Sustainability Accounting Reporting: A Survey on 30 U.S. Dow-Jones Companies

Ying Guo¹ & David C. Yang²

Abstract

The objective of this paper is to examine the development of sustainability accounting and reporting in practice, and to observe the reporting patterns and standards followed through a survey on reporting frameworks of U.S. large companies (Dow-Jones 30 companies). This paper first reviews and summarizes the recent literature in sustainability accounting research, particularly in sustainability accounting reporting. Further, the paper provides a survey on sustainability accounting reporting frameworks of 30 U.S. Dow-Jones companies. The findings of this study confirm the increasing trend of sustainability reporting among large publicly traded firms, which is suggested by prior accounting research. However, we observe various reporting formats and patterns among these 30 Dow-Jones companies. This implies that the lack of uniformity of sustainability reporting and assurance might reduce the comparability, effectiveness and accuracy of sustainability accounting reporting.

Keywords: Sustainability, Sustainability Accounting, Sustainability Reporting, Sustainability Accounting Reporting

I. Introduction

The literature on sustainability accounting emerged in the 1970s and has grown enormously since then. Thomson (2007) completed a literature review of approximately 700 articles in his work.

¹ PhD, Assistant Professor, College of Business and Economics, California State University, East Bay, Hayward, CA 94542. E-mail: ying.quo@csueastbay.edu, Tel: 510-885-490
² PhD, Professor, Shidler College of Business, University of Hawaii at Manoa, 2404 Maile Way, Honolulu, HI 96822. E-mail: yangd@hawaii.edu, Tel: 808-956-6975
He points out that those papers – which are far from complete - are published in over 22 countries employing 19 different research methods, with 31 research themes and 34 distinct theoretical frameworks. He further observes the change in the dominant research topic in sustainability accounting:

"The early literature up to mid-1980s concentrated on social issues. There was a lull in publications until the early 1990s when the main focus was on environmental issues. From the late 1990s the focus changed to social and ethical issues. In the most recent articles it is difficult to discern a trend, but concerns over sustainability, governance and accountability seem to be appearing in the literature." (p. 32)

Thomson (2007) concludes that the literature seems to be numerically dominated by content analysis of social and environmental disclosure in annual reports, further explained by some variant of legitimacy or contingency theory. Another stream of research is lacking in explicit theoretical framework, but rather emphasizes implicit references to business cases, market theories, informational usefulness or pragmatics. In Thomson’s (2014) further review of sustainability accounting literature of 2018-2012, he observes the same pattern reappearing in journals despite some promising developments in the accounting-sustainability literature.

The future direction of sustainability accounting research and practice is still under debate. Due to the different responses in comprehending the complexity of what “sustainability” truly means and how to report it, the development of sustainability accounting research has split into two paths. The first path follows a critical theory which argues that corporate sustainability accounting is the cause and source of corporate sustainability problems (Maunders and Burritt, 1991; Aras and Crowther, 2009; Gray and Milne, 2002; Gray, 2010). Due to the complexity and uncertainty of the definition of “sustainability”, the necessary accounting as the basis for sustainability reporting also remains unknown. Therefore, from the critical perspective, Gray (2010) and Gray and Milne (2002) condemn corporate sustainability accounting as having little use and as a fad that will disappear in time.

The second path is a management oriented path (Gable and Sinclair-Desgagne, 1993; Burritt et al., 2002).
The managerial path recognizes the importance of management decision making and views corporate sustainability accounting as a set of tools that assists managers in dealing with different decisions by diverse actors, different types of managers, as well as different stakeholders. Under this view, sustainability accounting will be a trend and grow in the future.

Burritt and Schaltegger (2010) assess the two development paths and conclude that: “both management decision making, through problem solving and scorekeeping, and a critical approach, through awareness raising, contribute to the development of sustainability accounting and reporting; however, the development of sustainability accounting and reporting should be orientated more towards improving management decision making.”

The objective of this paper is to examine the development of sustainability accounting and reporting in practice, and to observe the reporting patterns and standards followed, through a survey on reporting frameworks of U.S. large companies (Dow-Jones 30 companies). This study contributes to the accounting literature by providing empirical evidence of the development of sustainability accounting. Furthermore, our study is useful to policy makers and accounting standards boards by raising the concern on the lack of uniformity of sustainability reporting and assurance which reduces the comparability, effectiveness and accuracy of sustainability accounting reporting.

