk to include climate-related risks and their potential impact on companies' business models and financial outlooks. Significantly, under the new rules, large companies would be required to disclose – and have independently verified – greenhouse gas emissions they generate or purchase, known as Scope 1 and Scope 2 emissions, respectively.

The most controversial aspect, however, concerns indirect emissions generated by a company's full supply chain – namely, Scope 3 emissions, a broad category extending from the extraction of raw materials that it buys from suppliers to the end use of goods that it sells. These disclosures would be limited only to situations where they were deemed “material,” and Scope 3 disclosures would not need third-party verification and would be protected from legal liabilities. The pro-

posal also increases the accountability of companies that have issued emission targets and climate plans by requiring them to outline how they intend to reach those targets along with a time frame. Finally, under the new rules, companies would have to disclose any internal carbon prices, if such measures are adopted, and how they are set.

The SEC's proposed new ruling is ambitious. It significantly expands the scope of greenhouse gas reporting in the U.S., which, at the moment, is required only from the heaviest emitters.⁵⁸ Indeed, while 90% of S&P 500 companies voluntarily disclose statistics on carbon emissions or how much renewable energy they use, those statistics are generally not reviewed by regulators, and only a fraction of companies report similar metrics or mention climate change in their filings. Under the new law, firms would have to take climate-related risks more seriously in their governance and operational strategies.

Perhaps more important are the mandatory climate risk reporting standards. A standardized and trustworthy reporting regime has the potential to be the game changer, providing much-needed data that's useful to many stakeholders, from regulators to investors. Whether it is used as a basis for carbon taxes or to create a “shadow carbon price” where stock prices of high emitters are effectively penalized by investors, the reporting requirement would provide the data on carbon emissions that is critical for tackling climate change in any meaningful way.

In essence, the SEC's new disclosure rules aim to

⁵⁸ On Oct. 30, 2009, the Environmental Protection Agency published a rule for the mandatory reporting of greenhouse gases from sources that in general emit 25,000 metric tons or more of carbon dioxide equivalent per year in the United States. <https://www.epa.gov/ghgreporting/ghg-general-fact-sheet>

better measure climate risks – perhaps defining a coming-of-age moment for sustainability disclosures. By some estimates, ESG-informed investment could reach \$50 trillion in assets by 2025.⁵⁹ Yet, it is still difficult to assess whether such a significant reallocation of capital toward sustainable activities moves the needle for climate transition. The problem is that ESG data in general come from a hodgepodge of fragmented, incomplete and voluntary disclosures that lack standardization.

The SEC is not alone. Tighter regulatory oversight of ESG investment mandates is making progress on both sides of the Atlantic. The International Sustainability Standards Board (ISSB), created by the International Financial Reporting Standards Foundation that administers the IFRS accounting standards, is working on a unified set of global third-party nonfinancial disclosure standards similar to financial ones used in company filings. The European Union, which has consistently acted ahead of other regions, has already signed into law the Corporate Sustainability Reporting Directive, which requires an extensive set of disclosure standards in multiple environmental, social and governance domains. In fact, CSRD goes further than the SEC's proposed rules in coverage, extending to all private and public companies with at least 500 workers – nearly 50,000 medium-size and large companies. Importantly, the EU's rules apply the "double materiality" principle, requiring companies to measure their impact on people and the environment directly. The proposed SEC rules, on the other hand, emphasize investor-focused risk governance and financial materiality, given the SEC's narrower mandate of investor protection.

Still, the SEC's new ruling faces a tough road. It has already come under attack from some pro-business

groups, arguing it will drive up costs. Also of concern is whether the proposal exceeds the SEC's authority. If the Supreme Court's recent decision to curb the power of the Environmental Protection Agency is an indication of what the future might hold, it is likely that the final rules will face legal challenges ultimately decided at the highest level.

Finding Middle Ground in Energy Policy Through a Carbon Tax

Economists have favored a carbon tax as the best solution to address climate change by harnessing market forces to reduce carbon emissions and shift away from carbon-producing inputs into the energy, manufacturing and even food industries. The current timing may be ripe for that change, especially if a policy is introduced that encourages needed investments in traditional energy production while greener alternatives are not yet ready to replace them. We believe that policy is a combination of near-term regulatory relief for traditional energy assets combined with a backloaded carbon tax

In addition to increased evidence of rising climate risks, a daunting tangle of problems defines the global energy space of the past few years. On the one hand, the war in Ukraine combined with curtailed Russian oil and gas supplies has reminded many that unfriendly energy suppliers can also deliver inflation and hardship to their customers. On the other, efforts to increase oil and gas supplies, both in Europe and globally, face stout resistance to anything that might further entrench hydrocarbons in national economies.

If this seems like a recipe for policy vacillation and gridlock, it is. The risks are real. In the face of this thicket of problems, one may reasonably ask, "Is there no way to address several of these problems

⁵⁹ See Bloomberg (2021)

simultaneously?” Said differently, is it possible to design policy measures and political compromises that might lead out of the thicket, allowing progress on several fronts? One answer is to introduce carbon taxes as part of a larger political bargain. The bargain trades the introduction of carbon taxes for a less hostile oil and gas regulatory regime. The carbon taxes would have three important features. First, they would apply only to the emissions of new oil and gas projects. Second, the taxes would be customized by different project types, e.g., fracking, pipelines, refining. Third, they would be backloaded – the taxes would be low for the first 10-15 years, then escalate sharply.

This approach would accomplish several desirable things. First, it would cause carbon taxes to be adopted on a much broader scale. For the first time in the U.S., there would be widespread national carbon pricing. Second, it would give oil and gas firms a more predictable fiscal/regulatory environment in which to make the investment decisions that will provide near-term supplies. Third, it would also put them on notice that these new projects will need to be decarbonized or face steep carbon taxation. Said differently, the firms will have 10-15 years to earn project returns while figuring out how to decarbonize their assets to extend them.

This last point takes advantage of the industry’s use of “life extension economics.” Many oil and gas assets see their project lives extended well beyond initial scope because of continued high returns.

As a result, life extension provides a favorable framework for oil and gas firms to consider decarbonization options for their assets. Because there no longer will be a “cheap” life extension option in play, owners will face a choice of retiring the asset, keeping the asset going under what will be heavy and increasing

carbon taxes or investing to life extend with decarbonization. Under this third course, they still keep all profits and enhancements that such extensions typically bring but avoid the new, heavier tax burden. Thus the life-extension-based carbon tax on new hydrocarbon projects can address both short-term energy security issues and the longer-term goals of the energy transition. Combining the backloaded structure with upfront regulatory relief will encourage firms to undertake near-term production growth projects; it then allows them ample time and motivation to prepare for eventual decarbonization of the same assets.

Sealing a political bargain will require concrete steps to assure the industry that regulatory hostility is in remission. However, climate policy will benefit greatly from the ice being broken on carbon pricing and by the knowledge that new oil and gas projects will either be decarbonized or shut down. Once national carbon pricing comes into being, possibilities for its extension will also be significant.

