Achieving Sustainability through Environmental Social Governance (ESG) Reporting: Overcoming the Challenges

Abstract

The study analyses the effectiveness of the environmental, social and governance (ESG) framework in fostering sustainability. The study utilises a library research by surveying prior literature on issues related to the subject matter. Differing philosophical schools of thoughts of proponents and opponents of the current state of ESG reporting were analysed vis-à-vis their pros and cons, and the resulting outcome of the discourse utilised to set forth a position for engendering sustainable development. The study proposes the development of a holistic integrated framework that incorporates quantitative ESG disclosures with financial reporting; achieved through the monetisation of the ESG indices. The study outlines that despite the perceived herculean nature of the quantification of ESG indices, along with its incorporation into the financial reporting framework, the feat is nevertheless achievable. The integration might however be required to occur within phases, as well as a committed participation from the requisite stakeholders. Despite the seemingly precarious nature of the monetisation of the ESG indices, in our opinion, it remains the best bet yet for the promotion of true sustainability of not just the firm, but of the entire planet.

Keywords: Environmental, Social, Governance, Sustainability.

1. Introduction

Sustainability issues have remained a global concern. These account for the reason why countries world over continue to put measures in place to protect the environment in line with the sustainable development objective. These measures emanate from both institutional/governmental efforts and corporate inclinations. Examples of such sustainability initiatives include the International Integrated Reporting Council (IIRC), Global Reporting Initiative (GRI), Prince's Accounting for Sustainability Project, United Nations Global Compact (UNGC), Institute for Social and Ethical Accountability (AccountAbility) and International Sustainability Conferences mostly organised by corporate bodies and Non-governmental organisations (NGOs). Environmental, social and governance (ESG) indices have been canvassed by these initiatives in order to foster sustainable development.

ESG is an agglomeration of concepts borne out of the requirement for sustainability. The objective of ESG could be defined within the framework of sustainability issues. This entails that ESG practice is focused on addressing sustainability challenges within the corporate environment. Sustainability focuses on how contributions can be made to social and environmental welfare without harm or threat to the earth's survival. The Brundtland Report (1987) defined sustainable development as development that meets the needs of the current generation without jeopardising the ability of future generation to meet their own needs. As highlighted by Moneva, Archel and Correa (2006:124), "sustainability development is not a state of fixed harmony, but a process of change whereby exploitation of resources, the direction of investment and changes to institutions correspond to the needs of both the present and the future". Flowing from this tenet, increased consumption and utilisation of resources beyond the meeting of basic needs may not constitute sustainable development (Bebbington, 2001). Sustainability reporting should therefore entail reporting that inculcates consciousness in organisations of their social and environmental impacts, as opposed to an emphasis on profit maximisation over corporate environmentalism.

It has been heralded that financial reports have obtained optimal application in the reporting of accountability and governance related information as well as integrated communications (Atkins, Atkins, Thomson, & Maroun, 2015; Ilaboya & Ohiokha, 2016). Despite this optimum utilisation, sustainability concerns remain unalleviated. This could be due to the fact that the financial statements serve more as a report card of the outcome of social contracts and engagements between corporations and their stakeholders (Ilaboya & Ohiokha, 2016) as opposed to being a tool for fostering sustainable practice (Lokuwaduge & Heenetigala, 2016). The volume of social and environmental disclosures is continually on the increase, yet the extent of negative social and environmental consequences also continues to be on the rise (Milman, 2015). The increasing levels of disclosures have therefore not served to abate the negative externalities of corporate activities. One can therefore insinuate that the current state of ESG reporting is a far cry from the needed ingredient for fostering sustainable development, hence, to believe that ESG reporting in its present context can address this challenge could amount to an illusion. This however negates the position of several studies (deVilliers, Rinaldi, & Unerman, 2014; Higgins, Stubbs, & Love, 2014; Lokuwaduge & Heenetigala, 2016; Mervelskemper & Streit, 2017; Stubbs & Higgins, 2014) that consider ESG reporting as an ideal corporate mechanism for achieving sustainability goals.

