SUSTAINABILITY REPORTING AND THE FINANCIAL PERFORMANCE OF BANKS IN AFRICA

Edward Attah-Botchwey[1], Michael Gift Soku[2], David Mensah Awadzie[3]
[1]University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana.
 edward.attah-botchwey@upsamail.edu.gh , ORCID: 0000-0003-1140-5786
[2]University of Professional Studies Accra, Department of Accounting, Accra, Ghana.
 Michael.g.soku@upsamail.com.edu.gh, ORCID: 0000-0002-8333-2662
[3]Accra Institute of Technology, ACCRA, Department of Accounting and Finance, Accra, Ghana.
 davidawadzie@gmail.com , ORCID: 0000-0001-5532-2152

ABSTRACT

Purpose– This study examined the relationship between sustainability reporting and bank performance in Africa. Unlike previous studies that solely dwelled on accounting measures of performance, this study adopted both accounting (i.e., return on assets) and market-based measures of firm performance (i.e., Tobin's Q).

Methodology– The study relied on secondary data gathered from the audited financial statements of listed banks in Africa over ten years from 2010 to 2020. Notably, the financial statements of 20 listed banks (drawn from Ghana, Nigeria, and South Africa) were subjected to quantitative content analysis to quantify the extent of sustainability content. It was guided by the sustainability reporting framework developed by the global reporting initiative. The content analysis aims to identify and classify the extent to which firms report on Economic, governance, social, and environmental dimensions of sustainability. Besides, the financial statement figures aided the computation of a performance measure (return on assets and Tobin's Q) for the banks. Concerning data analysis, the study utilized a panel fixed effect regression model to estimate the relationship between sustainability reporting and firm performance.

Findings– The results suggest that economic, social, and governance reporting of sustainability content (in the financial statement) has a significant positive association with Tobin's Q and Return on Assets (ROA). Furthermore, the study's findings suggest that banks ' reportage of environmental sustainability content has a significant positive effect on ROA. However, it has no significant effect on Tobin's Q.

Conclusion– Generally, the study concludes that increased sustainability reporting enhances bank performance in the long term. Among others, the study recommends that policymakers develop a sustainability framework specific to the banking industry's needs.

Keywords: Sustainability, return on assets, bank performance, framework.
JEL Codes: E44, F40, F43

1. INTRODUCTION

The challenge of businesses is to maximize 'shareholders' wealth and consider the sustainability of operations in the long term. Bebbington and Unerman (2018) elaborate further, noting that stakeholders are also interested in the environmental, Social, and Governance (ESG) practices of organizations aside from the assets, liabilities, and equity. The 21st century has witnessed arguments supporting that shareholder wealth maximization alone is not a sustainable business objective since other stakeholders are also integral (Mahmood et al., 2018). The accounting and finance literature generally agrees that the impact of organizational activities on its external environment should be disclosed to its shareholders and the public members (Elkington, 1997; Jennifer-Ho & Taylor, 2007).

Therefore, sustainability reporting is the disclosure or reporting of organizational activities in furtherance of sustainable development. In 1987, the World Commission on Environment and Development (WCED) defined sustainability as development that meets current demands without compromising future generations' ability to meet their own. Although the definition by WCED (1987) is widely held in the literature, noteworthy is the fact that it mainly dwells on an organization's interaction with the natural environment (Gibson, 2006; Marshall & Brown, 2003).

The complexities of the 21st century, occasioned by technological innovations, corporate malfeasance, and community activism, among others, have widened the scope of sustainability beyond the natural environment. Presently, the definition of sustainability comprises factors bordering on the Environmental, Social, Governance, and Economic responsibilities/practices of a firm (Heikkurinen & Bonnedahl, 2013).

The World Business Council for Sustainable Development (WBCSD, 1999) defined sustainability as "the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life. " This definition resonates with Schwartz and Carroll (2008), who argues that firms should be evaluated on their financial success and other performances that benefit society. Large firms must disclose some minimum sustainability indicators in their annual reports (Fabbrizzi et al., 2017). Disclosures provide a premise for examining their non-financial performance.

However, unlike in the European context, sustainability disclosure is voluntary in most countries, especially those in the developing world (Doni et al., 2019). The voluntary nature of sustainability disclosures often underpins the question of "what motivates firms to disclose sustainability information when such disclosures are non-mandatory. " For Blaesing (2013), three main reasons explain why firms disclose sustainability information. First, sustainability disclosure by some firms is motivated by their need to portray a positive public posture/reputation and gain legitimacy over resources. Secondly, other 'firms' disclosure of sustainability information is driven by their need to increase public transparency of risks, reduce the cost of capital, and attain a favourable capital market orientation. Finally, sustainability reporting may be motivated by the need to improve internal planning and performance management processes.

An examination of the existing literature reveals that several studies have investigated the relationship between sustainability reporting and firm performance. Nonetheless, limitations in existing studies justify the conduct of this research. First, most of the existing studies on the subject matter used only accounting and non-market-based performance measures (e.g., profit margin, return on assets, return on equity, etc.) to assess the relationship between sustainability disclosures and firm performance. For example (Saeidi et al.2015; Chen et al. 2018). Meanwhile, accounting measures of performance, like any other measure, have their limitations (Hirschey & Wichern, 1984). For instance, accounting profitability measures are influenced by firm-specific selection and application of accounting assumptions, estimates, and treatments (Poonawala & Nagar, 2019). Again, factors encompassing earnings management and recognition criteria may lead to creative accounting practices which distort reported profits (Susanto & Widyaswati, 2019). They suggest that studies dwelling solely on accounting performance measures may yield misleading or inconclusive results; hence, the need to investigate the phenomena using market-based financial performance measures. Also, Hirschey and Wichern (1984) expressed serious concerns about researchers and practitioners solely relying on either accounting measures or market-value-based measures of financial performance.

Regarding accounting measures, Hirschey and Wichern (1984, P. 375) stated that "… Accounting income numbers to measure firm performance are typically justified because they are the best available data. There are measurement problems, however, caused by different accounting practices across industries, (possibly) inappropriate expensing of research and development (R & D) and advertising expenditures, a failure to reflect opportunity costs and risk, and replacement-cost accounting

Besides, the authors also indicated that accounting profitability measures are based on historical data or are rather backwards-looking when shareholders are more interested in the firm's future outlook. Thus, the argument by Hirschey and Wichern (1984) suggests the need for a more forward-looking or future-oriented measure of profitability, which falls within the realms of market-value-based profitability measures. However, concerning market value-based measures of profitability, Hirschey and Wichern (1984) indicated that "The prices that the markets place on the securities issued by firms and the changes in these values over time provide an ongoing assessment of the value of such firms" (p. 375). Thus far, it can be said that one approach to performance evaluation cannot be overarching since, at best, it is either forward-looking or backwards-looking. It then underscores the need to integrate both accounting and market-value-based performance evaluation approaches in assessing financial performance.

