An Overview of Sustainability Reporting Practices

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Results of Related Research and Recommendations for the Future

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Sustainability reporting has been an important topic for more than two decades. The demand for environmental, social, and governance (ESG) disclosures has grown with the public awareness of such issues. At the same time, more and more governmental organizations, industry groups, and corporations are voluntarily producing sustainability reports in order to project an image of social responsibility. Reporting on sustainability has become so important to stakeholders that it has evolved into a marketing tool, to the extent that some companies advertise green initiatives in order to win public acceptance, even if their day-to-day activities do not reflect those practices (Jahdi and Acikdilli 2009; full citations are available in the sidebar, *References*).

Even though such reporting practices have been adopted all over the world, there are differences in their development. This discussion reviews relevant research on the reporting practices that have been conducted in the sustainability arena. This information can provide an appreciation for the development of sustainability reporting and can be useful to managers, stakeholders, practitioners, researchers, and others as they evaluate the enactment of sustainability initiatives in organizations.

Background

During the last three decades, voluntary disclosure regarding sustainability initiatives has increased, accompanied by mandatory disclosures in different countries (Gray 2013a); however, despite finding an increase in the scattered information in the financial reports, the author did not find any substantial increase in independent sustainability reports. This trend is changing, but a unified set of rules still does not exist.

One of the most important standards setters for reporting on sustainability is the Global Reporting Initiative (GRI), which was created in 1997 by the Boston-based nonprofit Ceres and the Tellus Institute, with the purpose of developing global standards. For years, the GRI database has been experiencing a constant increase in the number of countries and companies reporting on their sustainability initiatives (KPMG 2008). In 2010, a GRI office opened on Wall Street, aimed at increasing the awareness on sustainability standards. Since then, the number of U.S. companies releasing sustainability reports to the public has increased. According to a December 2013 KPMG press release, 83 of the top 100 U.S. companies by revenue now report on sustainability (KPMG News Release, Dec. 9, 2013).

The development of sustainability regulation varies around the world. For example, in Asia, the Hong Kong Stock Exchange recently introduced new sustainability reporting requirements. Australia, Japan, and the United Kingdom enacted legislation that requires disclosure of sustainability initiatives by corporations (Dagiliene 2010). The European Union (EU) proposed what is known as the "Europe 2020 Strategy" (European Commission 2010), a new model of business based on sustainable growth (Martinuzzi et al. 2010). In the United States, the Sustainability Accounting Standards Board (SASB) was developed and incorporated in 2011. This not-for-profit organization is engaged in the development of a framework and standards for use by publicly listed corporations to benefit investors and the public. But despite all of these efforts, there is a lack of guidelines and consistency regarding sustainability accounting and reporting.

Overview of Research

Despite the growing importance of the sustainable development agenda, there has been very little research within the accounting education literature (Gray 2013b). This sparseness creates difficulty in addressing such an important topic in the literature and in the classroom.

As noted above, the idea of reporting sustainable practices emerged just within the last few decades. Consequently, the evolution of reporting started at the macroeconomic level, migrated to the microeconomic level, and is now focusing on increasing shareholder value through sound sustainable practices and reporting.

Macroeconomic research on sustainability accounting. This type of research attempts to incorporate sustainability accounting in national measures in order to achieve a "green" national product or a green gross domestic product (GDP). Economic researchers are concerned, however, about the issues associated with the use of GDP as a measure of economic health, and they have stressed the need to develop a more appropriate measurement of wealth—for example, see the World Bank's green accounting overview webpage. Similarly, Daly discussed the problems of using traditional economic measures to define weak and strong sustainability; he suggested changes in practices to achieve more sustainable economies (2005).

Post-Keynesian economists have broadened the term "economic sustainability" to include the protection of natural resources and ecological systems (Holt 2005). This definition raises questions of how to measure environmental impact. Given that markets do not reflect the full social cost of production, measures of limited resources are inaccurate (Kinzig et al. 2011). This made economists propose frameworks to price the consumption of natural resources (Courvisanos 2005).

