B | Governance Studies at BROOKINGS

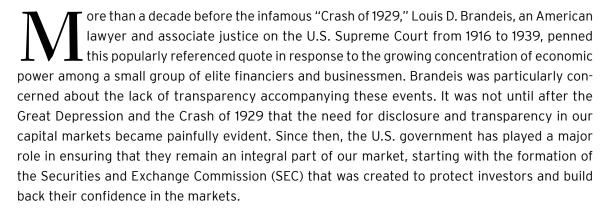
September 2014

The SEC and Capital Markets in the 21st Century: Evolving Accounting Infrastructure for Today's World

Robert G. Eccles and Jean Rogers

INTRODUCTION

"Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman."



Following the Crash of 1929, the country witnessed a devastating 83 percent plummet in the value of securities traded on the New York Stock Exchange over the course of three years. The Senate Committee on Banking and Currency began examining the financial industry, paving the way for securities regulation as we know it today. The preeminent legal minds of that era-including Brandeis and another future Supreme Court Justice, Felix Frankfurter, worked together to draft what would become the Securities Act of 1933 ("1933 Act" or "Securities Act") and the Securities



pr. Robert G. Eccles
is a Professor of
Management Practice at
Harvard Business School. He
was the founding Chairman
of the Sustainability
Accounting Standards Board
(SASB), where he continues
to serve on the Board.



Dr. Jean Rogers is the Founder and CEO of SASB. Since 2010 SASB developed from an idea formulated in collaboration with the Harvard University Initiative for Responsible Investment into a globally-respected, ANSI-accredited standardssetting organization.

1

¹ Louis D. Brandeis, "Other People's Money and How The Bankers Use It" (1914)

Exchange Act of 1934 ("1934 Act" or "Exchange Act").² These Acts together form the foundation of modern securities regulation, and are rooted in the notion that transparency is the antidote for an ailing market.

The '33 and '34 Acts led to the formation of the SEC, which Congress empowered to require and oversee corporate disclosure, a historic move that led to financial reporting standards and disclosure requirements aimed at protecting investors and the public. Through this action, Congress also sought to assure fair and honest markets, reliable prices, and unencumbered interstate commerce in securities.3 But over the years, public demand and the changing times have dictated the need to evolve and refine the system and, thus, the policies that govern it.

The first major evolution occurred in the 1970s. Until then, the SEC had delegated the standard-setting process to the private sector. When the financial reporting and standards process were called into question, the Wheat Committee was formed to determine how accounting standards should be established. In 1972, "Establishing Financial Accounting Standards"-also known as the "Wheat Committee Report," named after the report committee chairman, Francis M. Wheat-revealed an accounting standard-setting regime dominated by the major accounting firms and operating in a non-transparent process. This caused many to question whether the resulting standards had been established in an independent and unbiased way that truly served the interests of investors and the capital markets.4

The report led to the creation of an independent body called the Financial Accounting Standards Board (FASB), with the goal of serving the needs and restoring the trust of investors and the integrity of the capital markets. The "crisis of confidence" in the accounting profession could only be addressed through an objective, open, and transparent standards development process. It was stressed that FASB "will be, and will be seen to be, free of any private interests which might conflict with public interest" of accounting.5 FASB was created in 1973 to establish generally accepted accounting standards, and soon after became empowered by the SEC to develop accounting principles for the public interest for which there is "substantial authoritative support." It was this evolution of the SEC policies that served as the salve to soothe investors' fears and stabilize the market once more.

The creation of the SEC and FASB were crucial in developing the strong U.S. capital market we have today, but the world is now a very different place-facing megatrends such as population growth, food scarcity, climate change, and resource constraints. Today, financial accounting alone cannot capture the complete picture of a company's value. For S&P 500 companies, 20 percent of their value lies in tangible assets, while 80 percent is in intangible assets. In a changing world where issues such as climate change are presenting a real risk to business operations

⁷ Ocean Tomo, "Intangible Asset Market Value" accessed May 29, 2014 from http://www.oceantomo.com/productsandservices/ investments/intangible-market-value>.