Funding Innovation Toward a Clean Economy

Innovation is often a key component to battling many of the most insurmountable problems humankind has faced; for example, consider how the Industrial Revolution increased production capacity so that it might meet the needs of a global population that had grown exponentially. And yet, the area of clean tech poses several challenges in this regard. First, substantial asymmetric information problems exist in which investors – both public and private – may be highly unaware as to which areas are most capable of producing innovation. Second, investors’ need for financial return in the short to medium term may not align with the long-term nature required by research in a highly nascent field. And, the high amounts of

capital needed for R&D in the clean tech space mean that a tremendous amount of financial investment is needed just to get the ball rolling and start testing new ideas.

Despite these problems, however, there is substantial evidence demonstrating the importance of innovation, startups and entrepreneurs in creating a more sustainable future. For one thing, the cost of energy from renewable sources has dropped substantially in the last decade as these systems have been made more efficient and viable. Another positive sign is the growing collaborative network for green entrepreneurs, which is in part made possible by the public-private partnerships spearheaded by local and national governments worldwide. Finally, on the consumer side, demand for clean energy and more environmentally friendly methods of operation has grown tremendously. This increased demand has caused a variety of stakeholders – including governments, researchers, corporations and investors – to allocate more resources to these industries, which it is hoped will allow further development in the clean tech sector.⁶⁰

It is easy to be depressed about climate issues, but increased evidence and risks are motivating policy changes and research to come up with best practices. We believe that the SEC's climate risk disclosure requirement is a positive first step. Once emissions are measured, it sets the stage for the introduction of an effective carbon tax regime. We believe that a first step toward a broad-based carbon tax is backloading a carbon tax on new energy investments. However, a carbon tax is not enough to resolve the challenges

⁶⁰ For a more detailed discussion on innovation moving the clean economy forward, see our Kenan Insight "Can Entrepreneurs Save the Planet" with Gerald Cohen, Jacquelyn Pless, and Eric Toone. <https://kenaninstitute.unc.edu/kenan-insight/can-entrepreneurs-save-the-planet/>

of incentivizing investments in high-risk long-dated investment in alternates. The good news is that research and experimentation is teaching us how to bring together government, universities, entrepreneurs and private investors to tackle these challenges in an effective way.

S - Social

Less attention to date has been focused on the "social" objectives in stakeholder capitalism and ESG investing. This gap in attention can, at least in part, be attributed to the fact that there is less broad agreement on social objectives. One challenge is that prioritizing one group can sometimes come to the detriment of other groups, in perception or actuality. For example, should firms offer more generous benefits if in doing so they must then employ fewer workers? Moreover, there is significant disagreement across society about many social issues. Taking sides of some of these contentious issues can bring praise from one group of employees, customers and regulators, but disdain from other employees, customers and regulators.

Setting aside the disagreement and contention on many of these issues, social objectives face an added hurdle in the stakeholder capitalism or ESG investing framework because of difficulty surrounding measurement. While there are many issues yet to be solved in terms of measuring environmental impact, it is, in the end, a scientific problem. It is hard to measure the full carbon footprint of a given firm, but we all agree on the definition of carbon dioxide. In the social setting, things are not so simple. What represents diversity for one firm (e.g., in the U.S.) may not be diversity to another (e.g., in Europe).

While this clearly leads to challenges in this setting, it is also an opportunity. The fact that humans do

How to Grow Diversity in High-Tech Startups

Entrepreneurship has the potential to create tremendous innovation and job growth, and thus represents an important engine powering a vibrant, healthy economy. However, recent research indicates substantial diversity problems in the startup and entrepreneurial spheres. Cassel, Lerner and Yimfor (2022) and Cook, Marx and Yimfor (2022) show that less than 3% of venture capital firms or portfolio companies receiving venture funding are owned by minorities. Subsequently, these studies demonstrate that Black and Hispanic entrepreneurs encounter difficulties in raising first-time funds; in the five years following company formation, Black founders raise close to \$6 million less in venture funding than non-Black founders of similar firms. Given that more diverse firms and teams are linked to both higher performance and greater profits, these representational problems severely undercut the productive potential of an entrepreneurial ecosystem.

In analyzing the cause of these disparities, Cassel, Lerner and Yimfor demonstrate that there might be a potential disconnect between the network of venture capitalists funding startups and executives at companies formed by diverse founders. The evidence leads the researchers to conclude that a combination of bias (the funding gap disappears at later stages of funding, consistent with models of biased beliefs) and networks (minority founders are less likely than nonminority founders to have shared work histories with nonminority venture partners) explains, at least in part, the lack of funding for minority startups, leading to low levels of diversity.

The body of research suggests a variety of paths to address both problems. First, to address the issue of bias, greater levels of funding are needed for minority-owned private capital groups, which are far more prone to fund minority startups. In addition, increasing the number of minority chief investment officers and minority partners in existing private capital groups is likely to increase funding for minority-run inventors, innovators and entrepreneurs. Second, expanding and strengthening the networks available to minority entrepreneurs affords them greater access to capital. Existing private capital firms should thus look beyond their established work or education networks when searching for investment opportunities, as these groups tend to lack minority representation. To learn more, check out ["How to Grow Diversity in High-Growth Startups."](#)



not fit into boxes as neatly as chemical compounds means that it is also harder for government to resolve some of these issues. Policy solutions require standardization. Until we agree on rigid definitions of social objectives, we will need other entities to deliver. And this is one of the great promises of stakeholder capitalism: the potential to create incentives for firms to act to address important social problems in creative and less structured ways.

How best should a firm develop its policies in regard to social stakeholders? One critical step is to first define the stakeholders that are most relevant for a given firm. The list of possible social stakeholders is endless, and firms will have to select a subset of stakeholders to prioritize. For most firms, however, the key “social” stakeholder group that they will be measuring will be employees. Employees, as a stakeholder group, have received the most attention to date because of the critical nature of this group to firms’ operations and the ability of employers to affect their employees. As such, in the analysis that follows, we will focus primarily on employees.

Employees as a Key Stakeholder Group

The pandemic undoubtedly disrupted the workforce. Buzz terms like “the great resignation” and “quiet quitting” reflect a turbulent time for the labor market. Longstanding issues boiled to the surface in the face of the pandemic, including worker safety, job security, paid leave and a shrinking labor force. In May 2020, racial tensions in the United States flared with the police killing of George Floyd. Historically, many businesses have attempted to stay on the sidelines of controversial issues to avoid alienating customers and limit internal discord. But stakeholders including consumers and employees have called on businesses to not only make public statements on the matter but also make commitments to address issues related to

diversity and systemic racism within their own organizations and communities.