Regarding this, Hirschey and Wichern (1984) adopt the perspective that; "neither accounting nor market data provide an ideal or true measure of profitability. Instead, we argue that measures developed from both sources offer potentially unique but imperfect measures of profitability. We believe that a comparison of accounting and market data can prove highly beneficial" (p. 375). In essence, Hirschey and Wichern (1984) call on researchers to use both accounting and market-value-based profitability measures to enhance the reliability of research findings. This study uses the 'Tobin' q ratio as a market-based performance measure. It uses return on assets as an accounting profitability measure to assess the relationship between C.R. and firm performance. In addition, there is a relative paucity of sustainability studies as far as developing 'countries' context is concerned (Abernathy et al. 2017; Lichtenstein et al. 2013).

An extant review of the literature suggests that most studies on sustainability have emphasized mainly European and North American corporate entities, with little attention dedicated to developing countries (Abernathy et al., 2017; Lichtenstein et al., 2013). Besides, the few empirical inquiries generally discussed the sustainability practices of firms without due consideration of how the disclosure practices influence vital variables, such as financial performance, growth, etc. Increasing sustainability-related research in the context of emerging economies is underscored by the fact that research findings in the developed world (e.g., Europe and North America) may not necessarily apply to developing countries due to differences in culture, and infrastructure among others (Rogers, 2016).

Finally, the financial sector, especially the banking industry, has inadequate sustainability-related research. It stems from the fact that most existing studies have paid attention to environmentally sensitive firms like mining firms. Meanwhile, research findings from other sectors may not apply to the banking sector because of their unique nature, such as regulations and levels of environmental sensitivity. Investigating sustainability in the context of financial institutions in general and banks will enrich the sustainability literature. The study focuses on listed universal commercial banks in Africa. The study used only listed banks to enhance accessibility to data for purposes of analysis.

The general purpose of the study is to investigate the relationship between sustainability reporting and firm performance. The specific objectives include to investigate the influence of economic sustainability reporting on bank performance, assess the influence of governance sustainability reporting on bank performance, and examine the influence of social sustainability reporting on bank performance and investigate the influence of environmental sustainability reporting on bank performance.

In order to achieve the study's objectives, the following questions were asked. First, what is the influence of economic sustainability reporting on bank performance? Second, what is the influence of governance sustainability reporting on bank performance?, Thirdly, what is the influence of social sustainability reporting on bank performance? Finally, what is the influence of environmental sustainability reporting on bank performance?

2. LITERATURE REVIEW

This chapter presents a review of relevant empirical literature as far as sustainability reporting and disclosure is concerned. The chapter is organized into three main sections. The first section looks at basic concepts relating to sustainability, the second section presents the theoretical review, and the third section discusses empirical literature focusing on sustainability reporting.

2.1. Concepts of Sustainability

The United Nations (U.N.) is an inter-governmental organization formed in 1945 to address crucial global issues encompassing climate change, sustainable development, human rights, disarmament, terrorism, humanitarian and health emergencies, gender equality, governance, food, production, and more U.N, 2019). The U.N championed the modern view of sustainable development in a report produced by the World Commission on Environment and Development (WCED, 1983). In September 2000, members of the U.N., consisting of 99 heads of state, signed the Millennium Declaration. The singing of the declaration committed world leaders to fight **"**poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women, " among others. Eight Millennium development goals (MDGs) emerged from the millennium declaration, expected to be accomplished by 2015. Having expired in 2015, the MDGs were replaced with 17 sustainable development goals (SDGs), scheduled to be achieved by 2030. The SDGs are summarized below:

Table 1: United Nations Sustainable Development Goals

Goal Number	Description
1: No poverty	By 2030, eradicate extreme poverty for all people everywhere
2: Zero hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3: Good Health and Well-Being:	Ensure healthy lives and promote well-being for all at all ages
4: Quality Education:	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5: Gender Equality:	Achieve gender equality and empower all women and girls
6: Clean water and sanitation:	Ensure availability and sustainable management of water and sanitation for all
7: Affordable clean energy	Affordable clean energy: Ensure access to affordable, reliable, sustainable, and modern energy for all
8: Decent work and economic growth	Decent work and economic growth: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

9: Industry, innovation, infrastructure:	Industry, innovation, infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
10: Reduced inequality	Reduced inequality: Reduce inequality within and among countries
11: Sustainable cities and communities	Sustainable cities and communities: Make cities and human settlements inclusive, safe, resilient, and sustainable
12: Responsible consumption and production	Responsible consumption and production: Ensure sustainable consumption and production patterns
13: Climate action	Take urgent action to combat climate change and its impacts*
14: Life below water	Life below water: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development
15: Life on land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16: Peace, justice, and strong institutions	Peace, justice, and strong institutions: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels
17: Partnerships	Partnerships: Strengthen the means of implementation and revitalize the global partnership for sustainable development

Source: quoted from https://sustainabledevelopment.un.org/sdgs

2.2. Theoretical Review

2.2.1. Stakeholder Theory and Sustainability Reporting

The stakeholder theory has a broader perspective on corporate governance. Generally, stakeholders consist of a broad range of individuals and groups that can affect or affect a corporate entity's actions and inactions. Solomon (2010, p.15) offers a theoretical perspective of the stakeholder theory, noting as follows: "companies are so large, and their impact on society so pervasive, that they should discharge accountability to many more sectors of society than solely their shareholders... Not only are stakeholders affected by companies, but they, in turn, affect companies in some way". Contrary to the agency theory's propositions, stakeholder theory holds that a firm should be accountable to all parties interested in the firm (Chen & Roberts, 2010). Different stakeholders have different interests in the affairs of a firm. For example, while shareholders are interested in getting a rewarding return, employees are concerned about job security and good income.

Besides, creditors are interested in the firms' creditworthiness, while environmentalists expect the firm to adopt sustainable environmental practices. The stakeholder theory makes several assumptions. Notably, the theory holds that businesses should seek not only the financial interest of owners but also the interest of the broader society (Chen & Roberts, 2010). Relatedly, the theory assumes that the directors of organizations are equally accountable to all stakeholders, including employees, government, local community, customers, and suppliers. In the literature, stakeholder theory has been criticized because it conflicts with shareholder wealth maximization's central objective (Sternberg, 1997). Additionally, the theory has also been criticized for conflict with the agent-principal relationship, which posits that managers should be accountable primarily to shareholders.

In 1994, Elkington contended that corporations should concentrate on making profits and generating returns for shareholders. However, for Elkington (1994), businesses should also focus on social and environmental concerns. This concept later became known as the triple bottom line, and it seeks to gauge an organization's commitment to corporate social responsibility and sustainable business practices. Today the concept of sustainability reporting has become widespread among practitioners and academics (Blaessing, 2013). In demonstrating their commitment to sustainability, businesses report their sustainability practices in annual reports and other special reports. Stakeholder theory has been associated chiefly with the notion of morality in the context of corporate social responsibility.

Consequently, many prior works of literature resorted to the stakeholder theory in discussing sustainability reporting (Bebbington & Unerman, 2018; Unerman & Chapman, 2014). Mostly, such studies argue that business organizations should adopt practices that benefit shareholders and the entire society. By implication, businesses must adopt practices that benefit the community, protect and maintain the environment, and ensure the firm's long-term economic sustainability.