The study therefore sets out to extend the seeming thrust of several influential literature (e.g. Del-Bosco & Misani, 2016, Jain, Jain & Rezaee, 2016; Lu & Taylor, 2016; Pavlopoulos, Magnis, & Iatridis, 2017; Plumlee, Brown, Hayes & Marshall, 2015) on ESG which according to Owen, Gray and Bebbington (1997) have purportedly focused on increasing information available to investors and enhancing corporate image. This study intends to demystify this narrow focus and engrave an impression that the needed ingredient to make the core objective of ESG as it relates to sustainability a reality would be the redefining of the current reporting framework. The focus therefore is to drive the development of a framework that utilises ESG indices to promote true sustainability. This we believe can be achieved by propelling ESG beyond mere qualitative measures to an ideal pedestal through the development of a model for the quantitative inculcation of ESG metrics into financial reporting, thereby developing a concise integrated report where environmental, social and governance issues have direct implications on financial decisions. This proposition is in tandem with the tenets of the systems theory which posits that any system would only function effectively when their respective parts and components are substantively related and connected. Given that financial reporting metrics are generally quantitative in nature, qualitative ESG disclosures therefore cannot be adjudged to give substantive credibility to the linkage between sustainability reporting and financial reporting. As Owen et al. (1997:181) rightly puts it: "We are looking for something much more fundamental in how we imagine accounting systems for the future. If on the other hand, one believes that accounting systems are really superb things as they currently operate, why bother with environmental (and social) accounting at all". The realisation of this imagination will be best achieved with the input of NGOs and other relevant stakeholders through continual drives and clamour for sustainable development, which has proved the highest means of susceptibility for corporations thus far.

The rest of the paper is structured in sections as follows. Section 2 takes a cursory look at the individual components of the ESG framework and highlights the development of the ESG framework from the social to the environmental component, along with the eventual incorporation of the governance component. Section 3 presents an analysis of differing school of thoughts on ESG reporting in relation to sustainability. Section 4 harps on the subject matter of the study which aims to engender the development of a concise sustainability reporting framework, and further embodies the theoretical framework of the study while section 5 concludes the study.

2. ESG in Context: Concepts and Motivation

Sustainability entails the maximisation of positive effects and minimisation of negative effects in relation to social, environmental and economic consequences. ESG strategies developed as an important sine qua non for achieving this feat (Eccles & Serafeim, 2013). ESG is made up of its respective components namely: environmental, social and governance elements.

The social element of the ESG framework is emphasised by the corporate social responsibility (CSR) concept. Social responsibility is responsibility that relates to the human element of the community, inclusive of the human elements within the organisation itself. This responsibility entails such actions as community investment and the generality of internal social policies (Husted & Sousa-Filho, 2016). Akhter and Dey (2017) give recourse to the specific set of actions that encompass social responsibility which includes but are not limited to: human rights, diversity, health, education, training, labour practices, equal opportunity, safety, product responsibility, procurement practices, customer satisfaction and customer privacy. The social component posits that organisations should portray a sense of responsibility and accountability to every person, and group of persons who impacts and/or is affected by the practices, policies and decisions of the organisation. Social responsibility sees the organisation as a corporate citizen that should give back to the society even as it receives benefits from the latter (Carroll & Shabana, 2010).

Environmental responsibility focuses on the preservation of the state of the ecological environment (i.e. responsibility to environmental well-being and sustenance). The ecological environment is better preserved when attention is given to biodiversity, waste, effluents, emissions, water and compliance with environmental laws (Akhter & Dey, 2017). Environmental responsibility refers to responsibility in the utilisation of natural resources in a careful manner in order to minimise damage on the environment, while at the same time ensuring that these resources will be available for future generations. Environmental responsibility entails the use of sound environmental practices such as the setting of environmental policies, environmental investments and the implementation of pollution control measures (Husted & de Sousa-Filho, 2016).

Corporate governance entails the structure and activities involved in directing and controlling organisational affairs. It is the mechanism that propels all other factors of the ESG framework in order to engender trust in the firm from its stakeholders and the general public. The accruing importance of the governance element can be inferred from the words of Walls, Berrone and Phan (2012) when they posited that about a quarter of Fortune 500 companies have board committees saddled with overseeing the corporation’s impact on the environment, along with other factors such as increases in environmental related proposal by investors and the inclusion of responsibility criteria in executive compensation. Corporate governance involves such activities as the setting of organisational goals and strategies, monitoring of strategy implementations, directing and controlling overall operations, and reporting back to shareholders on the activities of management (Pavlopoulos et al., 2017). Corporate governance is the driving force that coordinates the creation of organisational value through the exertion of positive influence on its community and ecosystem, while at the same time reducing the extent of its harmful activities on these systems (Krechovska & Prochazkova, 2014). The governance index in ESG is therefore a necessary ingredient that oils the 'ESG wheel' as the corporation focuses on sustainability as opposed to maximisation.