It is with this backdrop that we look at employees as a stakeholder group critical to business, and who are driving more equitable outcomes for themselves and others through their firms. Engaging with employees at a stakeholder group is natural given that firms have a responsibility to their employees. The law defines some of these responsibilities. For example, firms are prohibited from discriminating against a protected class and must pay their employees a minimum wage. Stakeholder capitalism is of course not about these statutory minimums but instead about providing additional benefits to their employees. As emphasized elsewhere in this report, stakeholder initiatives can come in the form of win-win actions where everyone is better off as well as more complicated calculations where the benefits to one group are traded off against costs to another group. Stakeholder initiatives that involve employees are no different. Assuming implementing win-win solutions is straightforward, we will instead focus on the more complicated set of actions that involve trade-offs.

When evaluating trade-offs, it is important to start with a clear objective. If the goal is to benefit employees, what do workers value most? Employment protection, inequality and diversity are all important issues. We discuss each in turn.

Employment Protection

Traditionally, employment protection is seen as the most important concern for workers. Layoffs are costly for workers not only due to immediate earnings losses realized during the unemployment spell, but also due to longer-lasting income effects. Workers who reenter the labor force after an unemployment spell typically do so at a lower wage point, leading

to what is often described as the “scarring” effect of joblessness. For example, middle-age workers who were laid off during the double-dip recessions of the early 1980s received 30% lower wages, on average, after returning to the workforce.⁶¹ Even 20 years later, these individuals earned 20% less than similar workers who hadn’t experienced job loss. In present value terms, this is the equivalent of losing 2.8 years of pre-layoff earnings.⁶²

Moreover, the negative impact of a job loss contains significant physical and mental health effects that harm workers beyond the economic toll of a layoff. One study documents a 50% to 100% increase in mortality in the years immediately after one loses their job. The effect lessens over time but fails to completely recede, resulting in a reduced life expectancy for these workers by 1 to 1.5 years.⁶³ And, psychologically, job loss is also linked with increased rates of depression and anxiety of 15% to 30%.⁶⁴

While providing employees insurance against layoffs will have clear benefits for workers, these guarantees are costly for firms. To provide employment protection, firms must agree to forgo layoffs that would otherwise be profit maximizing following a negative shock, such as a financial crisis or shift in international trade. However, there can be benefits to firms if they are able to credibly commit to greater employment insurance. Workers may internalize this trade-off and accept lower wages to be employed at a firm that provides greater employment guarantees.⁶⁵ Family firms provide an example. Family firms with their legacy orientation have traditionally provided greater job security, and research has found evidence

suggesting that workers accept wage discounts to work at such firms.⁶⁶ In the absence of the leadership stability typically observed in family firms, it is difficult for employers to commit to provide employment guarantees for some future negative shock. But, firms can affect the probability they will have to lay off employees through their leverage decisions. Research has shown that firms with greater leverage reduce employment more than their less indebted peers after negative shocks.⁶⁷ As such, less leveraged firms will be in a better position to provide employment insurance.

Wage Inequality

Employee stakeholders are also asking firms to address income inequality. The median compensation for the chief executives of the largest U.S. companies topped \$14 million in 2021, setting a record.⁶⁸ For rank-and-file workers, wages have been increasing, albeit at a slower pace. Not surprisingly, the ratio of CEO pay to median worker pay keeps rising. Moreover, surveys indicate that the majority of Americans are troubled by these large pay gaps and believe firms have a responsibility to address income inequality by paying their workers a living wage.⁶⁹

The trade-off is apparent when discussing raising wages above the competitive rate set by the market. Employees would prefer to have more generous compensation, but higher wages will reduce a firm’s bottom line. It is important to emphasize that while significant wage increases will typically involve a transfer of wealth from shareholders to employees, it is not always a zero-sum game. A large body of literature has explored a concept called “efficiency

⁶¹ See Von Wachter, Song & Manchester (2011)

⁶² See Davis & Von Wachter (2011)

⁶³ See Sullivan & Von Wachter (2009)

⁶⁴ See Burgard, Brand & House (2007)

⁶⁵ See Berk, Stanton & Zechner (2010)

⁶⁶ See Ellul, Pagano & Schivardi, (2018)

⁶⁷ See Giroud & Mueller (2017)

⁶⁸ See Francis (2022)

⁶⁹ Francis, T. (2022)



wages,” where higher wages lead to changes in employee productivity and, in certain conditions, these productivity gains can fully compensate shareholders for the higher wages. In fact, U.S. Treasury Secretary Janet Yellen wrote one of the key papers in this literature. In Akerlof and Yellen (1990), the authors argue that workers purposely put forth less effort if they feel they are being underpaid. As such, paying higher wages can, in some circumstances, lead to higher worker productivity. Ouimet and Simintzi (2021) show evidence of such gains when looking at wages at unionized plants in the U.K. during the Great Recession. Likewise, Edmans (2011) finds that firms on Fortune’s 100 Best Companies to Work For in America list earn excess market returns. Interestingly, there also appear to be synergies between sustainability and employee welfare, given new research that finds that employees are willing to accept a lower wage to work at more sustainable firms.⁷⁰

Firms that will be able to pay their workers a wage above the competitive market rate will also benefit by attracting higher-quality workers and reducing unwanted employee turnover. It is important to acknowledge, however, that any such raises by individual firms are unlikely to significantly affect national trends in income inequality. One firm acting alone is unlikely to move the needle. Moreover, two-thirds of the increase in income inequality in the U.S. comes

from increasing inequality between firms.⁷¹ Over time, we are seeing an increasing bifurcation among firms, with a segment of firms paying low average wages and another segment paying high average wages. We also know that high-wage firms tend to be more profitable, as compared with their low-wage peers.⁷² Presumably, it is these high-wage firms that will have the greatest ability to raise wages, further increasing between-firm wage inequality.

However, firms can address inequality internally. It is important to understand that not all within-firm inequality is the same. One of the most influential research papers on within-firm inequality uses a field study in India. In this study, the authors show that dispersion in wages that can be tied to differences in worker productivity has no discernible impact on output, attendance or group cohesion.⁷³ Instead, it is “unjustified” horizontal pay inequality, or wage differences that cannot be attributed to differences in productivity, that negatively impacts employee effort. Likewise, Cullen and Perez-Truglia (2022) show that positive shocks to employee perceptions of their manager’s wages can lead to an increase in worker productivity. With higher managerial wages, the benefits to being promoted increases, thereby giving workers added incentives to work harder.