2.2.2. Stakeholder-Oriented Sustainability and Firm Performance

Three prominent theories offer explanations of the effects of sustainability reporting on firm performance. They include: (a) consumer inference-making theory, (b) signalling theory, and (c) social identity theory. 'The consumer inference-making

theory posits that consumers are more likely to infer positively about a product if they perceive the manufacturer as a sustainability-conscious or environmentally responsible producer (Brown & Dacin, 1997). As an implication, such favourable inferences about company products induce consumer purchase intentions and actual purchase decisions (Mishra & Suar, 2010; Crolic et al., 2019; Brown & Dacin, 1997; Handelman & Arnold, 1999; Gildea, 1994; Owen & Scherer, 1993). For instance, a recent multinational study conducted by Crolic et al. (2019) revealed that positive brand image perceptions about Microsoft induce purchase intentions among potential customers. Therefore, it is believed that such favourable inferences about a product can increase sales and create customer loyalty in the long run. Contextually, firms that engage in sustainable practices and report such practices in their sustainability reports are likely to be perceived as socially and environmentally responsible. With such a positive public image, the society or consumers would make a favourable inference about their products and eventually prefer to consume them. Thus, it can increase revenues and profitability. Besides, information about such a positive company image can impact stock prices and overall business performance.

2.2.3. Sustainability Reporting Practices

In 2015, Bonsón and Bednárová conducted a study investigating the extent to which companies within the Eurozone report on their corporate sustainability practices. Within the study, a content analysis was conducted on the annual sustainability reports of 306 Eurozone companies listed in the STOXX Europe 600. The sample for the study included 19 subsectors and 12 countries encompassing Austria, Finland, Germany, Luxemburg, the Netherlands, Spain, Belgium, France, Greece, Ireland, Italy, and Portugal. The dependent variables analyzed within the study were environmental, social, and governance indicators of sustainability based on the 'AECA's (the Spanish Accounting and Business Association's- AECA) integrated sustainability framework/scorecard. In addition, independent variables that were analyzed as predictors of the level of CSR disclosures encompassed country of origin, industry, and listing in DJSI.

In contrast, profitability and the size of the company were treated as control variables. The study's findings were that most Eurozone companies report more information on their corporate Governance practices than on their environmental and social practices. Also, the study found that Eurozone companies make moderate disclosures on their environmental impacts, whereas there is a limited disclosure on social indicators of sustainability practices. The study, however, did not find any significant relationship between the size of the company and the level of CSR practices. This finding contradicts earlier findings by Tagesson et al. (2009); Haniffa and Cooke (2005); and Branco and Rodrigues (2006), who indicated that large companies are more likely to make extensive sustainability disclosures since they are more socially visible and exposed to public scrutiny.

In a related study, Roca and Searcy (2012, p. 105) investigated the question, "What indicators are currently disclosed in corporate sustainability reports?" Within the study, a content analysis of the annual reports of 94 Canadian firms was examined using the global reporting initiative index. The study's findings suggested that most Canadian firms make more extensive disclosures on their social practices (e.g., Funding, donations, sponsorship, and community investments) than on environmental and governance practices. This finding contradicts the recent finding by Bonsón and Bednárová (2015) on firms in the Eurozone. Bonsón and Bednárová (2015) found that Eurozone firms disclose more information on governance than environmental and social aspects of sustainability; contradictory findings may be explained from two perspectives, namely "the research context" and "the research framework."

Differences in the findings of the two experts could be explained by differences in the geographic setting in which the investigations were done, notably Europe vs. Canada. However, again, differences in the research framework adopted in both studies might have accounted for the variation in results. In contrast, Bonsón and Bednárová (2015) adopted the Spanish Accounting and Business Association's (AECA) sustainability index, and Roca and Searcy (2012, P. 105) adopted the GRI sustainability index. Such mixed results suggest that the question of the sustainability practices of corporate entities has not been adequately addressed, hence justifying further studies such as this.

There is an emerging trend in sustainability reporting literature whereby scholars attribute sustainability reporting to the nature of the industry within which firms find themselves and the extent of sustainability regulations that firms must comply with. For example, Lokuwaduge and Heenetigala (2017) investigated the ESG reporting practices of metal and mining sector companies listed on the Australian Securities Exchange. The study used a content analysis scoresheet in examining the annual reports of 30 of the top 100 mining companies listed on the ASX. In terms of environmental sustainability disclosures, the study found that " on average, 63% of the indicators of environmental sustainability were not reported by the firms considered. According to Lokuwaduge & Heenetigala (2017), greenhouse gas emissions were the highest reported indicator, reported by 23 out of 30 companies (76.7% of the sample). They report their emissions as tonnes, kilotonnes, or megatonnes.

Regarding disclosures on the social dimension of sustainability, the study found that almost all the firms studied reported the majority of the social indicators of sustainability as far as the GRI framework is concerned. However, according to Lokuwaduge and Heenetigala (2017), the study relied on secondary data. Therefore, it was unclear whether companies avoided reporting this information or whether incidents such as fatalities, discrimination, human rights grievances, corruption, and non-

monetary sanctions did not occur during the reporting period. Concerning corporate governance disclosures, the study found that all the 30 sampled firms disclosed all required governance information as far as the GRI framework is concerned.

Relatedly, Kühn, Stiglbauer, and Fifka (2018) examined the website reporting practices of CSR activities by firms in Sub-Saharan Africa, notably Kenya, Botswana, Ghana, Tanzania, Uganda, Nigeria, and Zambia. In the study, a content analysis was undertaken on the websites of the firms involved in the study using Chapple and Moon's (2005) dimensions of CSR reporting. These are the existence of a CSR section on the company website; extent of CSR reporting; implementation of CSR; types of CSR and dimensions and channels of CSR. Besides, the study added two dimensions to those of Chapple and Moon (2005), namely "implementation of CSR" and "types of CSR. " The study found that although most of the firms studied (above 80%) have sections on their corporate website that report on their CSR activities, the information contained on such websites was not extensive as far as CSR reporting is concerned. The study found that only about 13-14% of the firms studied made extensive disclosures on their CSR activities, regardless of their origin. Accordingly, the study also found that "only 18% of all sample companies issue a standalone CSR report, and even less (14%) provide information on how they handle stakeholder relations".

Regarding the type of CSR activity, the study found that across the seven countries, 88% to 100% of the companies report their engagement within the community (corporate philanthropy) with a firm emphasis on reporting locally-oriented involvement activities. This finding is supported by the recent study of Abukari and Abdul-Hamid (2018), Nyarku and Hinson (2018), and the earliest work of Moon (2002), and Chapple and 'Moon (2005); thus, according to these scholars, community involvement is the dimension of CSR addressed mainly by companies. However, besides community engagement, Employee relations (addressed by 61% on average) and responsible production processes (57%) are given considerably less attention (Visser, 2006). In another study, Aboagye-Otchere et al. (2012) investigated Corporate governance and disclosure practices of Ghanaian listed companies using Standard and 'Poor's (S&P) transparency and disclosure (T&D) items in the construction disclosure index. The study found that the overall mean score of the companies in terms of disclosure of corporate governance indicators was 50.76%, thus showing a moderate level of disclosure. Notably, the study found that listed firms in Ghana make more disclosures on financial transparency (62.48%). In contrast, ownership and governance disclosures recorded an average score of 55.90% and 32.74%, respectively.