The origins of ESG can be traced back to the 1970's when corporations such as General Motors, Ford and Cummins Engine began to report on their philanthropic activities and community involvement (Wilburn & Wilburn, 2013). The environmental aspect was incorporated in the 1980's with specific emphasis on its inception traced to the emergence of environmental disasters such as the Union carbide chemical leak in Bhopal, India in 1984, and the Exxon Valdez oil spill in Alaska in 1989 (Odia, 2013). Other environmental issues that have occurred overtime includes the Kirki oil spill in Australia in 1991, the BP oil spill in Mississippi in 2010, and the unabated oil spillage, gas flaring and environmental degradation in the Niger-Delta region of Nigeria (Odia, 2013). Corporate governance is recognised in the ESG framework because it contributes not only to the overall corporate performance, but also to responsibility (Kocmanova, Docekalova, Nemecek, & Simberova, 2012). Owen et al. (1997) opined that the evolution of 'green accounting' brought about a requirement for new corporate governance structures in order to promote true accountability. Corporations are caught at a crossroad of either reforming their business practices and corporate governance structures, or maintaining the status quo and having to cope with negative environmental outcomes.

Specific sets of incidents led to peculiar reporting requirements, but these issue-specific reports did not provide a comprehensive overview of the company's operations, as they only catered for a relatively random set of ESG indices. In recent years, a more comprehensive set of ESG data has been disclosed by corporations due largely to the emergence of global initiatives such as the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI). More recent bodies like the Sustainability Accounting Standards Board (SASB) and the International Integrated

Reporting Council (IIRC) are canvassing the need to make ESG disclosures mandatory, as well as their linkage with financial reporting.

The most recent innovation in ESG development is the integrated reporting framework. The institutionalisation of integrated reporting can be traced back to 2010, with the formation of the International Integrated Reporting Committee later renamed as International Integrated Reporting Council (IIRC). The IIRC was the body saddled with the development and regulation of integrated reporting policies on a global scale. It was formed by the merger of the Global Reporting Initiative (GRI) and the Prince's Accounting for Sustainability Project (deVilliers, et al., 2014). Before the evolution of integrated reports, ESG disclosures began as part disclosures of corporate annual (financial) reports. Specific sections were carved out in the annual reports where organisations would report on social, environmental and governance issues. With time, the nature of these disclosures became complex and their requirements for disclosure broadened. This gave rise to stand-alone reports wherein corporations adopted other means to publish their ESG reports such as sustainability websites, separate reports and other interactive media (Stubbs & Higgins, 2014). The increasing and complex nature of these disclosures led to the development of initiatives such as the United Nations Global Compact (UNGC), the Global Reporting Initiative (GRI), and the Institute for Social and Ethical Accountability; generally referred to as AccountAbility (deVilliers et al., 2014). These initiatives were mostly voluntary in nature, as opposed to being mandatory regulations that are perceived to be generally more effective due to the inclination that the latter would engender credibility through standardisation.

The ambits of these initiatives however continued to increase in magnitude and complexity. It became cumbersome to systematically link requisite social, environmental and economic information across policies, practices and impacts. This heralded the birth of the integrated reports. Integrated reporting was borne out of the need to address this disconnect through the interlinking of sustainability reports to financial reports. The primary objective of integrated reports was therefore to present a broader, yet concise and more connected account of an organisation's financial, social and environmental performance (deVilliers et al., 2014). The integrated reporting initiative was spearheaded by the likes of Novo Nordisk (a Danish pharmaceutical company) and regulatory initiatives on integrated reporting in South Africa. The development of integrated reports was not with a view of being an end to an innovative process, but rather as the beginning of a new form of corporate culture that engenders sustainability (Stubbs & Higgins, 2014).

Previously, focus on ESG concerns were mostly reactive rather than proactive, as firm related ESG decisions in prior times were mostly tailored towards compliance with social and environmental laws and regulations. The shift to a proactive focus is basically hinged on the general believe (advanced by literature) that firms could gain competitive advantage by engaging in practices that are less harmful to the environment, thereby breeding sustainability (Clarkson, Li, Richardson, & Vasvari, 2011). One of the main tenets of ESG reporting is its perceived ability to engender sustainability. The issue of sustainability in relation to corporations focuses on how these corporations aim to contribute to future related improvements or deteriorations of the social and environmental sphere either locally, regionally or globally. This naturally endears investors to companies that are socially and environmentally responsible, as their interest lie more in long-term organisational value as opposed to short-term financial performance. The long-term value and survival of the firm is however threatened by ethical issues which could lead to the liquidation of the firm as experienced in recent decades (Kocmanova et al., 2012). This motivates the inclusion of the governance element into the ESG framework as it also engenders sustainability in relation to the social and environmental elements.