⁷¹ See Song, Price, Guvenen, Bloom & von Wachter (2019)

⁷² See Abowd, Kramarz, & Margolis (1999)

⁷³ See Breza, Kaur, & Shamdasani (2018)

⁷⁰ See Krueger, Metzger & Wu (2021)

Investors are also weighing in on inequality. As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, public companies listed in the U.S. are now required to disclose the pay ratio between the median employee and the CEO. Research has found that firms, on average, realize negative abnormal returns upon disclosure of high CEO-worker pay ratios, suggesting investors dislike the inequality measured by that pay ratio.⁷⁴ Such concerns, may not, however, be necessarily warranted if firm pay inequality reflects managerial talent. Gabaix and Landier (2008) argue that high CEO pay can be justified because of the productivity gains of attracting a more talented CEO at a large firm. If high pay inequality reflects managerial talent, then we should observe outperformance by such firms. Consistent with this argument, researchers have found that firms with higher pay inequality, measured at the hierarchy-firm-year level, which allows for better inferences across firms, have larger valuations and stronger operating performance.⁷⁵

DEI

The third key issue is diversity, equity and inclusion. Beyond the economic benefits of having a diverse workforce that brings alternative viewpoints, DEI matters for employee stakeholders who demand to see representation across races and genders as well as fair pay across groups. Investors are also demanding greater diversity. For example, BlackRock, the world's largest investment management firm, states that boards of directors should be made up of at least 30% women and/or members of underrepresented groups.⁷⁶ And regulators are increasingly mandating diversity. In 2018, California passed a state law

requiring that at least one woman sit on the board of any publicly traded company with headquarters in the state and, in 2021, NASDAQ proposed a rule requiring that all firms listed on their exchange have at least two diverse members or justify why they do not.⁷⁷

In terms of representation, progress has been made. Women now occupy a greater proportion of leadership positions in large firms; by the second quarter of 2021, there were 10% more women on corporate boards than there were a mere five years earlier. And, when analyzing the 3,000 largest publicly held companies, women now make up a quarter of all board directors. Yet this progress still falls short of adequate representation, given that 43% of all full-time workers in the U.S. are women. The needle has moved, but more still needs to be done.

Enhancing diversity requires reinventing recruitment into leadership positions and challenging assumptions. For example, recent experiments suggest that moving from an opt-in process to be considered for a position (i.e., needing to apply) to an opt-out option (i.e., everybody who meets certain criteria is automatically considered) decreases gender differences in promotions. Unfortunately, there are no silver bullets. Instead, research suggests the need to creatively challenge assumptions and systems to reduce the unique barriers underrepresented groups face.

Research also suggests that we need to challenge how we value merit. Merit as an idea is valid and useful. But it doesn't always represent the reality people experience. Belief in meritocracy leads to an assumption that any attempt to increase representation would sacrifice "quality" and thus amounts to unequal treatment of otherwise equal people (e.g.,

⁷⁴ See Pan, Pikulina, Siegel & Wang (2022)

⁷⁵ See Mueller, Ouimet, & Simintzi (2017)

⁷⁶ See BlackRock (2023)

⁷⁷ See Lee & Crenshaw (2021)

hiring women just because of their gender). This is a pervasive but false assumption.⁷⁸ Addressing such ideological resistance requires a long-term, respectful, active dialogue. Organizations can start by better using data to challenge assumptions about increased representation and lower quality and making such data transparent. Moreover, organizations can devote efforts to uncovering invisible and subtle barriers faced by those from underrepresented groups, as well as hidden and subtle advantages benefiting majority members.⁷⁹

As a tool, DEI transparency shows great promise. Transparency in selection criteria can lead to greater representation.⁸⁰ Transparency can also help to reduce pay gaps across groups. Bennedsen et al. (2022) study the effects of a Danish law that mandated that firms disclose gender disaggregated wage data and find that the law led to a narrowing of the gender pay gap by 13%. The law also impacted female representation, resulting in fewer departures and higher hiring and promotion rates among women. In contrast to the view that such policies are costly to firms, Bennedsen et al. (2022) find that firm performance was unchanged. Firms could opt to disclose this information voluntarily. Another approach that has been successful in increasing female representation is to provide generous nonwage benefits that are valued relatively more by women than by men. For example, research shows that providing generous maternity benefits increases gender diversity, particularly in labor markets where female talent is scarce.⁸¹

In terms of social issues, DEI is unique in that building a business case may not be the right approach. Some firms have decided that diversity is so integral

to their firm and culture that efforts to improve diversity do not need to be evaluated on a cost-versus-expected-benefits basis. In a recent survey of Fortune 500 companies, 80% argue they support diversity on the grounds that it benefits shareholder value.⁸² But, 5% of these firms justified their emphasis on diversity using a “fairness” or “moral” argument without any discussion on the costs or benefits of such programs.

The definition of social stakeholders can be extremely broad. But, our exploration of this topic over the last year has illustrated that the most effective starting point is your own employees. Policies such as employment protection, DEI and even paying above-market or efficiency wages can create win-win situations. Unfortunately, not all situations are win-win, which is also where a focus on employees can be beneficial. It’s easier to internalize those trade-offs when you can measure the impact on areas such as employee productivity.

G - Governance

Getting Governance Right

Perhaps the least controversial part of ESG investing is the emphasis it places on good governance. As we illustrate below, however, in order to get “E” and “S” right, you need to get governance right. Investors have considered firms’ governance values for quite some time now, and for good reason. A large amount of academic research provides strong evidence that “good governance” leads to value creation. Firms with strong shareholder rights are valued higher and have higher stock returns than those with weak shareholder rights.⁸³ When firms are targeted by activist hedge

⁷⁸ See Amis., Mair, & Munir (2020)

⁷⁹ See Phillips & Jun (2022)

⁸⁰ See Uhlmann & Cohen (2005)

⁸¹ See Liu, Makridis, Ouimet, & Simintzi (2022)

⁸² See Georgeac & Rattan (2022)

⁸³ See Gompers, Ishii, and Metrick (2003), Bebchuk, Cohen, and Farrell (2009). Also, Edmans (2020) provides a review of activist investors effects on firm value.

A Clear-Eyed Look at Salary Transparency Laws

In January 2022, the New York City Council enacted the New York City Salary Range Transparency Act, an amendment to the New York City Human Rights Law that went into effect in November. Under this act, it is an “unlawful discriminatory practice” for all employers with more than four employees to advertise a position without providing a minimum and maximum salary in the position advertisement.

New York City is merely the latest locality to enact pay transparency legislation, as 17 states currently hold similar laws on their books. However, while these laws are backed by well-meaning intent to reduce the gender pay gap, their actual effect remains nebulous. For example, the New York City law’s initial rollout has been somewhat rocky. Companies have found a variety of ways around the law, including posting incredibly large salary ranges or else simply not providing a job posting for the job in question.

In theory, greater transparency should help employees who are paid less than their peers and shrink the gender pay gap by expanding the options available to women. However, a recent paper by Zoe Cullen and Bobak Pakzad-Hurson provides evidence that firms internalize this effect when considering what to offer potential employees, and instead merely offer lower wages to all workers. In states that passed salary transparency legislation, wages across the board fell by 2%. Even in settings in which the pay gap narrows, the reason may not be because transparency leads employers to pay

women more. For instance, in papers examining pay transparency in both Denmark and the U.K., the primary driver of the reduction in the gender pay gap was a reduction in male wages. The primary beneficiary of such laws may not be women (or other groups that face discrimination) but the firms that employ them – thus demonstrating the need to account for potential dynamics and unintended consequences that legislation generates. To learn more, check out [“A Clear-Eyed Look at Salary Transparency Laws.”](#)





funds and are forced to take steps to strengthen governance, firm performance improves. Even the possibility of future potential intervention by activist investors appears to scare targets' peers into action to make improvements that increase valuations.⁸⁴ Research provides clear evidence: Good governance is strongly associated with value creation; investing in firms with good governance, therefore, makes sense. Advocating for "G" under the umbrella of ESG then should not be controversial at all. However, the question of what fully represents good governance is still under debate.