The remaining paper is organized as follows: Section II illustrates how to define sustainability and corporate social responsibility according to earlier literature; we also focus on the reporting issues of sustainability accounting, such as existing reporting standards and guidelines on assurance in sustainability accounting. Section III presents our survey results on sustainability accounting reporting. Section IV provides concluding remarks on the study’s objectives.

II. Sustainability, Its Reporting and Assurance

1. Corporate Social Responsibility and Sustainability

The term Sustainability is often used interchangeably with Corporate Social Responsibility (CSR) in accounting research.
According to Anderson (1989), CSR is defined as operating a business on a reliable, sustainable and desirable basis that values ethics, people, communities and the environment. More recently, McWilliams and Siegel (2001) classify CSR as instances where the company goes beyond compliance of law and regulation, and voluntarily engages in actions that appear to advance social causes, including committing to environmental and human rights protection, providing community support and so forth. Thus, CSR consists of environmental impact, corporate governance, social impact and workplace practices (RepuTex, 2003).

Finch (2005) classifies CSR as a sub-set of sustainability. CSR is short-term oriented, focusing on attention to current issues, and sustainability is a long-term goal that a company wants to achieve. This long-term goal includes the organization meeting its financial operational needs, and controlling its social and environmental operational impacts in order to align them with society's expectations and ethical values.

Sustainability is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations World Commission on Environment and Development, 1987, P.8). It is the capability of a corporate organization to add value and to continue to exist as an entity (International Federation of Accountants, 2006, p.3). In order to better understand the meaning of sustainability, we need to explain some other related terms, such as sustainable and sustainable development as well. Sustainable means capable of being sustained; sustainable development means capable of being maintained at a steady level of economic development or energy sources without exhausting natural resources or causing ecological damage which has future impact (Collins-Ins, 2006). Thus, the concept of sustainability requires an integrated assessment of the economic, social and environmental (or of the profit, people and planet) aspects of organizational activities (Tableb, Gibson and Hovey, 2011).

2. The Reporting of Sustainability, Standardization and Assurance.

(1) Reporting

Despite the importance of sustainability and sustainable development having been accepted by the public, the proper means of sustainability reporting is disputed.
As a critical perspective on sustainability accounting points out (Gray, 2010), the absence of a coherent picture of a sustainable society or business entity makes the accounting and standardization of sustainability reporting challenging. However, we are still making progress in the maturation of sustainability accounting and reporting. Buhr (2007) illustrates the process as:

“The process begins with employee reporting and then moves on to social reporting, environmental reporting, triple bottom line reporting and eventually, and ideally, sustainability reporting.”

Meaningful sustainability reporting is demanded due to increasing interest in sustainability activities recently. Holder-Webb, Cohen, Nath and Wood (2009) cited data in their paper showing that investor interest in firms that engage in CSR activities, an interchangeable term of sustainability activities, has grown dramatically:

“Between 1995 and 2005, investments of professionally managed assets grew from $7 trillion to $24.4 trillion, while the share of these assets invested in socially responsible investments grew from $639 billion to $2.29 trillion (Social Investment Forum [SIF], 2006). At the same time, large institutional investors and multi-stakeholder groups – including the UN Principles for Responsible Investment project, the Global Reporting Initiative (GRI) (2006), and the CERES, a coalition of investors and public interest groups – have focused attention on the materiality of social and environmental information to equity analysis. The magnitude and growth of socially responsible investing (SRI) assets has driven an equally dramatic growth in the need for information.”

KPMG (2005) conducted a survey on Corporate Responsibility (CR) Reporting. The survey covered over 1600 companies worldwide, including the top 250 companies of the Fortune Global 500 (G250) and the top 100 companies in 16 countries (N100). They found CR reporting had been steadily rising over the last decade and dramatically rose in the most recent three years of the study. In 2005, 52 percent of G250 and 33 percent of N100 companies issued a separate CR report, compared with 45 percent and 23 percent in 2002.
(2) Guidelines in Sustainability Reporting

The reporting of sustainability issues by corporations is one of the most important parts of sustainability reporting. Recently, several initiatives by independent and governmental organizations have provided guidance to assist organizations with sustainability reporting (Adams and Narayanan, 2007).