3. ESG Disclosures and Sustainability

Accounting is perceived in the positivist epistemology to serve only specific technical and rational purpose which is encapsulated in the provision of financial information for the efficient allocation of capital (Watts & Zimmerman, 1978). The critical theorists however debunk this perception and contend that accounting functions beyond mere collation and dissemination of financial information to being a tool for dynamic reforms and change, acting as a fluent craft which influences revolutions in organisational management and governance, along with prevailing institutional and social perspectives (Atkins, et al., 2015). Embed within the critical school of thought, an agglomeration of divergent views further exists.

Friedman (1970) emphasised that the true social responsibility of organisations (especially private corporations) is to increase its profits. He asserted that corporations are run by executives who are agents of the business owners, and therefore cannot function in a capacity to execute decisions that would be detrimental to the purpose for which the business was set up. Any intention to execute responsibility functions (to the society and environment) without prior consent of the owners would be negating the principal-agent relationship. Hence, in Friedman’s opinion, the issue of social responsibility for corporations is a mere rhetoric as it entails that the executives would have to act in ways that are not in the primary interest of the principal. Nevertheless, Milman (2015) inadvertently pointed out in his study that corporations were the greatest culprits of social and environmental degradation, hence, if these corporations were to be continually allowed to pursue a responsibility of profits, the eventual amount of degradation that would be experienced would snowball in unprecedented proportions. In order to forestall such occurrences, a framework needs to be developed that would absolve the executives of such decisions that could place them at crossfires with their principals.

Shifting our attention to a concept that incorporates every component of the ESG make-up, integrated reporting in its traditional form is bedevilled with varied opinions and perceptions. This traditional form of integrated reporting has so far revealed some of its attendant flaws. According to deVilliers et al. (2014), the study carried out by Price Waterhouse Coopers (PWC) on integrated annual reports issued by FTSE 100 companies in the UK revealed that despite most of the companies disclosing their strategic aims, priorities and progress, only a handful provided detailed explanations of the execution of these strategies. Also, a more limited number of the sampled firms reported on their environmental and social impacts; which defeats the focus on sustainability. An objective of integrated reporting in creating a link between the critical elements of reporting was nowhere in achievement. Similar results were also discovered on a sample of IBEX 35 companies in Spain where a survey indicated that only 11% of sampled firms integrated strategy with sustainability (deVilliers et al., 2014).

Stubbs and Higgins (2014) noted that integrated reporting cannot be regarded as a revolution in sustainability reporting approaches, but rather can be adjudged to be an incremental phase in sustainability reporting developments. Stubbs and Higgins (2014) further asserted that integrated reporting is still relatively young in practice and therefore needs more time to bring about the desired innovative revolution in sustainability reporting, but seven years down the line, there has yet to be any significant change or possibility of any such change that would form the bedrock of the revolution in sustainability reporting. This resonates the assertion of Higgins et al. (2014) when they foresaw that the nature of integrated reports was unlikely to motivate any fundamental changes in the way companies carried out their operations.

Proponents of integrated ESG reporting (deVilliers et al., 2014; Higgins et al., 2014; Stubbs & Higgins, 2014) are of the opinion that the value of ESG reports lies in their separation from financial reports; as ESG reports focus on the company’s interaction with its environment, while financial reports focus on the organisation purely as an economic unit. By their standards, sustainability stand-alone reports have the potential to make companies more socially and environmentally aware of their impacts on stakeholder groups thereby leading to changes in their business practices. Some opponents (Friedman, 1970; Owen et al., 1997) are however of the opinion that the current ESG framework is unlikely to lead to changes in the manner in which corporations execute their activities and business, thereby reducing the likelihood of the framework to address social and environmental issues. Even where these changes occur, the rate of the change may be inadequate to cater for the risk posed by the ESG externalities. Gray (1990) outlined the negative externalities of ESG to include global warming, ozone depletion, decline in bio-diversity, green house effects, pollution, natural resource depletion, acid rain, human rights abuses, rise in sea levels, threats to habitats, deforestation, desertification, overpopulation among others. Gray (1990) opined that these negative externalities would impact negatively not only on the current generation, but also on future generations (if we have any). A limited scope exists for proffering solutions to these issues, and the solutions would be restrictive, at best, as opposed to being corrective.