At a basic level, good governance is aligning interests between the owners (shareholders) and the management. The governance structure of a firm is what determines the balance of power between managers and shareholders. In the case of a public company, this involves issues around how to structure an effective board that can do its monitoring job and how to incentivize the management properly to ensure that the company acts in the interest of shareholders. The ultimate authority rests, however, with the shareholders, who elect directors and delegate most decisions to managers. It is for this reason academic research on good governance has largely focused on shareholder rights and shareholder value; for public

companies, these are easy to observe and measure, and thus helped improve our understanding. Yet, in the context of ESG investing, good governance has at times taken different meanings that fall outside this scope defined by the relationship between shareholder rights and shareholder value. The debate around what "G" in ESG is and how it connects to value, therefore, is left somewhat muddled.

In this section, we first lay out a definition for good governance. We then survey what we know about getting it right – good practices around CEO pay, board composition, ownership structure and shareholder engagement – and how it all relates to value creation. We also point to potential ways that ESG can sometimes get the "G" wrong.

What Is Good Governance?

At the heart of governance for the modern corporation is what economists call the "principal-agent" problem – the idea that a firm is often run by a manager ("agent") who is separate from the owner-shareholders ("principal") and who may make decisions that diverge from what is in the best interest of shareholders. This divergence of interests is what gives rise to deadweight losses, called agency costs. For example, some managers may choose to coast rather than work hard on growing the company.

⁸⁴ See Gantchev, Gredil, & Jotikasthira (2019)

Others may avoid taking risks required for keeping up with innovation; yet others may pursue pet projects that further their own personal interests or even those of their board of directors to be rewarded for the favor with greater pay and lower chance of being fired for their poor performance. Good governance, therefore, begins with aligning interests – minimizing these agency costs – and ensuring the company acts in the interest of shareholders.

In the context of ESG assessments, optimal governance may not be so simple. Consider that there are likely cases where “G” may conflict with “E” and “S.” For example, good governance may involve ensuring that CEOs don’t excessively spend on “E” and “S” for their own personal benefit.⁸⁵ That’s why many people believe that it’s illogical that ESG are combined together – “G” is about maximizing long-term shareholder welfare; “E” and “S” are about serving stakeholders, even if not in the interest of stakeholder welfare.

This primacy of the shareholder interest is, of course, what critics of shareholder capitalism often object to. Indeed, viewed often as equivalent to the singular objective of shareholder value maximization, this focus on shareholder interest is often what is blamed by advocates of stakeholder capitalism for the failings of shareholder capitalism.

What Does Good Governance Mean for Stakeholder Capitalism?

What then does good governance mean for stakeholder capitalism? A more nuanced and, in our view, a more accurate interpretation is that good governance, in fact, involves maximizing shareholder welfare – of which shareholder value is naturally

⁸⁵ See, for example, Masulis & Reza (2015).

Good governance can be boiled down to two points:

- **Stakeholder value can lead to shareholder value**
- **Even if stakeholder value comes at the expense of shareholder value, shareholders may directly care if it affects shareholder welfare. (And still, a company should only pursue stakeholder value if it’s an issue not effectively addressed by policy)**

Good governance ensures that stakeholder value is ONLY pursued if it satisfies one of the two above criteria. The CEO cannot fritter shareholder money away on ES causes she cares about but shareholders don’t.

the biggest element. Shareholder welfare, however, also involves everything else that shareholders care about, including any externalities to other stakeholders that might *ultimately* affect shareholder value.⁸⁶

Viewed in this way, good governance worries about agency costs that can arise not only when CEOs

⁸⁶ The seminal paper on agency relationships by Jensen and Meckling (1976) also examines maximization of shareholder welfare versus shareholder value. See Edmans (2021) for a detailed discussion.

underweight shareholders' interests but also when they underweight stakeholders' interests and take actions at the expense of important stakeholders that ultimately affect shareholder value. For example, consider a company with a reputation for mistreating its employees or customers; such a reputation will surely impact attracting or retaining them in the future, thus reducing shareholder value.⁸⁷ Milton Friedman, who is often identified as the ultimate champion of shareholder capitalism, highlights this very notion in his landmark 1970 article: "It may well be in the long-run interest of a corporation that is a major employer in a small community to devote resources to providing amenities to that community or to improving its government. That may make it easier to attract desirable employees."⁸⁸ Far from what is typically characterized as pursuing unbridled self-interest with a singular focus on profits, acting in the interest of shareholders requires maximizing shareholder welfare – the vast majority of which is long-term shareholder value, but which does involve taking the interests of stakeholders seriously.

Under stakeholder capitalism, good governance can still focus on the interest of the shareholder; it still involves aligning interests and making sure that the CEO does not pursue her own interest at the expense of both shareholders and stakeholders. Good governance ensures that CEO compensation is properly tied to long-term shareholder value and that boards do their monitoring job to hold management accountable and to ensure shareholder rights. Good governance under stakeholder capitalism, therefore, need not be different from good governance under shareholder capitalism.

⁸⁷ Edmans (2012) shows that employee job satisfaction is positively related to firm value and future stock returns.

⁸⁸ Friedman (1970)

How Do You Get Governance Right?

CEO pay

Designing executive compensation in a way that aligns a CEO's interest with those of shareholders is critical for good governance. It is important for not only attracting and retaining a talented CEO – what economists call the participation constraint – but also for motivating her sufficiently to work hard and act in the interest of shareholders – the incentive constraint. The incentive element typically uses equity instruments to directly link executives' payoffs to shareholder value. What an optimal incentive contract looks like, who ultimately determines the pay package and what outcomes incentive compensation schemes actually produce is the subject of an intense debate among both academics and practitioners. Consider the controversy around Elon Musk's \$50 billion pay package at Tesla, for example.

Pay ratio is not the right good governance metric

One issue in ESG metrics is what constitutes fair compensation for executives.⁸⁹ But a central governance question must be whether large CEO pay packages that we observe are the optimal contracting outcome in a competitive labor market for managerial talent, or an indication that powerful and entrenched managers set their own pay with the help of boards that they effectively control.⁹⁰

ESG advocates have embraced the pay ratio as a key metric in the name of good governance. The World Economic Forum suggests, for example, that all

⁸⁹ See, for example, [MSCI ESG Ratings Methodology: Pay Key Issue](#)

⁹⁰ See Bebchuk and Fried (2004)

companies report it to show how stakeholder-friendly they are. Its supporters argue that companies that are “more equal” as per their pay ratio will have better and stronger cultures, which will lead them to stronger financial performance.