² The 1933 Act reflects two main objectives: (1) to provide specific information about securities to investors; and (2) to curb fraud in the sale of those securities. By contrast, the 1934 Act is significantly broader and focused on the overall regulatory framework to include the creation of: (1) the SEC itself; (2) a regulatory system to monitor the securities markets and its participants; (3) a comprehensive disclosure scheme; and (4) specific antifraud provisions.

³ Dr. Jean Rogers and Robert Herz, "Corporate Disclosure of Material Information: The Evolution-and the Need to Evolve Again," The Journal of Applied Corporate Finance (2013)

⁵ AICPA (1972). "Establishing Financial Accounting Standards: Report of the Study on Establishment of Accounting Principles," ("Wheat Report") accessed on June 3, 2014 from < http://www.fasb.org/cs/ContentServer?c=Document_C&pagename=FASB%2FDocument_C%2 FDocumentPage&cid=1176156777828 >.

⁶ See SEC Financial Reporting Release No.1 (1982).

and public pressure continues to build for more non-financial data, environmental, social, and governance (ESG)⁸ management is becoming a core component of corporate strategy.

Beyond financial data, investors are now interested in issues such as how a company is prepared for the challenges of resource constraints, the damaging effects of climate change, water scarcity, and higher demand brought on by population growth and emerging markets. It is to the risk of companies not to

For S&P 500 companies, 20 percent of their value lies in tangible assets, while 80 percent is in intangible assets.

disclose material information if "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the "total mix" of information made available."9 Despite this regulatory obligation, corporate reporting today still fails to systematically account for changes in non-financial value drivers that investors need to make decisions. Today's capital markets need infrastructure to account for sustainability performance.

SUSTAINABILITY ISSUES ARE BUSINESS ISSUES

Sustainability accounting seeks to quantify how a company manages human, social, and environmental capital and how it deals with innovative technology, leadership, and governance. How well a company addresses sustainability can impact its revenue, operating expenses, and other critical financial indicators. Although some companies do share this information, the reporting of it is not standardized and is usually geared toward interest groups, not investors who have a financial stake in the company. As this information becomes more relevant to a company's bottom line, the time has come to give investors comparable information on these increasingly significant risks and opportunities.

Climate change risk is an example that's gaining increasing attention. In order to evaluate climate risk, investors need industry-specific metrics by which they can benchmark and gauge progress. For example, in real estate the quality of building stock and the geographical location of vulnerable assets matters. For automobiles, progress on developing alternative fuel vehicles matters. For insurance, understanding the vulnerability of insured assets and the frequency and magnitude of weather-related events matters.

The environment is not the only area where investors need more information. Material sustainability issues that are not reflected on financial statements arise in every industry and sector of our economy.

For example, in the pharmaceutical industry the World Health Organization estimates that the global market for counterfeit drugs has reached \$431 billion, representing one percent of the United States' supply, and 10 to 15 percent of the global pharmaceuticals market. 10 This issue presents a significant health and safety risk to consumers with an estimated 100,000 annual deaths attributed to substandard or counterfeit drugs worldwide. Pharmaceutical companies subsequently face material risks associated with the potential loss of public confidence and reduced

^{10 &}quot;Abbott Labs to Pay \$1.5 Billion to Resolve Criminal & Civil Investigations of Off-label Promotion of Depakote". Department of Justice 7 May 2012: Web http://www.justice.gov/opa/pr/2012/May/12-civ-585.html



⁸ The terms ESG, sustainability, and non-financial data are used interchangeably in this essay.

⁹ TSC Industries v. Northway, Inc., 426 U.S. 438 (1976).

revenue. While 85 percent of companies in the industry have no disclosure on the issue, the remaining 15 percent have industry-specific disclosure on how they are combating the risk counterfeit drugs present to profits and consumer confidence which clearly shows that this can be done.

Let's look at another example. In the Software & IT Services industry, a recent global study on the cost of cybercrime found the average annualized cost of cybercrime incurred per organization ranged from \$1.3 million to \$58 million. The technology sector was among the top five sectors in terms of average annualized costs incurred for FY 2013.11 Companies in the Software & IT Services industry depend on repeat customers for their maintenance or subscription revenues. Their ability to combat cyber attacks can affect the competitiveness of their products, with direct impact on market share and revenues. Yet, 70 percent of Software & IT Services companies disclose no metrics that measure performance on this issue which would enable investors to compare performance.