The Global Reporting Initiative (GRI) is an independent institution that develops and disseminates globally applicable sustainability reporting guidelines. The GRI was initiated by CERES (www.ceres.org) and the United Nations Environment Program in 1997 and became an independent body in 2002. Besides the GRI, the International Standards Organization (ISO), the World Business Council for Sustainable Development (WBCSD), AccountAbility, the Sustainability Integrated Guidelines for Management project (SIGMA), the United Nations Global Compact, Business in Community (BITC), and two Canadian and one Australian sustainability reporting initiatives are articulating principles and guidelines on sustainability reporting. Based on the survey “Race to the Top” (The World Bank Group, 2003) which polled executives from 107 global multinational organizations, 47 percent of the executives view ISO 14000 Standard on Environmental Management as having an impact on their business operations. GRI guidelines impacted 38 percent, World Business Council for Sustainable Development 37 percent, International Labour Organization Core Conventions 37 percent and Global Compact 32 percent.

(3) Assurance of Sustainability Reporting

Accompanying the rapid growth of sustainability accounting reporting, assurance engagement has risen. Owen (2005) highlights that among the sustainability reporting collected by CorporateRegister.com (2004), nearly 40 percent included external assurance statements in 2003, compared with only 17 percent in 1993. According to the KPMG International Survey of Corporate Responsibility Reporting (2005), the trend of increase is continuing. 30 percent of G250 and 33 percent of N100 companies provide an assurance statement along with their CR reporting in 2005, compared with 29 percent and 27 percent in 2002. However, the U.S. companies seem to be reluctant to provide external assurance on their sustainability reports. Surprisingly, only one report out of 32 was accompanied with assurance.

"Two international standards, both used by assurance practitioners to provide sustainability assurance but designed for different objectives, have taken a dominant role. The AA1000 Assurance Standard (AA1000AS) was launched in March 2003 by AccountAbility (AccountAbility, 2003a, 2003b), while the IAASB’s International Standard on Assurance Engagements (ISAE3000) (IAASB, 2003) is available since January 2005. Further, a number of national (draft) standards has also emerged, for instance in Australia (Standards Australia, 2003) and in The Netherlands (Royal NIVRA, 2005). More recently, the latest sustainability reporting framework developed by GRI (G3 Guidelines) contains recommendations for reporting companies in their approach to the external assurance of sustainability reports."