Unfortunately, research shows otherwise. A simple focus on pay ratio suggests that lower pay ratios should be intrinsically better than high ratios. However, the evidence is, in fact, high pay ratios are associated with higher long-term profitability and firm value.⁹¹ There are several potential reasons for this positive link. It might be that higher pay attracts and incentivizes the best managerial talent or that high pay is in fact due to strong long-term performance. The problem with using the pay ratio as a key metric is that it is largely uninformative. For example, the pay ratio will naturally vary across industries. Consider investment banks versus supermarkets; the pay ratio will be lower for the former than the latter simply because midlevel bankers are well paid, even if they are not executives. Similarly, high-growth firms will naturally have higher pay ratios than mature firms.⁹² Measuring pay ratios can also set up perverse incentives as CEOs can lower the ratio by outsourcing or automating low-paid jobs.

Ultimately, where the pay ratio fails as a “stakeholder metric” is because the logic is anchored in the mindset of splitting a fixed pie: If a CEO’s share of the pie is reduced, it means there will be more for the employees. What should be in the best interest of both shareholders and stakeholders, rather, is incentivizing the CEO to grow the pie in a way that can benefit all employees.

⁹¹ Muller, Ouimet and Simintzi (2017), Falaye, Reis, and Ventakeswaran (2013)

⁹² Frydman and Papanikolaou (2017)

Thus, CEO pay should only matter to the extent to which (1) it might damage employee morale and thus firm value and (2) paying the CEO excessively directly costs shareholder value, rather than to show how stakeholder-friendly a company can be.

What research says about getting CEO pay right

What does research tell us about getting CEO compensation right for good governance? Quite a bit, but it comes down to a few fundamentals. First, the best way to align interests is simply by making sure that CEOs have skin in the game. An often-cited study of owner-CEOs – CEOs who are voluntarily heavily invested in their firm – finds that these firms deliver higher stock returns than those with low managerial ownership, and also have higher returns on assets, have greater labor productivity and are more cost-efficient.⁹³ In other words, incentives work.

Second, giving CEOs a long horizon also matters. Incentives tied to short-term equity returns give rise to adverse outcomes – like slashing investment inefficiently to inflate earnings in an attempt to boost the near-term stock price around when they have more equity vesting.⁹⁴ Requiring a long enough runway that sometimes even extends to after they leave their position can ensure that CEOs are not tempted to leave a mess for their successors.

Third, discrete performance targets can be counterproductive. For example, if hitting a target comes at the expense of cutting R&D for the firm, adverse long-term valuation effects can result that may not be immediately apparent to shareholders.⁹⁵ Rather than tying compensation to specific metrics, firms that

⁹³ See Lilienfeld-Toal and Ruenzi JF 2014

⁹⁴ See Edmans, Fang and Lewellen RFS 2017

⁹⁵ See Bennett, Bettis, Gopalan, and Mulbourn JFE 2017



increase long-term incentives for executives improve not only long-term profitability and sales growth but also ratings for the environment, customers and communities.⁹⁶ In the end, getting CEO compensation right for good governance in a way that benefits both shareholders and stakeholders simply requires linking it to long-term value.

Recently, ESG-linked pay has been discussed as a tool for promoting good governance. Specifically, the argument is made that ESG-linked pay (1) gets managers to think about material ESG issues that affect shareholder welfare, and (2) gets managers to think about ESG issues that affect shareholder value. However, the arguments may be misguided. Recent research suggests that incentivizing executives to multitask on ESG issues and increased complexity of agency relationships could reduce aggregate stakeholder welfare.⁹⁷

⁹⁶ See Flammer & Bansal (2017)

⁹⁷ See Bebchuk & Tallarita (2022)

Boards

When managers do deviate from acting in the interest of shareholders, however, the board of directors is who should provide the oversight necessary to hold CEOs accountable. Indeed, directors are shareholders' first line of defense against an incompetent management. They are expected to supervise the actions of management, provide advice and reject poor decisions. A board that does its monitoring job properly is therefore crucial to any good governance structure.

Yet, boardrooms are riddled with their own set of complex issues: Is a larger board better than a smaller one? Who makes better directors, insiders or outsiders? What about interlocking directors – against which the Department of Justice recently launched an enforcement initiative?⁹⁸ The answers to these questions, among others, are central to creating a board structure that works for good governance.

⁹⁸ An "Interlocking directorate" occurs when the same individual or entity sits on the board of two or more companies. There is a danger that an interlock between competing firms may be used to co-ordinate behavior and reduce interfirm rivalry.

Keep the board small, independent and focused

Plenty of evidence exists on what matters for a successful board. First, while it would seem like a larger board might be better at its monitoring job, it is not the case. Any benefits of a large board appear to be outweighed by slow decision making or less effective discussion of CEO performance. The evidence shows that firms with smaller boards have greater firm value than those with larger boards. A widely cited study finds that smaller boards are not only better at dismissing poorly performing CEOs but also provide better performance incentives to CEOs that result in better operating efficiency and profitability.⁹⁹

Second, effective monitoring requires board independence. Inside directors may simply be unable or unwilling to remove incumbent CEOs if their own careers are closely tied to that of the CEO. In contrast, outside directors who are not full-time employees of the firm would have an incentive to develop a reputation for being experts in decision control and would want to ensure the proper governance of the firm. The evidence corroborates this. Outside directors are far more effective than their inside counterparts when it comes to removing a CEO based on poor performance.¹⁰⁰ One caveat is that outside directors should not sit on too many boards. Research documents that shareholders typically get less benefit from having independent directors on the board if they hold multiple directorships (though this is not true in all cases).¹⁰¹

Does board diversity matter?

Board diversity is the issue now generating the most

⁹⁹ See Yermack (1996)

¹⁰⁰ See Weisbach (1988)

¹⁰¹ See, Fich and Shivdasani (2006) and Coles, Daniels and Naveen (2008)

attention from ESG governance advocates. In the wake of COVID-19 and the events of 2020, including the killing of George Floyd, many companies are racing to address long-standing issues around systemic racism and sexism. Yet, these efforts are potentially leading to well-intentioned policies with uncertain outcomes. A case in point is the board diversity mandate proposed by Nasdaq and approved by the SEC in August 2021. Nasdaq's diversity rules, similar to other policies of its kind adopted elsewhere, aim to improve the gender or ethnic diversity in the corporate board room by mandating quotas. While they may generate beneficial social outcomes, the central question is whether these quotas affect governance. The evidence is at best mixed. Boards with female directors have better attendance records and show tougher monitoring of management, but the average effect of gender diversity on firm performance and value appears to be negative or, at best, negligible.¹⁰²

Is there a need for stakeholder representation at the board level?