Risk is inherent in investing, but the more meaningful information about available investment opportunities, the more often investors will put capital to its most productive and profitable use. All investors benefit from insight into the management's priorities. Standardized sustainability data is part of the total mix of information investors need.

INCREASED DEMAND FOR SUSTAINABILITY DISCLOSURE

So irrelevant were ESG issues to the reasonable investor of yesteryear that the SEC ruled not only once, but twice, against attempts to mandate disclosure of companies' environmental and civil rights records. Their conclusion: The information was not clearly significant or "material" to investors. That was in 1975, and again in 1980 in response to petitions made by the Natural Resources Defense Council (NRDC). The SEC justified its 1975 ruling by pointing out that a reported 0.0005 percent of assets under management were interested in ESG issues in the early '70s.

That was then.

Compare that to a more recent statistic: The Socially Responsible Investment (SRI) community-which uses investment strategies that consider both financial return and social impact-now represents 11.3 percent of the \$33.3T total assets under management in the U.S. capital markets. It is likely to continue to increase as new generations of investors enter the market. The Millennial generation believes business should do more to address society's challenges in areas including resource scarcity (68 percent), climate change (65 percent) and income equality (64 percent).¹² Evidence suggests that investor interest in ESG issues has shifted since the NRDC case and continues to grow at the national and global levels.

For example, in a 2013 survey conducted by Ernst & Young of more than 160 senior decision-makers at financial institutions around the globe found that a majority of investors surveyed - nine out of 10 - revealed that "in the last 12 months, assessing non-financial performance had played a pivotal role in their investment decision- making

^{12 &}quot;The Millennial Study 2014" Deloitte, 2014: Web http://www2.deloitte.com/global/en/pages/about-deloitte/articles/2014-millennialsurvey-positive-impact.html



^{11 &}quot;2013 Cost of Cyber Crime Study" Ponemon Institute, 2013: Web http://media.scmagazine.com/documents/54/2013 us ccc report final 6-1 13455.pdf>

process." The report concluded: "This demonstrates that the analysis of non-financial issues can no longer be dismissed as a niche approach to investment."13

Increasing investor interest in sustainability performance can also be seen in the rising number of ESG-related shareholder resolutions. ESG proposals represent approximately 55 percent of total shareholder proposal submissions in 2014, up from 45 percent for the same period in 2013.14 The most common topics shareholders seek information on are disclosure and oversight of political spending, disclosure and oversight of lobbying, reporting ESG proposals represent approximately 55 percent of total shareholder proposal submissions in 2014, up from 45 percent for the same period in 2013.

on sustainability, setting and reporting on greenhouse gas (GHG) emissions reduction targets, and assessing and reporting on global labor practices and human rights. The rising level of ESG-related shareholder resolutions signals increased investor demand for comparable, decision-useful information on material sustainability factors.

While investor demand for ESG information is rising, studies show that there are ways to maximize access to, and the utility of, this information for investors. First, investors are engaging in fairly unproductive and costly means to get the information they need - 89 percent request it directly from the company, and 50 percent sponsor or co-sponsor a shareholder proposal. Furthermore, investors could better use the information if it was standardized. Two-thirds of global institutional investors say that they would be more likely to consider this non-financial information when making investment decisions if common standards were used.¹⁶

In light of this increased demand, it's helpful to understand how investors use ESG information. A study¹⁷ on the role of ESG factors in fundamental equity analysis finds that investors use ESG information in the following ways:

- Economic analysis: To understand industry trends and externalities likely to affect the economic outlook and, therefore, value creation and capital formation.
- **Industry analysis:** To understand factors driving competitiveness and the potential for sustained value creation in an industry, as well as externalities from an industry likely to affect other industries (and therefore portfolio risks).
- Company strategy: To understand management quality and corporate strategy, and evaluate a company's ability to respond to emerging trends.
- **Valuation:** To adjust traditional valuation parameters and assumptions, including cash flow and weighted average cost of capital (WACC), to reflect performance on material sustainability issues.

^{17 &}quot;How Investors are Addressing Environmental, Social and Governance Factors in Fundamental Equity Valuation," United Nationssupported Principles for Responsible Investment (PRI), February 2013.