2.2.4. Economic Sustainability Reporting

Economic sustainability (series 200) in the context of GRI standards requires organizations to disclose/report on their impacts on the economic conditions of stakeholders as a whole and economic systems at the local, national and global levels. The economic sustainability reporting dimension of the GRI framework looks at the flow of capital among various stakeholders and the impact that organizations have on society as they work toward generating wealth and other economic benefits, and how such effects are managed. The Economic Standards, otherwise called "The 200," include topic-specific Standards made up of the following:

GRI 201: Economic Performance 2016 Effective From 01 Jul 2018

GRI 202: Market Presence 2016 Effective From 01 Jul 2018

GRI 203: Indirect Economic Impacts 2016 Effective From 01 Jul 2018

GRI 204: Procurement Practices 2016 Effective From 01 Jul 2018

GRI 205: Anti-corruption 2016 Effective From 01 Jul 2018

GRI 206: Anti-competitive Behavior 2016

2.2.5. Environmental Sustainability Standards

Environmental sustainability standards (The 300 series) of the GRI Standards include topic-specific Standards used to report information on an 'organization's material impacts related to environmental topics. This dimension is also known as series 300, and its sub-components include the following:

GRI 301: Materials 2016 Effective From 01 Jul 2018

GRI 302: Energy 2016 Effective From 01 Jul 2018

GRI 303: Water and Effluents 2018 Effective From 01 Jan 2021

GRI 304: Biodiversity 2016 Effective From 01 Jul 2018

GRI 305: Emissions 2016 Effective From 01 Jul 2018

GRI 306: Effluents and Waste 2016 Effective From 01 Jul 2018

GRI 307: Environmental Compliance 2016 Effective From 01 Jul 2018

GRI 308: Supplier Environmental Assessment 2016 Effective From 01 Jul 2018

2.2.6. Social Sustainability Reporting

Social sustainability reporting Standards (series 400) include topic-specific Standards used to report information on an 'organization's material impacts on social topics. It has subcategories encompassing the following:

GRI 401: Employment 2016 Effective from July 01, 2018

GRI 402: Labor/Management Relations 2016 Effective From 01 Jul 2018

GRI 403: Occupational Health and Safety 2018 Effective from January 01, 2021, GRI 404: Training and Education 2016 Effective from July 01, 2018

GRI 405: Diversity and Equal Opportunity 2016 Effective from July 01, 2018, GRI 406: Non-discrimination 2016 Effective from July 01, 2018

GRI 407: Freedom of Association and Collective Bargaining 2016 Effective from July 01, 2018

GRI 408: Child Labor 2016 Effective from July 01, 2018

GRI 409: Forced or Compulsory Labor 2016 Effective from July 01, 2018

GRI 410: Security Practices 2016 Effective from July 01, 2018

GRI 411: Rights of Indigenous Peoples 2016 Effective from July 01, 2018

GRI 412: Human Rights Assessment 2016 Effective from July 01, 2018

GRI 413: Local Communities 2016 Effective from July 01, 2018

GRI 414: Supplier Social Assessment 2016 Effective from July 01, 2018

GRI 415: Public Policy 2016 Effective from July 01, 2018

GRI 416: Customer Health and Safety 2016 Effective from July 01, 2018

GRI 417: Marketing and Labeling 2016 Effective from July 01, 2018

GRI 418: Customer Privacy 2016 Effective from July 01, 2018

GRI 419: Socioeconomic Compliance 2016

3. DATA AND METHODOLOGY

3.1. Model Specification

The causal research design was used in this analysis. Causal research looks at the interaction between variables, or the impact of one thing on another, and more precisely, the impact of one variable on another (Mugenda and Mugenda, 2003). The study's target population was listed banks operating in three African countries, including Ghana, Nigeria, and South Africa, which were emphasized in the study over ten years from 2010 to 2020. The utilized panel fixed effect regression model.

Figure 1: Conceptual Model
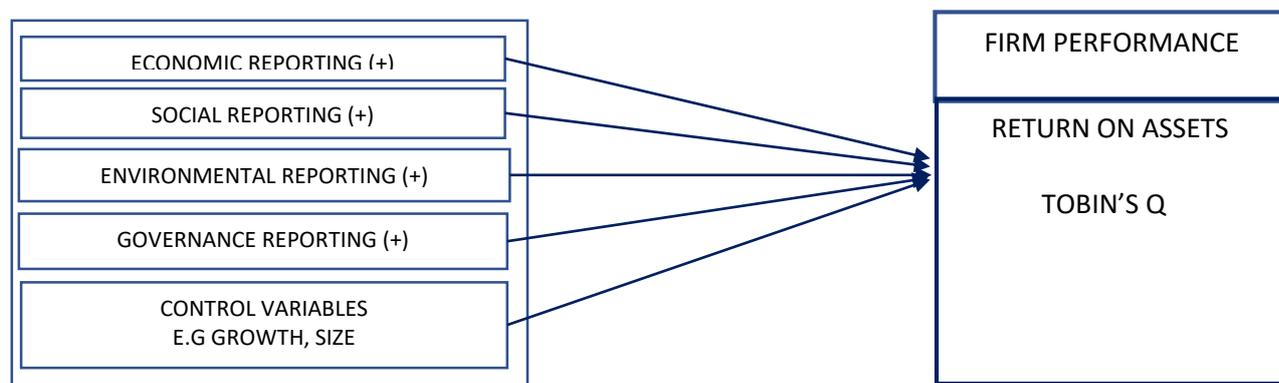
The conceptual framework is mathematically represented as follows:

$$\text{Tobin's Q/ROA}_{it} = \beta 0 + \sum_{i=1}^{n} \beta 1 X i t + \in$$

Where, β0 is the intercept of equation, β1 is the coefficient of X $_{it}$ variables, Xit is the different independent variables representing sustainability in bank one at Time t, t is time from 1, 2… years and ε=Error term, ROA is Return on Assets.

