Thoughts on ESG Measurement

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Based on growing concerns about the adverse effects that corporations impose on stakeholders, recent years have seen an explosion of interest in detailed information that allows for assessment of corporations along environmental, social and governance (ESG) dimensions. Potential stakeholders can be broadly defined as any group or individual who can affect or is affected by the corporation (e.g., Freeman, 2010), which includes shareholders, creditors, employees, customers, suppliers, communities, future generations, the environment and the planet. ESG measures in their current myriad forms are currently influencing large flows of capital towards ESG-themed investment vehicles, as well the investment and decision priorities of corporate executives in response to these capital flows and other pressures deriving from investors, activists, the media and politicians.

Long running literatures in accounting, economics, finance, and business practice examine the powerful role that performance measurement plays in shaping behavior and potentially deleterious effects caused by schemes that measure the wrong things, are incomplete with respect to key factors, or specify performance measures that poorly map to the underlying factors of interest. Given the potential for ESG measurement to fundamentally alter allocations of capital across countries, industries and firms in the economy, as well as within individual firms, it is crucial at this juncture to critically examine the existing ESG measurement landscape and its implications for economic outcomes.

It is useful to consider ESG measurement in the context of performance measurement systems more generally. Such systems include accounting standards developed by the FASB and IFRS, innovative costing methodologies like activity-based costing, and a wide range of non-financial performance measures directly used in compensation contracts or strategic tools such as balanced scorecards. The corporate organizational form has proven to be a powerful and dynamic mechanism for driving economic growth and prosperity, and 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, inside corporate managers and other stakeholders to monitor and discipline the actions and statements of insiders.

At this point ESG is infused with a complex mixture of legitimate concerns for society and the environment, economics, political ideology and self-interest. As we move forward it is paramount to consider the ultimate objectives of ESG measurement and how it could optimally fit into the existing corporate order and information regime. This is a non-trivial undertaking. The issue of 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 (e.g., Milton Friedman 50 Years Later). For example, if we take an enlightened shareholder value perspective in which corporate leaders recognize that treating stakeholders well facilitates long-term value maximization (e.g., Jensen, 2002), the objective of ESG performance measurement could be to facilitate and discipline the value maximizing treatment of stakeholders. In contrast, in a pluralistic stakeholder perspective where the welfare of all stakeholders is relevant and valuable independently of effects on shareholders (e.g., Bebchuk and Tallarita, 2020), ESG measurement could create a basis for firms to make difficult trade-offs across the interests of various stakeholder groups and allow these groups to assert their claims against the corporation.

At this point, the evolving demand for ESG information derives from clienteles with diverse objectives and incentives. These clienteles include, among others:

1. 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 (Hart and Zingales, 2017);
2. Corporate executives managing internal capital allocation decisions and dealing with pressure from investors and myriad stakeholder groups;
3. Investment managers designing ESG products to appeal to various investor clienteles and generate fee income;
4. Ideologues seeking to transform existing economic and political institutions (e.g., Omarova, 2021; Darwall, 2021).
5. Billionaires, regulators, activists, NGOs and others seeking to implement political objectives outside of normal political channels. 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 (Macey, 2021).
6. Financial service firms, rating agencies, proxy advisors, accounting/consulting firms and academics seeking to benefit from providing ratings, consulting on ESG issues, and attesting to ESG disclosures. There are important conflicts of interest raises that can arise when a firm both provides ESG ratings and consults on how to raise ESG ratings (See WSJ 1/29/22).

Can a single ESG measurement structure possibly satisfy such diverse objectives? Are all of these objectives desirable? 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 are good or bad. Further, such a stark good versus evil view of the world can have unintended consequences. For example, a recent paper examines ESG investing in the context of green patent production (e.g., patents with the potential to contribute to mitigating environmental problems). They find that find that oil, gas, and energy producing firms are key innovators in the green patent landscape. These energy producers produce more, and higher quality, green innovation. However, these firms are explicitly excluded from many ESG funds,

and are often the targets of divestiture campaigns focused on stimulating green energy innovation. Consider also the role played by the mining of lithium, a key component of electric vehicle (EV) batteries. Lithium mining involves environmental and social impacts that could elicit low ESG ratings and the diversion of capital elsewhere e.g., Shadbolt, 2021).

ESG measurement challenges are reflected in the current state of the ESG reporting landscape characterized by many ESG ratings firms, idiosyncratic voluntary disclosures by corporations and mandatory reporting requirements that vary substantially across jurisdictions. A recent study (Berg, Koelbel and Rigobon, 2022) reveals this complexity by analyzing ESG rating data from six prominent ESG ratings agencies. The study finds that ESG ratings from different providers disagree substantially, with correlations between the ratings ranging from 0.38 to 0.71. Digging deeper, they find that the six agencies combined report 709 individual ESG indicators, where the indicators used vary substantially across the six agencies. Collapsing these 709 measure into 64 distinct categories, they find the correlation in category scores across agencies to again be quite low. The large number of indicators and categories together with the divergence across agencies makes it difficult for investors and other stakeholders to evaluate the ESG performance of companies. What information is conveyed by overall ratings that collapse 64 categories into a single measure, where overall ratings across ratings agencies can vary in the underlying categories and the way in which specific categories are operationalized? To the extent that overall ESG ratings are used to classify companies as good or bad, this aggregation could have negative impacts on the allocation of capital across firms and sectors.