¹³ EY (2014). "Tomorrow's investment rules: global survey of institutional investors on non-financial performance."

¹⁴ EY (2014). "Let's talk: governance 2014 proxy season preview".

¹⁵ PwC (2014). "Sustainability goes mainstream: insights into investor views."

¹⁶ Ibid.

This interest in ESG issues is not limited to investors, however, as evidenced by efforts made at the national government and intergovernmental levels. Brazil's BM&FBOVESPA and South Africa's Johannesburg Stock Exchange (JSE) are both recognized as being on the cutting edge of sustainability issues in the global stock exchange community. For example, the JSE requires companies to prepare an integrated report on an "apply or explain" basis in order to trade. An integrated report is a single report that combines information on the company's financial performance-what is typically required for disclosures-as well as information on non-financial performance,18 in order to present an honest and accurate picture of the company.19 The third King Report on Corporate Governance, or commonly called King III, recommended that businesses should report annually in an integrated manner, "putting the financial results in perspective by also reporting on "how a company has, both positively and negatively, impacted on the economic life of the community in which it operated...and how the company intends to enhance those positive aspects and eradicate or ameliorate the negative aspects in the year ahead."20 In 2010, the JSE codified the King III recommendations requiring approximately 450 listed companies to produce integrated reports.

Broad support for the United Nations Principles for Responsible Investment (PRI) has also grown since its creation in June 2012 on the eve of the UN Conference on Sustainable Development (Rio+20). The PRI is "an international network of investors working together to put the six Principles for Responsible Investment into practice. Its goal is to understand the implications of sustainability for investors and support signatories to incorporate these issues into their investment decision-making and ownership practices." The PRI offers a menu of possible actions for incorporating ESG issues into investment practices across asset classes.²¹

...71 percent of the top 100 companies in 41 countries now report on ESG, largely in CSR reports.

This mounting interest in ESG issues is also reflected in the growing number of corporate social responsibility (CSR) or sustainability reports we see today. In the last decade, and more so in the past few years, sustainability reporting has advanced; 71 percent of the top 100 companies in 41 countries now report on ESG,²² largely in CSR reports. While these reports play an important role in communicating sustainability performance to a broad base of stakeholders, they are less useful to investors, as the reports vary by company and industry and performance; thus, performance is not comparable. This type of reporting holds limited value for investors to determine the non-financial performance of a company. As H. James Harrington, CEO of Harrington Institute stated, "Measurement is the first step that leads to control and eventually to improvement. If you can't measure something, you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it."

¹⁸ According to the IIRCS website: "[Integrated Reporting] <IR> is a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation. An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term." http://www.theiirc.org.

¹⁹ Eccles, Robert and Krzus, Michael. (2010). "One Report: Integrated Reporting for a Sustainable Strategy". Wiley. Hoboken, New Jersey.

²⁰ Institute of Directors in Southern Africa (2009)"King Report on Corporate Governance for South Africa 2009". p.2.

^{21 &}lt;a href="http://www.unpri.org/about-pri/about-pri/">http://www.unpri.org/about-pri/about-pri/

^{22 &}quot;The KPMG Survey of Corporate Responsibility Reporting," http://www.kpmg.com/global/en/issuesandinsights/articlespublications/ corporate-responsibility/pages/default.aspx (2013)

Unlike the eras of the formation of the SEC and the FASB, today there is no shortage of data. And while transparency remains crucial to investor confidence and a thriving market, disclosure for disclosure's sake is no longer enough. The problem is not only whether companies are disclosing ESG data, but also whether they are disclosing meaningful data.

THE CREATION OF SASB

The Sustainability Accounting Standards Board (SASB) was created to fill the market need for standardized sustainability disclosure. SASB's mission is to develop and disseminate sustainability accounting standards that help publicly-listed corporations disclose material factors in compliance with SEC requirements.

SASB developed as a result of a 2010 paper by the Initiative for Responsible Investment (IRI) at Harvard University, entitled From Transparency to Performance.²³ The paper discusses a process for determining industry-specific material issues and their associated performance indicators. Due to an overwhelmingly positive response to the study, the authors began exploring ways to develop a full set of industry indicators, including the creation of an independent 501(c)3 nonprofit organization. SASB was developed and incorporated in July 2011 and publicly launched in October 2012 by SASB Founder and CEO Dr. Jean Rogers.