Finally, the above general least square model is converted into specified models as follows;

Research Model 1: Using Tobin's Q as Performance Measure

$$\text{Tobins'Q}_{it} = \beta_0 + \beta_1 Econ\_Sus_{it} + \beta_2 Gov\_Sus_{it} + \beta_3 Soc\_Sus_{it} + \beta_4 Env\_Sus_{it} + \beta_6 size_{it} + Growth_{it} + \varepsilon_{it}$$

Research model 2: Using Return on Assets as performance measure

$$\text{ROA}'_{it} = \beta_0 + \beta_1 Econ\_Sus_{it} + \beta_2 Gov\_Sus_{it} + \beta_3 Soc\_Sus_{it} + \beta_4 Env\_Sus_{it} + \beta_6 size_{it} + Growth_{it} + \varepsilon_{it}$$

Table 2: Variable Definitions

Name	Definition
Dependent variables	
ROA	"Return on Assets given as the Ratio of profits before interest and tax to total assets. "
Tobin's Q	"Ratio of the market value of a company's assets (as measured by the market value of its outstanding stock and debt) divided by the replacement cost of the company's assets (book value)."
Variables of Interest	
Econ_Sus	Economic disclosure score as per GRI standards
Gov_Sus	Governance disclosure score as per GRI standards
Soc_Sus	Social disclosure score as per GRI
Size (SIZE 1)	"The Log of total assets for the bank 1 in time t"
Growth (GRO)	"Year on Year change in interest income for Bank one in time t"
E	Error term

4. FINDINGS AND DISCUSSIONS

4.1. Descriptive statistics

Table 3 below contains the Descriptive statistics on the key variables measuring sustainability. On average, the results suggest that Economic disclosures have the highest mean score (mean=5.92; SD=2.17) across the firms studied. By implication, it indicates that banks disclose more information on sustainability's economic dimension compared to the other dimensions. Following financial disclosures, governance indicators were the second most disclosed dimension of sustainability by the banks under consideration (mean= 5.41). The financial sector is a sensitive one, and any governance anomaly can result in dire consequences to individual stakeholders and the macroeconomy. As a result of this, there are strict regulatory requirements concerning governance mechanisms and processes. In addition, the social dimension of sustainability was found to be the third most disclosed dimension of sustainability among the banks under consideration (mean=5.35). Finally, the environmental dimension of sustainability was the least disclosed sustainability dimension (Mean= 4.52).

4.2. Test for the Presence of Heteroskedasticity

From Table 4, a P-Value of 0.3340 at 5% significance suggests that we fail to reject the null hypothesis and accept that the underlying data (variables) for estimating the regression model does not suffer heteroskedasticity. Having established that the residuals of the variables are homoscedastic, we proceed to determine when the research models are best estimated using fixed-effects or random effects.

Table 3: Presence of Heteroskedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance (Accept)
Variables: fitted values of TOBQ

```
chi2(1)     =     0.93
Prob > chi2  =   0.3340
---------------------------------------------------------------------------
```

4.3. Model 1 (Tobins Q) Specfication Test

The results in Table 5 indicate that the Haussmann specification test selected the fixed effect specification. It suggests that the research model will be more efficient when estimated with fixed effects rather than random effects. Thus, with a P-value of 0.003 at a 5% significance level, we reject the null hypothesis that random effect is appropriate and accept that Fixed effects are somewhat appropriate.

Table 4: Model 1 Specification

Coefficients				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	initialFE	initialRE	Difference	S.E.
ENVi	.0605308	.0629029	-.0023721	.
SIZEi	.0296286	.0384953	-.0088667	.
ECOi	.044726	.0642559	-.0195299	.
GOVi	.0727821	.0876994	-.0149173	.
SOCi	.0375393	.0429563	-.005417	.
GROWTH	.0635927	.0707377	-.007145	.

```
Prob>chi2 =    0.0000
H0: random effects are appropriate (reject)
Ha: Fixed effects is appropriate
```

4.4. Model 2 (ROA) specification test

As was the case in model 1, the Haussmann specification test result above indicates that the second research model can be better estimated using fixed effects. That is, against the null hypothesis that "random effect is appropriate," a probability value of 0.0000 suggests a rejection of the null hypothesis. Hence, the second model was also estimated using fixed effects.

Table 5: Haussmann Specification Test 2

Coefficients				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fe3	re3	Difference	S.E.
ECOii	.0545596	.0677679	-.0132083	.0041047
GOVii	.0423894	.0355917	.0067977	.0021025
ENVii	.0381999	.0550752	-.0168753	.0055473
SOCii	-.0003282	.0098682	-.0101964	.0036498
SIZEii	.0180626	.0285133	-.0104508	.0018855
GROWTH	.0335101	.0388779	-.0053677	.0022932

```
Test:  Ho:  Random effect is appropriate (reject)
Ha: fixed Effects is appropriate (Accept)
Prob>chi2 =    0.0000
```

4.5. Model 1 - Final Estimate

The research model was re-estimated after correcting the problem of serial correlation. Compared to the previous model (where the serial correlation was present), the current model explains more of the variance in the dependent variable. In the final iteration, the co-efficient of determination increased from 63% to 67%. It suggests that the first estimate of the model was rendered less efficient by serial correlation. According to Chin (1998) and Moore (2013), r-squared values ranging from 50%-69% are considered moderate. It suggests that the exogenous variables in model one moderately explain the variations in the endogenous variable. Specifically, about 67% of the variance in bank performance can be jointly explained by

sustainability disclosures, including economic reporting, governance reporting, social reporting, environmental reporting, bank size, and growth. Bank size and bank growth were used as control variables. Additionally, it is noteworthy that all the variables were jointly significant at a 5% significance level (i.e., P-Value of F-statistics = 0.0000). Besides, the final model was examined for the second time to assess whether the introduction of the lagged dependent variable was successful in eliminating the problem of serial correlation.

Table 6: Final Estimation of Model 1

```
-------------------------------------------------------------------------------------
Fixed-effects (within) regression              Number of obs      =     124
Group variable: ID                             Number of groups  =      17
R-sq:  within             = 0.6628             Obs per group: min=       4
       Between            = 0.2308                           avg =     7.3
       Overall            = 0.2279                           max =       8
                                               F(7,100)          =   28.08
Corr (u_i, Xb)            = 0.2109             Prob > F          =  0.0000
-------------------------------------------------------------------------------------
TOBQ          |   Coef.      Std. Err.     t     P>|t|     [95% Conf. Interval]
--------------+----------------------------------------------------------------------
      lagdep  | -.2232678    .0672354   -3.32   0.001    -.356661     -.0898746
        ENVi  |  .0521217    .0060598    8.60   0.000     .0400993     .0641442
       SIZEi  |  .0282144    .0114483    2.46   0.015     .0055013     .0509275
        GOVi  |  .0671849    .0220569    3.05   0.003     .0234247     .1109451
        ECOi  |  .058355     .0162731    3.59   0.001     .0260697     .0906403
        SOCi  |  .0328664    .0148486    2.21   0.029     .0034072     .0623256
   GROWTHTOBQ       |  .0321465    .0154863   2.08   0.040    .0014222    .0628709
       _cons  | 6.596587     .5851045   11.27   0.000     5.435757     7.757418
--------------+----------------------------------------------------------------------
    sigma_u |  .7580427
    sigma_e |  .09028342
        rho |  .98601342   (fraction of variance due to u_i)
-------------------------------------------------------------------------------------
F test that all u_i=0:   F(16, 100) =   29.22       Prob > F = 0.0000
-------------------------------------------------------------------------------------
```

4.6. Model 2 - Final Estimate

The final estimate of model 2 showed an improvement in the R-squared after eliminating the impact of serial correlation.

Notably, it is observed that the introduction of the lagged dependent variable led to an improvement in the coefficient of determination from 40% to 48%, almost 0% (Refer to Table 11 above). By implication, this suggests that the final model accounts for almost 50% of the variation in the performance of banks; all other things are held constant. Taken together, the F-statistics also suggest that all the explanatory variables are jointly significant in explaining the endogenous variable.