This also imposes significant challenges for companies trying to deal with the competing pressures from various stakeholder clienteles. How does a firm manage 64 categories and make inevitable trade-offs across categories that are valued differently by different clienteles? This issue lies at the heart of the debate over shareholder primacy versus stakeholder governance. Stakeholder theory requires that the interests of different stakeholder must be balanced somehow. This raises difficult questions regarding conflicts between groups of stakeholders and between stakeholders and shareholders (e.g., Bebchuk and Tallarita, 2020). This central issue directly spills over to performance measurement space where firms must decide how to make trade-offs across measures associated with competing stakeholders' interests.

While some stakeholders may view ESG measures through the lens of solving social issues and climate change, the perspective of a firm's managers may differ as their compensation and labor market value, as well as the risk of attacks by activist investors, are closely tied to the firm's economic performance. This may lead managers to view ESG scores as a problem to be managed rather than as mission to solve social issues and mitigate climate change. The theory of incentives offers some insight here (e.g., Holmstrom and Milgrom, 1987). Faced with an array of ESG categories and measures, managers may prioritize individual items based on the level of cost and effort needed to increase a given measure. However, the cost of increasing a performance measure may be unrelated to any societal benefits as the measure may map poorly into the underlying factor or involve a factor that is second order in importance. While managers have incentives to prioritize investments that add value for shareholders, they may have incentives to manage the measures

unrelated to value maximization rather than underlying problem (greenwashing). Also, given that managers will likely focus on the things that are measured, to the extent that important issues are not captured or are captured poorly, managers may simply ignore the issue or just manage the measures.

Refining the objectives of ESG measures.

It is unlikely that a single reporting framework can be all things to all people. Instead of the multi-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 currently supported by mandated public reporting, securities laws and enforcement mechanisms that prohibit false and misleading information, highly developed accounting standards, and sophisticated financial intermediaries such as financial analysts, credit rating agencies and the financial press. The idea here would be to tailor ESG reporting to financially material sustainability information. Current ESG reporting certainly embeds information that is immaterial from an investor standpoint, but still important to other stakeholders. Alternative measurement structures could then be designed to meet the needs of other stakeholders.

This is indeed the approach that the Sustainability Accounting Standards Board (SASB) has taken in defining material issues with evidence of wide interest from a variety of user groups and evidence of financial impact. 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. This focus provides an opportunity for researchers and others to evaluate the efficacy of measures with respect to their valuation consequences. In fact, a large and growing body of academic literature investigates ESG measures from an investor perspective. 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., 2020), and carbon disclosures (e.g., Bolton and Kacperczyk, 2021a, 2021b; Aswani and Rajgapol, 2021). While the results are mixed, this is a promising area for future research. The research to date is 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 by the necessity of relying on third party ratings that, as discussed earlier, are far from perfect (Christensen, Hail and Leuz, 2021).

How to design ESG reporting that is free from political influence and agendas

Consider the process of accounting standard setting. Accounting standards are the product of well-defined objectives and a transparent open process designed to mitigate the influence of political pressure on standards and achieve widespread acceptance across society. Standard setters like the FASB 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 the case that accounting standard setting 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 (e.g., Solomons, 1991).

If the goal is to set ESG reporting standards, the design of the process will depend on the ultimate objectives of the system. Is the objective of ESG to complement the purpose of the corporation as mechanism of economic growth and prosperity? To repurpose the corporation as a mechanism of social policy? If it is the former, it is paramount that the funding structures of standard be transparent and not allow funding needs to influence the outcomes. The process of setting the standards must be open and transparent, and the standard setters themselves chosen and compensated in a manner than minimizes capture by outside interests.

Converting ESG Measures into Monetary Units: Impact Accounting

In her recent book, Reimaging Capitalism in a World on Fire, Rebecca Henderson posits that capitalism should be reimagined so that companies "embrac[e] a pro-social purpose beyond profit maximization and tak[e] responsibility for the health of the natural and social systems." She also states "it took me a surprising long time to embrace the idea that accountants hold the key to saving civilization. Even tiny changes in accounting rules can change behavior in profound ways." A growing movement indeed proposes that better accounting practices can help transform capitalism and redirect it onto a more sustainable track. "Impact Accounting", as it is called, seeks to comprehensively measure how individual companies impact stakeholder welfare, and then translate these financial, social, and environmental impacts into monetary values that can be integrated into the current accounting framework (e.g., HBS Impact-Weighted Accounts Project; Serafeim and Trinh, 2020). Instead of focusing on financial wealth creation as measured by profits, the new bottom line will reflect "total impact".

Leaving aside the debate over whether capitalism actually needs to be reimagined and reshaped, Impact Accounting holds the promise of changing capitalism, but also poses great risk for existing economic arrangements that have delivered enormous prosperity. It is hard to overstate how ambitious this impact accounting initiative is. Despite decades of research, discussion and debates, accountants have still not resolved how to reliably measure important economic constructs such as brand value, R&D intangibles, human and organizational capital, and marginal cost. Yet, Impact Accounting seeks to put a monetary value on the impact of products and operations on people, the environment and the planet, and then add or subtract it from companies' profits (Stuttaford, 2020). The level of judgment and the potential for ideological bias in determining these monetary values is enormous. What is the monetary value that credit card companies should bear for consumer depression due to credit card debt, or airlines for flight cancellations, or food producers for obesity, or hiring practices, etc.? To be complete, this system would also have to overcome the difficult task of measuring the consumer surplus that is derived from credit cards, air travel, food items, and every other product, service and policy at every company (e.g., King and Pucker, 2021).

There is a clearly a lot of work yet to be done in the areas of ESG measurement and Impact Accounting. These endeavors hold significant promise, but confront us with significant challenges

in balancing economic prosperity with the solutions to the many complex issues facing the people of planet earth.