SASB's goal is to create a system in which sustainability accounting complements financial accounting, such that financial information and sustainability information can be evaluated side-by-side to provide a complete view of corporate performance. SASB's standards help investors identify risks and opportunities in their portfolios and benchmark companies in a given industry. SASB standards help companies comply with existing regulation-Regulation S-K-to disclose material information in the Form 10-K. SASB standards also help companies improve performance on the sustainability issues most likely to impact long-term value creation.

Many wonder: "Why industry-specific standards?" Financial analysts cover specific sectors because it is essential to understand basic value drivers, business models, and the regulatory environment if one seeks to compare financial performance. It is the same with sustainability performance. Companies that provide similar products and services tend to have similar business models, use resources in similar ways, and thus tend to have similar impacts on society and environment. As the price-to-earnings ratio is only understood in the context of the industry, so, too, is energy intensity or carbon emissions' data.

As the price-to-earnings ratio is only understood in the context of the industry, so, too, is energy intensity or carbon emissions' data.

Examples of SASB metrics elucidate how a sustainability issue, such as climate change, affects industries in different ways. For the issue of climate change, SASB's metrics for the health care delivery industry address how companies manage risks to physical infrastructure that is located in low-lying and/or hurricane-prone areas; how companies address infrastructural risks based on facility design, such as having key medical equipment in basements or lack of reliable backup power; how companies address the need for added and/or flexible capacity due to influx of patients from climate-related events such as hurricanes, flooding, or heat-related illness; and how companies obtain the necessary facilities and expertise to identify and treat changing disease profiles in patients.

23 http://www.sasb.org/wp-content/uploads/2012/03/IRI Transparency-to-Performance.pdf, accessed August 2014.



SASB's climate related metrics for companies in the commercial banking industry include how climate-change factors are integrated into their lending processes, the current level of portfolio risk associated with specific sustainability trends, and total loans to companies in industries that produce significant greenhouse gas emissions, such as Oil and Gas, Materials, Industrials, and Utilities.

A goal as ambitious as SASB's cannot be achieved without a rigorous and comprehensive process. This process has two central objectives: first, to identify the sustainability issues that are likely to constitute material information for a company in a given industry, and second, to determine the best metrics that allow investors to measure a company's performance concerning that issue. The accounting metrics provide a standardized format for companies to disclose their performance on the sustainability issues that they have identified as constituting material information about their company.

SASB's standards development process includes evidence-based research, multi-stakeholder working groups, a 90 day public comment period, and a review by an independent standards council. By encouraging broad and balanced market participation, this process helps create standards that are cost-effective for companies and decision-useful for investors. At the conclusion of SASB's standards development process, the "provisional standard" is considered complete and issued to the public. During the provisional period, SASB welcomes feedback from companies that are working to implement the standards. At the end of the provisional period of at least one year, SASB will release an update to the standards and remove the provisional label.

It is important to note that SASB's standards are based on the Supreme Court's definition of materiality: information is material if "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of the information made available."²⁴ This definition of materiality has a singular and unwavering focus on the reasonable investor's decision to buy, sell, or hold a security. SASB standards are designed for the disclosure of material sustainability information that informs investor decision-making.

Regulation S-K already requires companies to disclose all material information in the Form 10-K. Companies can voluntarily use SASB standards to comply with Regulation S-K to disclose known trends or uncertainties that are reasonably expected to have a material impact on liquidity, capital, sales, revenues, or income. All of the issues addressed in SASB standards are substantiated by evidence of investor interest and/or financial impact on a company or an entire industry.