Another complex issue is whether the interests of employees, customers and wider stakeholders are best served through representation at the board level. Take worker representation. First, it would be difficult for a worker to "represent" all workers. Workers come from different pay grades and locations; for example, it might be that decisions benefiting office workers could come at the expense of assembly line workers. In contrast, shareholders are generally aligned behind the common objective of improved long-run value. Second, if a firm has a culture of treating workers poorly, worker representation is unlikely to be a fix for that culture – it is more likely that many decisions would simply move to backroom dis-

¹⁰² See Ahern and Dittmar (2012), Greene, Intontili and Kahle (2019), Eckbo, Nygaard, Thorburn (2022)

cussions. Nevertheless, there appears to be a move underway to put more workers on boards, often in an attempt to rebuild trust in a “broken” system. Yet, the jury is still out on whether this makes any difference.¹⁰³

Returning to our definition of good governance, it is then almost to be assumed that putting nonshareholders on the board would reduce shareholder welfare. The counterpoint would require an odd scenario, such as managers not knowing how important employee satisfaction was for firm value (and investors not knowing either), thus requiring worker directors to push management to care. In short, stakeholder representation on boards may be relevant for “E” and “S,” but not for “G.”

Ownership structure

A central feature of the public corporation is that it has thousands, and sometimes millions, of shareholders. This diffuse ownership structure creates the potential for passive shareholders since few shareholders would have the incentive to bear large costs of monitoring the management – what is known as the “free-rider problem.” Shareholders with large equity positions, however, can overcome this problem. They have greater financial incentives to monitor the

¹⁰³ Faleye, Mehrotra, and Morck (2006) show that when employees have a large stake and are involved in governance, their companies invest less in long-term assets, take fewer risks and grow more slowly. The same study reports lower job creation and lower labor and total factor productivity for these firms. There is also the potential for manager-worker alliance--when employees have substantial voting rights, the manager-shareholder conflict gets even worse. Masulis, Wang and Xie (2019) show they help entrench incumbent managers and allow them to pursue value-destroying acquisitions by undercutting the disciplinary ability of takeovers. All of these findings would point to the negative impact of worker representation on overall firm efficiency and value – opposite to a goal of enlarging the pie.

board and management, as the benefits these large shareholders receive from their monitoring activities are more likely to exceed their costs. Large shareholders are often called “blockholders” who own large positions (formally, an equity stake of 5% or more in the U.S. for regulatory purposes). The presence of blockholders – and more generally a firm’s ownership structure – therefore plays an important role in firm governance.

Increasingly, blockholders are prevalent across companies and around the world.¹⁰⁴ One study finds that 96% of U.S. domestic corporations have at least one shareholder of 5% or greater; many firms have several blockholders.¹⁰⁵ In the U.S., public firms have a far more concentrated ownership structure than ever before. Much of this trend is explained by the growth of a few large investors groups following passive investment strategies (i.e., index funds and ETFs), and specifically Vanguard, BlackRock and State Street. For example, looking at two large firms, Apple and GE, each firm had Vanguard as a greater than 5% blockholder, and the top 10 institutional shareholders in aggregate owned 22.61% of Apple and 22.05% of GE.¹⁰⁶ Apart from index funds and ETFs, the largest blockholders typically include hedge funds, other corporations, financial institutions, venture capitalists, pension funds and individual investors (e.g., founders). Given their large and concentrated ownership positions, understanding institutional investors’ role in corporate governance is important and currently at the center of a growing backlash against ESG.

How do blockholders govern?

Large shareholders can influence corporate decisions

¹⁰⁴ See La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998)

¹⁰⁵ See Holderness (2009)

¹⁰⁶ See Edmans and Holderness (2017)

in two ways. The first is direct intervention – commonly known as “governing by voice,” engagement or activism. This means taking any action that will improve firm value, but that is costly for the investor. For example, a large shareholder may seek a strategic change by either publicly criticizing the management and launching a proxy fight, or by working behind the scenes advising the management; alternatively, a blockholder may vote against a slate of directors or a wasteful merger, or seek the removal of an underperforming executive. What ultimately gives the blockholder the ability to implement an intervention is the voting rights that come with the large stake.¹⁰⁷

On the other hand, a direct intervention may be difficult to implement for some blockholders. For example, some institutional investors may be better at choosing a portfolio of stocks than launching proxy fights or giving strategic advice. Moreover, even if they have the expertise, they may still fail to succeed in their intervention efforts. An alternative mechanism for blockholders to exert influence in that case is through exit, or divestment.¹⁰⁸ In other words, shareholders can “vote with their feet” and sell their shares. In this case, blockholders would have strong incentives to gather information about the firm’s long-term fundamental value because they stand to profit from selling their stakes upon negative information.

Both engagement and activism as related to ESG have created controversy. Engagement is often seen as blockholders trying to impress their firm’s beliefs onto companies. It is controversial because it is unclear if those beliefs represent the underlying shareholders in the case of large intermediaries such as index funds and public pension funds (where it

is the public at large who are perceived as ultimate equity owners). For example, critics contend that the personal preferences of senior managers at financial firms may dictate engagement terms on ESG issues. On the other hand, divestment is perceived as lower demand for financial investment and thus should raise the cost of capital for a company. In turn this would result in lower investment (due to a higher hurdle rate for new investment) and stunt a firm’s growth. Again, the concern is that large blockholders acting as intermediaries might not be making divestment decisions that correspond to the preferences of the ultimate shareholders.

These findings suggest two separate issues are in play with large shareholders and the “G” in ESG. First, what are the governance policies that shareholders should care about to provide proper alignment between owners and their “agents”? Second, in a world where the ultimate shareholders are increasingly removed from the actual governance process, how should we ensure that shareholders’ preferences are properly reflected in the process.¹⁰⁹ This second issue is a rapidly evolving topic, with many new solutions being proposed for shareholders to individually express their preferences through expanded proxy voting tools (e.g., the expansion of the BlackRock Voting Choice platform).¹¹⁰

The Bottom Line

Where does the evidence leave us in terms of understanding the role of governance in ESG? We believe that the fundamental role of governance is to ensure that the company acts in the interest of shareholders. This reflects the heart of the principal-agent problem

¹⁰⁷ See Shleifer and Vishny (1986)