Table 7: Final Estimation of Model 2

```
---------------------------------------------------------------------------------------------
Fixed-effects (within) regression              Number of obs      =      141
Group variable: ID                             Number of groups   =       18
R-sq:  within      = 0.4806                    Obs per group: min =        6
       between     = 0.0346                                    avg =      7.8
       overall     = 0.0003                                    max =        8
                                               F(7,116)           =    15.33
corr(u_i, Xb)      = -0.1705                   Prob > F           =   0.0000
---------------------------------------------------------------------------------------------
   ROA        |   Coef.      Std. Err.      t    P>|t|      [95% Conf. Interval]
--------------+------------------------------------------------------------------------------
      ECOii   |  .0388183    .0133699     2.90   0.004     .0123374         .0652991
      ENVii   |  .0417534    .0207406     2.01   0.046     .0006741         .0828328
      GOVii   |  .0405458    .0085116     4.76   0.000     .0236876         .057404
```

```
      SOCii      |   .0254755        .0116373   2.19   0.031    .0024265          .0485246
      SIZEii     |   .0172294        .0071022   2.43   0.017    .0031626          .0312961
      GROWTHROA     |  .0279007       .0102057   2.73   0.007   .0076871            .0481144
      Lagdep  |  -.1700089       .0758225   -2.24   0.027   -.3201848       -.019833
       _cons  |   6.621671       .5807967   11.40   0.000   5.47133          7.772012
------------------+--------------------------------------------------------------------------------------
      sigma_u |  .82245998
      sigma_e |  .11322165
          rho |  .98140157   (fraction of variance due to u_i)
--------------------------------------------------------------------------------------------------------
F test that all u_i=0:   F(17, 116) =   14.02        Prob > F = 0.0000
--------------------------------------------------------------------------------------------------------
```

This section discusses the findings of the study in light of the existing literature. The discussions on the hypothesized relationships are based on the final estimated regression models. These are summarized in Table 13 below.

Table 3: Hypotheses Tests

VARIABLES	MODEL 1			MODEL 2		
	TOBINQ (β)	S.E	P-Value	ROA (β)	S.E	P-Value
ENV	0.052***	(0.006)	0.000	0.042	(0.021)	0.51
SIZE	0.028**	(0.011)	0.015	0.017**	(0.007)	0.017
ECO	0.058***	(0.016)	0.001	0.039***	(0.013)	0.004
GOV	0.067***	(0.022)	0.003	0.041***	(0.009)	0.000
SOC	0.033**	(0.015)	0.029	0.025**	(0.012)	0.031
GROWTH	0.032**	(0.015)	0.040	0.028***	(0.010)	0.007
Constant	6.597***	(0.585)	0.000	6.622***	(0.581)	0.000
Lagged (DV)	0.223***	(0.067)	0.001	0.170**	(0.076)	0.027
R-squared	0.663			0.481		
Prob > F =	0.000			0.000		

NB:

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

4.7. Economic Disclosures and Firm Profitability

Under models one and model two, H2c and H2d were validated at a 0.1% significance level. In H1a, the result suggests that a one-unit improvement in bank economic distribution will result in about a 5a. In the case of H1b, the finding was that a unit improvement in the financial disclosure of banks would result in a corresponding increase in their return on assets by about 4%, all other things held constant. Comparatively, although both models demonstrated a significant positive association between financial disclosures and financial performance, it appears that the first model (using Tobin's Q) had a more substantial effect.

Consistent with Nobanee and Ellili (2017) and Shrivastav and Kalsie (2017), the results depict those financial disclosures have the highest impact on financial performance under H1b, compared to other dimensions of sustainability. Nobanee and Ellili (2017) studied sustainability (i.e., economic, environmental, and social) disclosure practices of banks in the United Arab Emirates. In their study, Nobanee and Ellili (2017) segmented the banks under consideration into two, including conventional banks and Islamic banks. The study's findings that financial disclosures are higher for both types of banks. A study by Hinson et al. (2015) also concluded that economic indicators were the most disclosed dimensions of sustainability.

On the contrary, the findings of Bonsón and Bednárová (2015) do not collaborate with this study. Instead, they found that firms disclosed more governance information than environmental, economic, and social information. The differences in findings might be attributed to the differences in the sustainability disclosure mediums emphasized by each study. Whereas the study focuses on sustainability reportage via annual reports, Bonsón and Bednárová (2015) emphasized website r. Besides, the choice of sustainability framework adopted in the conduct of each study may account for the differences in the results. Thus, whereas the current study employed the sustainability frame developed by the global reporting Initiative, Bonsón and Bednárová (2015) adopted the Spanish Accounting and Business Association's (AECA) sustainability index.

Concerning why firms disclose more economic content relative to other sustainability indicators, some scholars point to regulatory requirements concerning disclosures of financial information (Aboagye-Otchere et al., 2012). Another strand of the literature believes that increased financial disclosures can enhance a firm value and reputation in the long run (Bonsón & Bednárová, 2015; Shrivastav & Kalsie, 2017). Notably, the argument has also been made that increased financial disclosures demonstrate a firm's commitment to accountability and transparency.

Additionally, Sahore and Verma (2017) and Gillan et al. (2010) corroborate our finding that economic reporting positively influences firm value. It is held in the literature that firms with good financial standings are more likely to increase their disclosures on economic matters. It may explain why economic reporting has a positive association with financial performance. Besides, it is believed that stakeholders are increasingly becoming sensitive to issues bordering on sustainability. Hence, they tend to reward firms who make extensive disclosures about their sustainability practices, enhancing firm performance. Contrary, Nobanee and Ellili's (2017) findings concluded that no significant relationship exists between financial disclosures and firm performance. Such mixed findings in the literature may signify the need for further research.

4.8. Governance Disclosures and Firm Performance

The study sought to examine whether banks' disclosure of governance indicators influences their financial performance and firm value. According to the sustainability framework developed by the Global reporting initiative, governance disclosures encompass reporting on the company mission, vision, strategy, organizational structure, board characteristics, and board composition, among others. From the results presented in table 13, we fail to reject hypotheses H2a and H2b. the study found a significant positive relationship between governance disclosures and financial performance for models one and two. Specifically, Under H2a, the finding suggests a one-unit improvement in governance disclosures will result in about a 6.7% increase in the Tobin's Q of banks, all other things being equal. Accordingly, Under H2b, findings suggest that a one-unit improvement in the governance disclosures of banks will culminate in about a 4.1% improvement in the return on banks' assets. The findings contradict the earlier study by Nobanee and Ellili (2017) but corroborate with Shrivastav and Kalsie (2017). Whereas Shrivastav and Kalsie (2017) found that a positively significant relationship exists between governance disclosures and firm performance, Nobanee and Ellili (2017) failed to establish any significant relationship. Notwithstanding the mixed findings, there is some degree of convergence in the literature concerning the positive association between financial performance and governance disclosures (*see* Dalton et al. 1999; Gillan & Starks 2007; Love, 2010).