The implementation of sustainability measures requires international efforts. Both the World Bank and the United Nations are addressing sustainability issues. To this end, in 2000, the United Nations released the *Handbook of National Accounting Integrated Environmental and Economic Accounting*. This publication provides a framework for defining and linking economic statistics. In addition, in 2012, the United Nations adopted a System of Environmental-Economic Accounting (SEEA) as a standard for producing internationally comparable statistics on the environment and economic issues. Following this lead, the World Bank published the *Little Green Data Book* in 2013, which includes the adjusted net savings (ANS) indicator. The ANS (also called genuine savings) measures the rate of savings in an economy after taking into account investments in human capital, depletion of natural resources, and damage caused by pollution.

Microeconomic research on sustainability accounting. Research on a microeconomic (corporate) level includes the definition of metrics and the determinants of quality and reliability of reports. Some variables used to measure sustainable (green) accounting on a macro level may also be useful at a micro level. To examine the measurement of green initiatives in corporations, Jeffers discussed the need for a framework to identify and measure the associated environmental variables in order to enhance planning, control, and decision making, as well as assess their financial impact on the corporation's bottom line (2007). Using metrics acknowledged in the traditional cost accounting literature, Jeffers identified the variables that should be considered when developing a framework to measure and present green initiatives in financial statements and management reports. She also highlighted the need for all corporations to prepare and release sustainability financial reports to the public. Building on this paper, Jeffers examined the financial and managerial implications of accounting for green initiatives and its effects on corporate reports. She noted the need to identify, estimate, and measure relevant variables in order to quantify the financial and other impacts of environmental initiatives (2008).

In terms of the quality and transparency of reports, there is a body of literature examining the differences in reporting among industries and countries. The industries that have been most frequently studied were those perceived as environmentally sensitive (Fernandez-Feijoo et al. 2013)—for example, oil companies were among the first groups to report on environmental issues (Alali and Romero 2012; Deegan 2002; Deegan and Gordon 1996). Deegan and Gordon found an association between Australian companies' industries and their environmental disclosures (1996). They also found an increase in environmental disclosures between 1980 and 1991. A similar industry effect is found among German companies (Gamerschlag et al. 2011), Spanish companies (Prado-Lorenzo et al. 2008), and U.S. companies (Holder-Webb et al. 2009). Furthermore, using a sample of 1,047 companies in 11 countries and 38 industries, Fernandez-Feijoo et al. found that the pressure of stakeholders in an industry has an effect on the transparency of the sustainability reports (2013).

Sustainability Initiatives and Company Value

Sustainability initiatives have become an important factor in corporations' decision making. These initiatives require a huge

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initial capital investment and force companies to change their processes and rebrand their products, which raises the question of whether the enactment of sustainability measures results in increased value to companies.

Research into the area of sustainability and company value has produced mixed outcomes. On one hand, Burnett et al. found association between company value and corporate sustainability when *Fortune* 500 companies adopted an eco-friendly management (2011). Similarly, Clark and Allen found that shareholder wealth maximization is associated with sustainability leadership when using the Dow Jones Sustainability Index (2012). On the other hand, Guidry and Patten saw no significant market reaction to the announcement of the release of sustainability reports (2010); however, they did find that companies with the highest quality reports exhibited significantly more positive market reactions than companies with lower-quality reports.

Studying the top 100 sustainable global companies in 2008, Ameer and Othaman found significantly higher mean sales growth, return on assets, income before taxes, and cash flows from operations in some sectors when companies engaged in sustainable practices, as compared with those who did not (2012). Furthermore, these researchers noted that the financial performance of more sustainable companies increased over subsequent periods.

In 2013, Jeffers and DeGaetano found that sustainable initiatives are positively correlated with industry, price-to-book ratio, market capitalization and earnings before interest, taxes, depreciation, and amortization. They also reported that a moderate relationship exists between sustainable initiatives and total equity. These results suggest that there might be some relationship between sustainability adoption and a company's value. Furthermore, Lourenço et al. found that investors react negatively to large profitable companies with low levels of social responsibility (2012).

Other studies have reported opposite outcomes. Lee et al. found a negative association between corporate social performance and corporate financial performance (2009). They suggested that, given that financial markets place a higher value on companies' social performance, these markets are prepared to realize lower returns.

Overall, research in the area of sustainability reporting has found a lack of consistency in the variables used to measure and report sustainability initiatives. In addition, whereas some researchers found a positive market reaction for companies with high-quality reporting, others found no relationship. A positive relationship has been found between sustainability initiatives and a company's value with respect to some accounting and market variables, whereas no significant relationships were found with others. These mixed findings might result from researchers using different definitions of sustainability, country and industry effects, and inconsistent variables, as well as the evolution of sustainability over time.