To date, SASB has issued standards for 27 industries in four sectors, which constitutes 40 percent of SASB's planned work. (SASB will issue standards for 80+ industries in 10 sectors by 2016). The capital markets have been driving the development of the standards. More than 1,890 individuals-affiliated with companies with \$9.5T in market capital, and investors representing \$21T assets under management-have participated in our industry working groups to date. In May 2014 SASB announced the appointment of Michael R. Bloomberg, founder of Bloomberg LP, and Mary Schapiro, former SEC Chairman, as Chair and Vice Chair, respectively, of SASB's Board of Directors. Other board members include Elisse Walter, former SEC Chairman, Aulana Peters, former SEC Commissioner, and Dr. Robert Eccles, Harvard Business School Professor and SASB's first board chairman, who serves on the SASB board with a special focus on harmonization with other sustainability and integrated reporting organizations. SASB Founder Dr. Jean Rogers continues to serve as SASB's CEO.

24 TSC Indus. v. Northway, Inc., 426 U.S. 438, 449 (1976)



The SEC brought about much-needed change in our markets, providing the "sunlight" Brandeis called for through financial disclosure. Transparency and disclosure in our markets were reinforced through the advent of FASB. SASB aims to build on the work of these organizations, with the common goal of protecting investors through market transparency. Industry-specific sustainability accounting standards will not only level the playing field among companies and industries, they will also provide a cost-effective way to communicate with the markets; mitigate risk for omission of material information; eliminate cumbersome questionnaires associated with current processes; and enable benchmarking.

SASB AS PART OF A BROADER MOVEMENT

While SASB is the only organization that creates industry-specific sustainability accounting standards for the capital markets, other organizations are working to advance corporate sustainability reporting. The International Integrated Reporting Committee (IIRC) is working to embed Integrated Reporting into mainstream business practice in the public and private sectors. The Global Reporting Initiative (GRI) provides a framework for the development of standalone sustainability reports that benefit a broad range of stakeholders. The Carbon Disclosure Project (CDP) helps companies and cities disclose environmental information. The GRI, IIRC, and CDP have played a formative role in advancing sustainability reporting. When developing standards, SASB considers the existing body of disclosure standards and uses existing standards whenever possible. Harmonizing SASB standards with existing disclosure standards avoids additional costs for companies and aligns SASB's work with global corporate transparency efforts. The Corporate Reporting Dialogue (CRD), a group convened by the IIRC, aims to align efforts of international reporting organizations. The CRD is a multilateral forum working to understand the current landscape of reporting efforts and points of alignment between national and international efforts, financial and non-financial reporting, and statutory and voluntary initiatives.

While SASB standards are designed for inclusion in SEC filings, the standards are also applicable at the global level. As many companies publicly-listed in the U.S. are global entities, and many global companies trade on U.S. exchanges and must comply with SEC regulations, any reporting mandated by the SEC will have a global impact. Furthermore, the European Union recently passed an amendment to its general accounting directives to include ESG disclosure in a company's annual financial filings.²⁵ SASB provides an attractive option for European companies that need to implement the EU directive and also disclose in the United States.

CONCLUSION

High-quality disclosure is the lifeblood of securities markets. Now, more than ever, non-financial factors influence the long-term viability of companies. There is strong interest in these issues from investors, and SASB is providing companies with a cost-effective way to report on the non-financial information that investors are increasingly requesting. With access to comparable information on material non-financial topics, investors will be able to act with conviction on the critical issues of our time.

^{25 &}lt;a href="http://ec.europa.eu/internal_market/accounting/non-financial_reporting/index_en.htm">http://ec.europa.eu/internal_market/accounting/non-financial_reporting/index_en.htm, accessed August 2014



Just as the SEC, and later FASB, were created to fill gaps in the market, SASB aims to create the next evolution in corporate reporting-one that builds on existing regulations and standards and incorporates the new challenges that companies face today. One need only look at the history of the SEC and FASB to see that transparency, disclosure, and clear standards are the key to this natural evolution.

GOVERNANCE STUDIES

The Brookings Institution 1775 Massachusetts Ave., NW Washington, DC 20036 Tel: 202.797.6090 Fax: 202.797.6144 brookings.edu/governance.aspx

Editing

Grace Wallack

Production & Layout Beth Stone Emily Feldmesser

EMAIL YOUR COMMENTS TO GSCOMMENTS@BROOKINGS.EDU

This paper is distributed in the expectation that it may elicit useful comments and is subject to subsequent revision. The views expressed in this piece are those of the authors and should not be attributed to the staff, officers or trustees of the Brookings Institution.