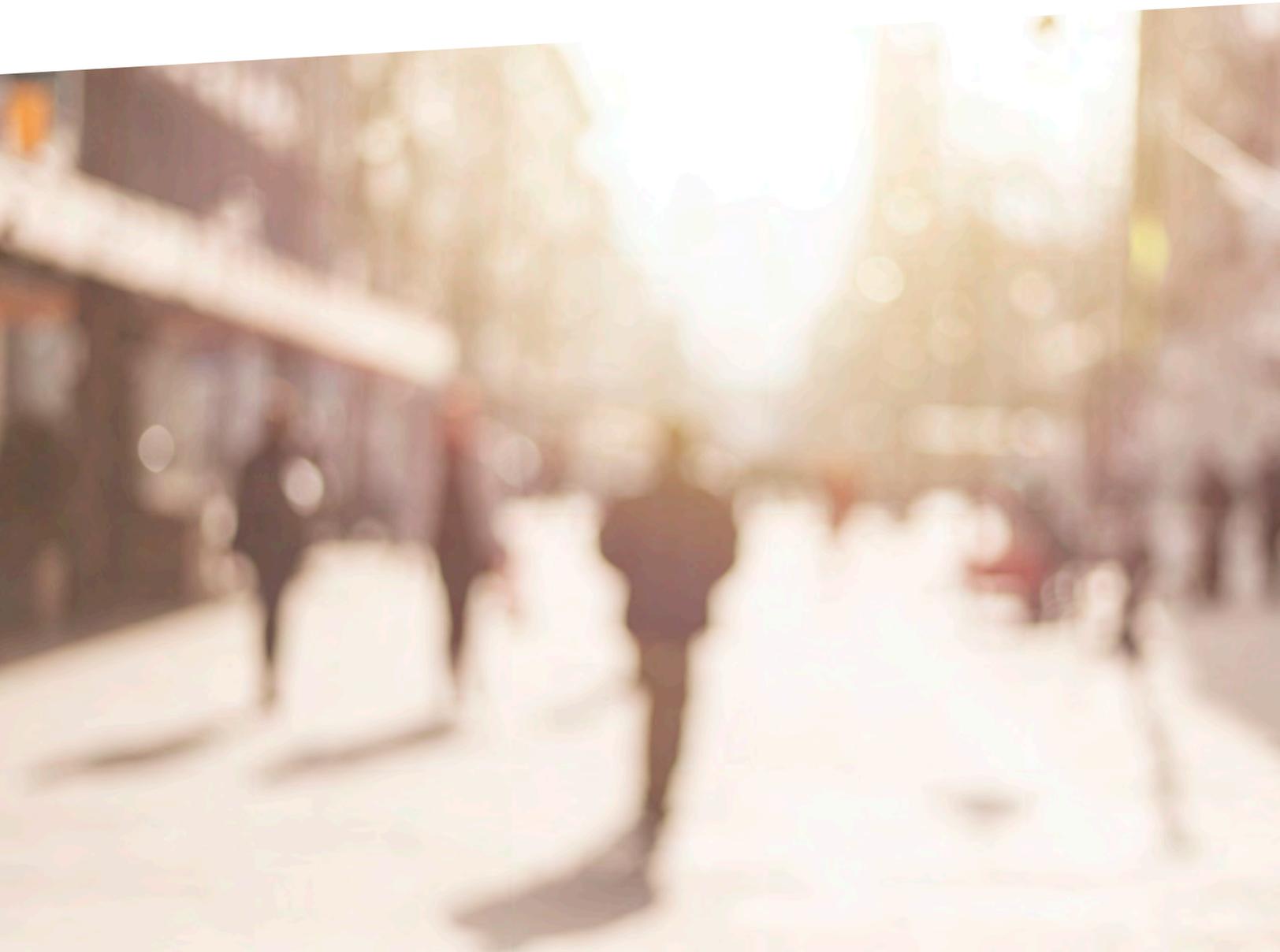
¹⁰⁸ See Admati and Pfleiderer (2009) and Edmans (2009)

¹⁰⁹ See, Gantchev and Giannetti (2021) and cites therein.

¹¹⁰ See <https://www.blackrock.com/corporate/newsroom/press-releases/article/corporate-one/press-releases/2022-blackrock-voting-choice>.

– that managers may not act in shareholders' interest. The key distinction as ESG becomes more embedded in decision making is that acting in the best interest of shareholders is likely more complex than maximizing profits. It instead involves maximizing shareholder *welfare*, which can include nonpecuniary factors for many investors – a fact acknowledged even by the father of shareholder primacy, Milton Friedman. But shareholder value is likely the biggest element, and this involves tying CEO pay to long-term shareholder value, ensuring (in most cases) independent, small and focused boards, ensuring (in most cases) share-

holder rights, shareholders being able to engage (although more engagement is not necessarily better). To the extent that shareholders have goals other than long-term shareholder value, companies should make sure that they discover these goals. But it is essential that CEOs do not start pursuing whatever ESG goals they personally desire, since they are using shareholder money to do this. And, this represents a serious potential agency problem for ESG, as it is well documented that CEOs can pursue their pet projects or whatever cause happens to be in the news so they can be viewed favorably by the public.



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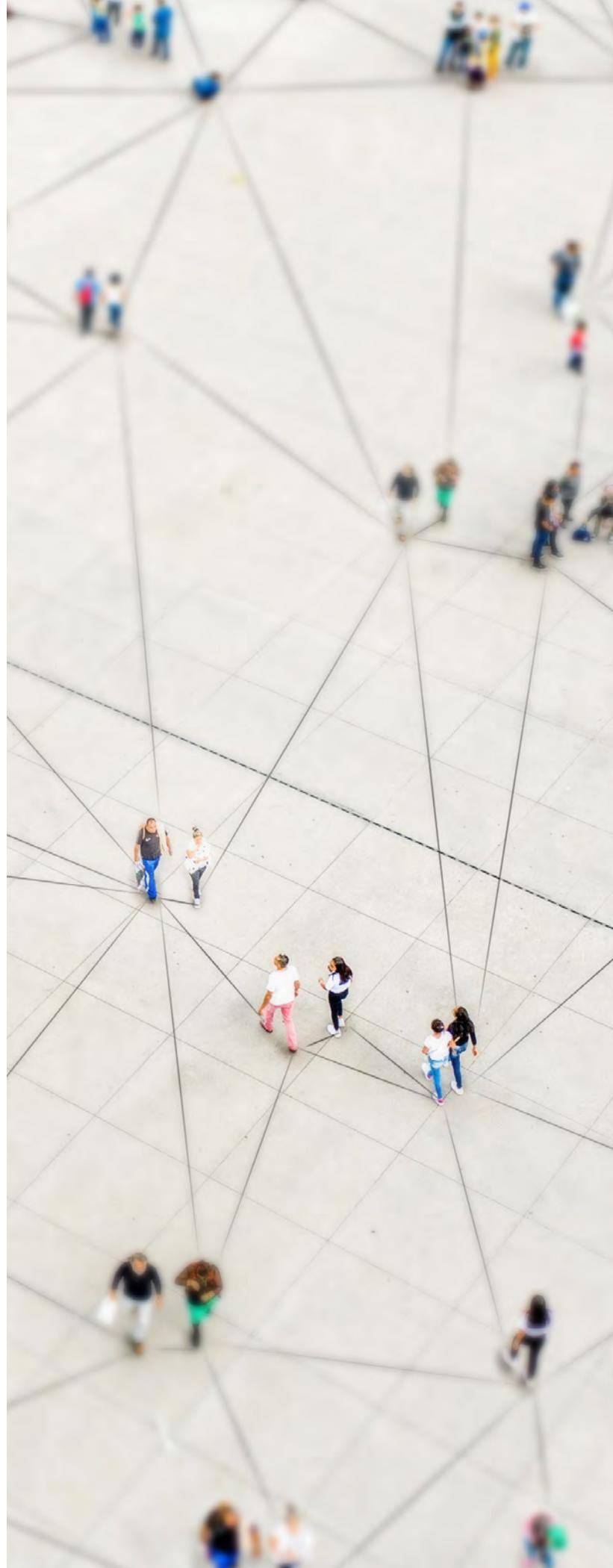
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