4.9. Social Disclosure and Firm Performance

The study examined whether social disclosures influence the financial performance of firms. The social dimension of sustainability entails disclosures on human resources, labour practices, impact on society, and corporate social responsibility. The result of the study validated H3a and H3b. The study results indicate that social disclosures have a significant favourable influence on financial performance and firm value. Under H3a, data in Table 13 reveals that a unit improvement in the social disclosure of banks will culminate in about a 3.33% increase in their Tobin's Q. Additionally, under H3b, the findings suggest that a one-unit improvement in the social disclosure of firms will lead to about a 2.5% increase in the return on assets of banks.

A related study by Mishra and Suar (2010) contended that responsible social practices by businesses enhance corporate reputation, which in turn can lead to a favourable perception of the firm by customers and other stakeholders and lead to increased business performance. That is, according to the consumer inference theory, consumers are more likely to increase their demand for a company's product if they perceive it to be socially responsible (Brown & Dacin, 1997). Besides, Consumers may associate high product quality with proactive corporate citizenship (Maignan & Ferrell, 2001; Mishra & Suar, 2010). Mishra and Suar (2010) explain further, stating as follows. Alternatively, irresponsible behaviour by firms agitates stakeholders. They often react by boycotting the company, reducing its consumption, initiating legal action against the company, and spreading lousy word-of-mouth about irresponsible business practices (p.576).

4.10. Environmental Disclosure and Firm Performance

Environmental reporting includes disclosing sustainability indicators such as energy consumption, waste management, emissions, and biodiversity. There have been persistent arguments in the literature concerning whether environmental reporting impacts financial performance and firm value. Whereas one strand of the literature has established a positive relationship between the two variables (Sulaiman & Mokhtar, 2012; Wahab et al., 2017; Graham, Harvey & Regional, 2005), another strand of the literature finds a negative relationship between the two variables (Chiong, 2010). Some studies do not find any significant relationship between the two variables (Nor et al., 2016; Sarumpaet, 2005). In most cases, those who find a negative relationship between environmental reporting and firm performance explain that managing environmental responsibility may erode profits; hence the higher the environmental cost, the lower the financial performance. Other

scholars have also argued that although environmental responsibility may not translate to increased profitability in the short run, it has long term benefits such as boosting firm reputation and prestige, enhancing legitimacy, as well as increasing the long-term value of the firm

In the current study, there are divergent findings concerning whether environmental reporting influences firm performance. In the first model, the results suggest that environmental reporting has a significant positive effect on firm performance, as measured by Tobin's Q.; nonetheless, the second model (using return on assets as a measure of financial performance) did not establish any significant relationship between the two variables. Specifically, Under H1a, the findings suggest that a one-unit improvement in the environmental disclosure of banks will result in about a 5.2% improvement in firm profitability, all other things being equal. However, under H1b, although the result shows that a unit improvement in environmental reporting can enhance profitability by about 0.42%, such an outcome was statistically insignificant. Thus, the contradiction in model I and model II findings can mainly be attributed to the differences in performance measures. In other words, whereas the accounting measure of performance suggests that no statistically significant relationship exists between environmental reporting and return on assets, the market-based performance measure has established a significant positive relationship between environmental reporting and Tobin's Q. These findings complement the existing literature, which argues that environmental reporting may not impact profitability in the short-term, but may have an impact on the overall firm's value. That is, Tobin's Q, which established a positive relationship, has been by several studies to measure firm value. In contrast, return on assets has also been used as an accounting profitability measure.

4.11. Bank Size, Growth, and Firm Performance

Firm size was used as a control variable in the study. Generally, the literature agrees that larger firms report more sustainability information than smaller firms (Brammer & Pavelin, 2006). It is believed that large firms are more visible in the public domain and would disclose more information to improve their reputation and gain a favourable position among stakeholders (Cormier & Magnan, 2003). Besides, being able to adequately value and report environmental sustainability performance might be challenging to smaller firms that (due to financial challenges) cannot employ qualified personnel for such a task. Consistent with the existing literature, the study finds a significant positive relationship between Bank Size and performance for both of the models. Under H4a, the finding suggests that Tobin's Q of firms will improve by 2.8% with a unit increase in firm size. Besides, using the second model, a unit increase in bank size will increase the return on assets by 1.7%, all other things being equal. Besides, bank growth (measured by year-on-year change in assets) established a statically significant positive relationship with return on assets and Tobin's Q.

5. CONCLUSIONS AND RECOMMENDATIONS

Generally, increased sustainability disclosures tend to enhance firm performance. Nonetheless, it appears the effect of sustainability reporting is more felt in the long term than in the short term. Additionally, it can be said that sustainability reporting has to do with information disclosure. Any increment in disclosure practices is more likely to impact stock market-based performance measures (Tobin's Q) than accounting performance measures (return on assets). It may explain the efficient market hypothesis, which states that asset prices reflect all available information. Consequently, increased disclosures may paint a positive picture of firms' sustainability practices, thereby boosting stock prices and overall firm value (measured by Tobin's Q). Besides, firms tend to disclose more sustainability information when company laws mandate it, and this was reflected in the disclosure rates for financial and governance information, which are mostly mandatory. Comparatively, larger firm sizes are positively associated with increased sustainability disclosures. It is believed that large firms have the necessary financial resources to absorb the cost of sustainability disclosures.

Besides, larger firms may have the resources to employ skilled personnel who can adequately measure and report sustainability. To sum everything up, the study results suggest that disclosing sustainability practices has implications on firm performance; however, such effects may not be felt in the short-run but in the long term. Accordingly, the study concludes that market-based performance measures are more responsive to sustainability disclosures than accounting-based performance measures. Generally, firms that disclose more sustainability information are likely to enjoy increased performance over time. Customers and other stakeholders are increasingly becoming interested in firms that are more sustainability-conscious than otherwise. Hence the study recommends that banks pay attention to all the dimensions of sustainability, not only those mandated by law. Banks should not consider themselves less environmentally sensitive and disclose less environmental information. Secondly, the 21st century has witnessed technological innovations that have widened the mediums of corporate communications.

The study recommends that firms go beyond the traditional means of disclosing sustainability information through annual reports. Using social media platforms, firms can post their sustainability information on Facebook, Twitter, Instagram, and YouTube. The uniqueness of these social media platforms lies in their ability to facilitate real-time engagement with stakeholders and almost no cost. Besides, a wider audience can be reached when information is disclosed on social media

platforms. The disclosures can be organized into several media types: video, audio, 3D animations, etc. These enhance the richness of communicated information.

REFERENCES

Abernathy, J, Stefaniak, C, Wilkins, A, & Olson, J. (2017). Literature Review and Research Opportunities on the Credibility of Corporate Social Responsibility Reporting. American Journal of Business, 32(1). https://doi.org/http://dx.doi.org/10.1108/AJB-04-2016-0013

Francis Aboagye-Otchere Ibrahim Bedi Teddy Ossei Kwakye, (2012),"Corporate governance and disclosure practices of Ghanaian listed companies", Journal of Accounting in Emerging Economies, 2(2), 140 - 161

Abukari, A. J., Abdul-Hamid, I. K. (2018). "Corporate Social Responsibility Reporting in the Telecommunications Sector in Ghana." International Journal of Corporate Social Responsibility 3 (1): 2. https://doi.org/10.1186/s40991-017-0025-9.

Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: an enabling role for accounting research", Accounting, Auditing & Accountability Journal, https://doi.org/10.1108/AAAJ-05-2017-2929

Blaesing, D. (2013). Nachhaltigkeitsberichterstattung in Deutschland und den USA: Berichtspraxis, Determinanten und Eigenkapitalkostenwirkungen. Frankfurt/M: PL Acad. Research.

Bonsón, E., & Bednárová, M. (2015). CSR reporting practices of Eurozone companies. Revista de Contabilidad, 18(2), 182-193.

Brammer, S., & Pavelin, S. (2006). Voluntary environmental disclosures by large U.K. companies. Journal of Business Finance & Accounting, 33(7-8), 1168-1188.

Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. Journal of Business Ethics, 69(2), 111-132.

Brown, T. J., & Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. Journal of Marketing, 61(1), 68-84.

Chen, J. C., & Roberts, R. W. (2010). Toward a more coherent understanding of the organization–society relationship: A theoretical consideration for social and environmental accounting research. Journal of business ethics, 97(4), 651-665.

Chen, Y. C., Hung, M., & Wang, Y. (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. Journal of Accounting and Economics, 65(1), 169-190.

Crolic, C., Zheng, Y., Hoegg, J., & Alba, J. W. (2019). The influence of product aesthetics on consumer inference making. Journal of the Association for Consumer Research, 4(4), 398-408.

Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. California Management Review, 36(2), 90-100.

Gibson, R. B. (2006). Sustainability assessment: Basic components of a practical approach. Impact Assessment and Project Appraisal, 24(3), 170–182

Gildea, R. L., (1994). Consumer Survey Confirms Corporate Social Action Affects Buying Decisions. Public Relations Quarterly, 39(4), 20–22.

Gillan, S., Hartzell, J. C., Koch, A., & Starks, L. T. (2010). Firms' environmental, social, and governance (ESG) choices, performance, and managerial motivation. Unpublished working paper.

Handelman, J. M., & Arnold, S. J. (1999). The role of marketing actions with a social dimension: Appeals to the institutional environment. Journal of Marketing, 63(3), 33-48.

Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. Journal of Accounting and Public Policy, 24(5), 391-430.

Heikkurinen, P., & Bonnedahl, K. J. (2013). Corporate responsibility for sustainable development: a review and conceptual comparison of market-and stakeholder-oriented strategies. Journal of Cleaner Production, 43, 191-198.

Hinson, R., Gyabea, A., & Ibrahim, M. (2015). Sustainability reporting among Ghanaian universities. Communication, 41(1), 22-42.

Hirschey, M., & Wichern, D. W. (1984). Accounting and market-value measures of profitability: Consistency, determinants, and uses. Journal of Business & Economic Statistics, 2(4), 375-383.

Jennifer Ho, L. C., & Taylor, M. E. (2007). An empirical analysis of triple-bottom-line reporting and its determinants: evidence from the United States and Japan. Journal of International Financial Management & Accounting, 18(2), 123-150.

Kühn, A. L., Stiglbauer, M., & Fifka, M. S. (2018). Contents and determinants of corporate social responsibility website reporting in Sub-Saharan Africa: A seven-country study. Business & Society, 57(3), 437-480.

Lichtenstein, S., Badu, E., Owusu-Manu, D. G., Edwards, D. J., & Holt, G. D. (2013). Corporate social responsibility architecture and project alignments. Journal of Engineering, Design and Technology, 11(3), 334 – 353.

Lokuwaduge, C. S. D. S., & Heenetigala, K. (2017). Integrating environmental, social and governance (ESG) disclosure for sustainable development: An Australian study. Business Strategy and the Environment, 26(4), 438-450.

Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., & Salman, T. (2018). Does corporate governance affect sustainability disclosure? Mixed methods study. Sustainability, 10(1), 207.

Maignan, I., & Ferrell, O. C. (2001). Corporate citizenship as a marketing instrument - Concepts, evidence and research directions. European Journal of Marketing, 35(3/4), 457 – 484.

Marshall S, Brown DL. 2003. Corporate environmental reporting: What is in a metric. Business Strategy and the Environment, 12(3), 87– 106.

Mishra, S., & Suar, D. (2010). Does corporate social responsibility influence firm performance of Indian companies? Journal of Business Ethics, 95(4), 571-601.

Nobanee, H., & Ellili, N. (2017). Does Risk Disclosure Reporting Quality Reduce Credit Risk?. Available at SSRN 2971474.

Nor, N. M., Bahari, N. A. S., Adnan, N. A., Kamal, S. M. Q. A. S., & Ali, I. M. (2016). The effects of environmental disclosure on financial performance in Malaysia. Procedia Economics and Finance, 35, 117-126.

Nyarku, K. M., & Hinson, R. E. (2017). Corporate social responsibility reporting of banks operating in Ghana. African Journal of Business Ethics, 11(2),122-131.

Poonawala, S. H., & Nagar, N. (2019). Gross profit manipulation through classification shifting. Journal of Business Research, 94, 81-88.

Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. Journal of Cleaner Production, 20(1), 103-118.

Rogers, A. D. (2016). Examining Small Business Adoption of Computerized Accounting Systems Using the Technology Acceptance Model (Doctoral dissertation, Walden University).

Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saaeidi, S. A. (2015). How does corporate social responsibility contribute to a firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. Journal of Business Research, 68(2), 341-350.

Sahore, N., & Verma, A. (2017). Corporate disclosures and financial performance of selected ındian manufacturing and non- manufacturing companies. Accounting and Finance Research, 6(1), 119. https://doi.org/10.5430/afr.v6n1p119

Sarumpaet, S. (2005). The relationship between environmental performance and financial performance of Indonesian companies. Jurnal Akuntansi dan Keuangan, 7(2), 89-98.

Schwartz, M. S., & Carroll, A. B. (2008). Integrating and unifying competing and complementary frameworks. Business & Society, 47(2), 148–186.

Shrivastav, S. M., & Kalsie, A. (2017). The relationship between foreign ownership and firm performance in ındia: an empirical analysis. Artha Vijnana, 59(2), 152-162.

Solomon, J. (2004). Corporate Governance and Accountability. England: John Wiley and Sons.

Sulaiman, M., & Mokhtar, N. (2012). Ensuring sustainability: A preliminary study of environmental management accounting in Malaysia. International Journal of Business and Management Science, 5, 85-102.

Tagesson, T., Blank, V., Broberg, P., & Collin, S. O. (2009). What explains the extent and content of social and environmental disclosures on corporate websites: a study of social and environmental reporting in Swedish listed corporations. Corporate Social Responsibility and Environmental Management, 16(6), 352-364.

Unerman, J., & Chapman, C. (2014). Academic contributions to enhancing accounting for sustainable development. Accounting, Organizations and Society, 39(6), 385-394.