Implications of Sustainability Reporting

The recent string of natural disasters has highlighted the need to protect the environment and increased the demand for environmentally friendly products and services. As awareness and demand grow, companies of all types in every industry will be forced to adjust their strategies and increase their sustainability initiatives. They will also be compelled to comply with sustainable legislation and regulation or face ever-increasing fines and penalties, as well as other consequences.

This demand for sustainability initiatives will also have a significant impact on accountants and auditors because it will require them to gain expertise in the measurement, reporting, and auditing of sustainability initiatives. Failure to properly measure and report on these initiatives could potentially lead to allegations of material omissions or misstatements in the financial statements.

Future of Sustainability Reporting and Assurance

The reliability of sustainability reporting is currently compromised. Oelschlaegel has referred to the absence of a systematic procedure to assess the competence of assurance providers (2004). Furthermore, O'Dwyer and Owen have raised concerns regarding the independence of assurance providers and the quality of assurance practice (2005). In addition, there is a high degree of management control over the measurement and assurance process, which is evidenced by its reluctance to address the assurance statement to specific constituencies.

In 2005, Hasan et al. found that large audit firms do not provide high-level assurance services because of the lack of appropriate criteria or performance standards. Similarly, in 2011, O'Dwyer conducted a longitudinal case study on the evolution of assurance of sustainability reports with two Big Four audit firms. He found that practitioners have limited guidance from assurance standards and have been restrained by their overreliance on traditional auditing techniques. The audit firms in the study proposed a coupling of an external expert stakeholder assessment of reporting related to "completeness" with traditional audit assessments related to "data reliability" in order to overcome these difficulties. In addition, auditors questioned the extent to which the requirements for sustainability assurance can be aligned with the operational capabilities of audit firms.

It is apparent that there will be an increased demand for better identification, more consistent measurement, and enhanced reporting of inputs and outputs related to sustainability initiatives. This will undoubtedly lead to a demand for a standardized set of high-quality global standards and procedures for sustainability reporting and assurance.

Recommendations

CPAs will need to become more involved in the development of rules for measuring and assuring sustainability reports in order to ensure that they are in harmony with acceptable accounting standards. Accountants also need to receive training to expand their expertise from traditional financial accounting and auditing to environmental and efficiency reporting and auditing.

Researchers will need to find measures to better assess the variables in order to evaluate sustainable initiatives and reporting. Because corporate reporting often contains qualitative and certificate-based measures, scaling or indexing methods might be useful for researchers to measure the degree of sustainability adoption by companies. In addition, longitudinal and cross-sectional data should be collected at the company level, the industry level, and the country level in order to conduct comparative analysis. Furthermore, case studies may be effectively utilized to assess the financial impact of sustainability initiatives in companies.

In addition, as suggested by Gray, the gap in the accounting educational literature regarding sustainability issues will have to be bridged (2013a). This will encourage important interactions between sustainability and other related disciplines to be adequately addressed and developed in the classroom as well as cultivate innovation.

Looking Back and Looking Ahead

The above discussion reflects the current status and challenges faced by organizations in the measurement and reporting of sustainability initiatives. Over the past 20 years, the field has evolved from broad economic concepts to annual corporate reporting in the form of corporate social responsibility (CSR) reports. Standards-setting organizations have been established to facilitate reporting. Sustainability has captured media and consumer attention. Furthermore, the belief that, beyond the social good, economic value exists with respect to sustainability reporting appears to be validated by the marketplace. More and more evidence has pointed to the fact that sustainability has become a strategic priority for businesses.

But in order for industries and companies to integrate sustainability programs into their business strategy, several challenges remain. One major challenge will be to develop appropriate metrics and benchmarks, along with an integrated system to measure and report the progress of sustainability efforts. From a stakeholder's perspective, assessments and audits of sustainability reports are needed; from the academic perspective, more research is needed.

It is hoped that this brief overview of the research in sustainability reporting, along with the accompanying references, can assist managers, stakeholders, researchers, and practitioners as they select, develop, and report on sustainability strategies and practices. ❑

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