III. Survey of Sustainability Accounting Reporting on 30 U.S. Dow-Jones Companies

In this study, the 2010 Dow-Jones 30 U.S. companies were surveyed on whether they provide sustainability accounting reports and if so, how they report sustainability issues, guidelines adopted, reporting patterns employed, and methods of assurance reporting. Our survey results area follows:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Sustainability Reporting</th>
<th>Sustainability Reporting Start Date</th>
<th>Guideline</th>
<th>Reporting Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M</td>
<td>Yes (pdf available)</td>
<td>2006 or earlier</td>
<td>(GRI) G3 Sustainability Reporting Guidelines and AccountAbility’s Assurance Standard (AA1000)</td>
<td>3rd party assurance; Environmental Resources Management (ERM) provided an independent, third party assurance of 3M's 2006 and 2008 sustainability reports. Current year's in progress.</td>
</tr>
<tr>
<td>Company</td>
<td>Availability</td>
<td>Reporting Type</td>
<td>Date</td>
<td>Index and Supplementation</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------</td>
<td>---------------------------------------</td>
<td>---------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Alcoa</td>
<td>Yes (pdf available)</td>
<td>Corporate Sustainability Reports</td>
<td>2002</td>
<td>(GRI) index, the GRI Mining and Metals sector supplement, and the 10 International Council on Mining and Metals' sustainable development principles</td>
</tr>
<tr>
<td>American Express</td>
<td>Yes (pdf only available for 2007/2008)</td>
<td>Corporate Social Responsibility Report</td>
<td>2007/2008</td>
<td>GRI index provided in 2007/2008 report (recognizing responsibility to shareholder; Self-developed social and community perspective oriented topic (program) on CSR web. Philanthropy: Bringing Good Citizenship to life around the world: • Preserving and sustaining unique historic places for the future • Developing new leaders for tomorrow • Encouraging community service where our employees and customers live and work</td>
</tr>
<tr>
<td>Company</td>
<td>Report Type</td>
<td>Sustainability Report</td>
<td>GRI Content Index Provided</td>
<td>Third-Party Assurance</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>------------------------</td>
<td>---------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>AIG</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>Yes</td>
<td>Sustainability</td>
<td>2006</td>
<td>GRI content index provided</td>
</tr>
<tr>
<td>Caterpillar</td>
<td>Yes(pdf)</td>
<td>Sustainability</td>
<td>2005</td>
<td>Self-developed; (Powering Change(Boost Energy &amp; Ethics; Goals and Progress; 3rd party limited assurance by FIRA Sustainability 3rd party audited or assurance on most of the DuPont key activities including safety, health, and performance, financial accounting and compliance with the ethics and business conduct guide</td>
</tr>
<tr>
<td>Citigroup</td>
<td>Yes(pdf)</td>
<td>Corporate Citizenship Report</td>
<td>2000</td>
<td>GRI content index</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>Yes(pdf)</td>
<td>Sustainability</td>
<td>2001</td>
<td>GRI index + United Nations Sustainability</td>
</tr>
<tr>
<td>DuPont</td>
<td>Yes(pdf)</td>
<td>Sustainability</td>
<td>Unknown, earlier than 2009</td>
<td>GRI G3 guideline; GRI index</td>
</tr>
<tr>
<td>Company</td>
<td>Availability</td>
<td>Type of Report</td>
<td>Year</td>
<td>Auditor</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------</td>
<td>------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>General Motors</td>
<td>Yes (web based)</td>
<td>Corporate Re</td>
<td>unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Hewlett-Packard</td>
<td>Yes(pdf)</td>
<td>Global citizen</td>
<td>2001</td>
<td>GRI</td>
</tr>
<tr>
<td>Home Depot</td>
<td>Yes(pdf)</td>
<td>sustainability</td>
<td>unknown</td>
<td>Self-develop (Energy use, Carbon emissions, sustainable product assortment, sustainable operations, supply chain impact)</td>
</tr>
<tr>
<td>IBM</td>
<td>Yes(pdf)</td>
<td>Corporate Re</td>
<td>2002 (2006)</td>
<td>GRI</td>
</tr>
<tr>
<td>Intel</td>
<td>Yes(pdf)</td>
<td>Corporate Re</td>
<td>2001</td>
<td>GRI G3.1 content index + UN Global Compact</td>
</tr>
<tr>
<td>Johnson &amp; Johnson</td>
<td>Yes(pdf)</td>
<td>Sustainability</td>
<td>unknown</td>
<td>Self-develop (Success and Challenges (People, Planet and Business); Healthy Planet 2010 (Goal and actual comparison; Health Future 2015(Goal and Measurement)</td>
</tr>
<tr>
<td>Company</td>
<td>Published?</td>
<td>Type</td>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
<td>------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>JPMorgan</td>
<td>Yes(pdf)</td>
<td>Corporate Responsibility Report</td>
<td>2007</td>
<td>GRI index</td>
</tr>
<tr>
<td>McDonald's</td>
<td>Yes(pdf)</td>
<td>Corporate Responsibility Report</td>
<td>unknown</td>
<td>GRI guideline</td>
</tr>
<tr>
<td>Microsoft</td>
<td>Yes(pdf)</td>
<td>Citizenship Report</td>
<td>2003</td>
<td>GRI G3 framework, GRI content index provided!</td>
</tr>
<tr>
<td>Pfizer</td>
<td>Yes(pdf)</td>
<td>Corporate Responsibility Report</td>
<td>2007</td>
<td>GRI G3; no GRI content index included</td>
</tr>
<tr>
<td>Procter &amp; Gamble</td>
<td>Yes(pdf)</td>
<td>Sustainability report</td>
<td>1999</td>
<td>GRI content index included</td>
</tr>
<tr>
<td>United Technologies</td>
<td>Yes(pdf)</td>
<td>Integrated Financial + Corp Responsibility Report</td>
<td>2007 (CR report)</td>
<td>Self-developed (Message from the chairman and the President, Our Commitments, Key performance Indicators, Objectives: Progress and challenges, Governance, Environment, Products, Customers and Suppliers, People, Communities, Awards and Recognition, Company and Business Unit Overviews)</td>
</tr>
<tr>
<td>Verizon Communications</td>
<td>Yes(pdf)</td>
<td>Corporate Responsibility Report</td>
<td>2004</td>
<td>Self-developed (Who we are, Message from chairman, Focusing on Our Priorities (Ethics &amp; Governance, Partnering with Communities, Empowering employees, Protecting the Environment, Service &amp; Innovation), Leading by Example, Harnessing People Power, Tackling the World’s To-Do List, Profile and Performance)</td>
</tr>
<tr>
<td>Wal-Mart</td>
<td>Yes(pdf)</td>
<td>Global Responsibility Report</td>
<td>2005 (Report on Ethical Sourcing)</td>
<td>Self-developed (Message from CEO, Summary, Environment, Social, Making Progress, Global)</td>
</tr>
</tbody>
</table>
The survey results show that:

(1) Only one (i.e., AIG) out of these 30 companies in our sample did not provide sustainability accounting reporting in 2010. This means 96.7 percent of firms in our sample chose to report their sustainability activities, higher than the ratio of 52 percent of G250 and 33 percent of N100 companies issuing separate CR reports in 2005 (KPMG, 2005). The survey data confirms the rising trend of sustainability accounting reporting in practice.

(2) Six of 29 companies (21 percent) issue sustainability reports and also present 3rd party assurance on a part of or the whole report. The ratio of 21 percent is still lower than that suggested by the global data (KPMG, 2005): 30 percent of G250 and 33 percent of N100 companies provided an assurance statement with their CR reporting in 2005. However, we do observe the significantly increasing assurance practice for U.S. large firms alone. Note that in 2005, only one out of 30 companies (3%) presented external party assurance on its CR report.

(3) 19 out of 29 (66 percent) companies follow GRI standards to prepare their sustainability reports, compared with 38 percent of samples in 2003 based on the “Race to the Top” survey (The World Bank Group, 2003). This statistic indicates that the GRI guidelines is the dominant set of sustainability reporting standards among U.S. large companies.

(4) Six out of 19 companies that adopt GRI guidelines also value other sets of sustainability reporting frameworks, such as AA1000, the UN Global Compact and industrial specified reporting standards. This suggests the single current set of sustainability reporting frameworks alone might not fully satisfy the users’ demands on reporting frameworks for those who come from different industries with distinct interests.

(5) 34 percent of these 30 U.S. Dow-Jones companies chose to use self-developed reporting frameworks. At least four major types of reporting patterns have been observed, including:

i. Triple Bottom Line or Three Pillars: Environment, Society and Economics or Planet, People and Profit.

ii. Natural Environment, Employees, Communities and Customers.

iii. Goals and Progress on Sustainability Issues.
iv. Activities and Funds

This results in the concern that the lack of uniformity of sustainability reporting might reduce the comparability, effectiveness and accuracy of sustainability accounting reporting.

IV. Conclusion

Through the literature review of recent articles and books on sustainability accounting research, we observed the fast growth of interests on sustainability accounting reporting. Several initiatives by independent and governmental organizations have provided guidance to assist organizations with sustainability accounting reporting and its external assurance. Surveys have observed the development and change in sustainability accounting and its reporting and assurance practice. We are interested in U.S. firms' responses to the global development of sustainability accounting reporting and conducted a survey on 30 U.S. Dow-Jones companies to determine whether they provide sustainability accounting reports and if they do so, how they report sustainability issues.

The survey data confirm the rising trend of sustainability accounting reporting in U.S. large firms. The results also show the significantly increasing assurance engagement for U.S. large firms compared with that from earlier research. Furthermore, our study suggests the single current set of sustainability accounting reporting frameworks alone might not fully satisfy the users' demands on reporting frameworks for those who come from different industries with distinct interests. We observe that one third of firms developed their own reporting frameworks on sustainability accounting reporting with different reporting patterns and styles. We raise the concern that the lack of uniformity of sustainability accounting reporting and assurance might reduce the comparability, effectiveness and accuracy of sustainability accounting reporting.

References