Atkins et al. (2015) indicated that what is generally regarded as integrated reporting does not adequately capture the extent of environmental damage and depletion to people and the earth, thereby impeding the degree of accountability. Nevertheless, the monetisation of social, environmental, and other related costs could motivate a long-run integrated thinking which could engender sustainability; as corporations become more aware of both the economic and social implications of their activities and actions. This interesting ideology is however demystified by Owen et al. (1997) who asserted that:

> The interesting issue here for environmental (and social) accountants is how on earth a sophisticated and well-developed system, like accounting, which is administered by highly educated and undoubtedly intelligent people such as accountants, can be so complicit in encouraging – even requiring global devastation in the name of economic success we know as profit and growth. More especially still, what sort of mind is it that can reduce such a notion as complex and crucial as “environment” or “global” or “life” down to provisions, costs and efficiency without noticing that this is the worst kind of *reductio ad absurdam*? (p. 179).

Opponents of integrated reporting further posit that ESG indices are homogenous activities, and research into them are demanding and challenging. They believe that research into social and environmental accounting is premised on the existence of fundamental flaws in financial accounting and reporting, hence tinkering with ESG in relation to financial reporting would amount to a waste of time – at best (Owen et al., 1997).

We debunk the position of Owen et al. (1997) by asserting that focus on ESG and its attendant monetisation and incorporation into financial reporting does not amount to a waste of time. ESG sets out to correct the perceived flaw inherent in financial reporting, by extending the purview of financial reporting to a more encompassing view of sustainability. Accounting is therefore elevated from a mere function of identifying, recording and communicating financial and economic information, to a tool for preserving the earth as we know it. The environmental degradation experienced between the inception of the world and the dawn of the industrial revolution (amounting to thousands of years) cannot be compared to that which have occurred between the industrial revolution and current times (amounting to just about 200 years), as changes that occurred in recent years were unprecedented in the prior 10,000 years (Milman, 2015). The continual degradation of the societies and the environment can therefore be attributed to the activities of corporations. Despite the continued increase in the extent of voluntary and qualitative ESG disclosures, the extent of degradation to the planet however continues to be on the increase (Milman, 2015). This simply entails that corporations have not been motivated to reduce their negative impacts on society and the environment regardless of their increased ESG disclosures. What better way to communicate the impact of these negative externalities to them than through a language of business well understood by them: accounting numbers. Maunders (1996) however expresses fears that utilisation of a methodology such as the integration of ESG into financial reporting would shift focus to numerical outcomes and computational methods utilised while ignoring the reality from which such numbers were abstracted.

As highlighted by Friedman (1970), corporations have a questionable characteristics of being clear-headed and far-sighted with issues that relate to their internal business processes, and being muddle-headed and short-sighted when it relates to issues of external concerns irrespective of the fact that these external issues have the capability to affect in the long-run the overall performance and survival of the business. Traditional ESG reports do not serve to place a firm hold on these corporations. Alternative means (even beyond the purview of the current integrated reporting framework) are required to attract the interest of the corporations concerned. The debate about ESG being able to foster sustainability in its current form therefore seems to be an illusion devoid of substance. The way forward herein, as advocated by this study is the monetisation of the social and environmental costs which would unconsciously shift the focus of the firms from an organisation/economic-centred perspective to a stakeholder-driven perspective.

4. Developing a Concise Reporting Framework

Financial reporting in its current state could lead to the disenfranchisement of those stakeholder groups whose needs cannot be readily expressed in the common vocabulary of business (i.e. the use of accounting in its quantitative terms as a language of business). Accounting in these terms would therefore have failed in neutrality of communication by favouring those parties with stronger economic arguments at the peril of social and environmental related endeavours (Killian, 2010). Despite increases in the volume of ESG disclosures (Atkins, et al., 2015; Ilaboya & Ohiokha, 2016), social and environmental degradation continues to be on the increase (Milman, 2015). An empirical research question of how the human species would continue to exist on the earth given the rate of degradation to the environment and other life support systems is one that many do not wish to consider, let alone test, as no one wants to contend with the reality that at the going rate, extinction of the human race might become inescapable (Gray, 1990). The extent of degradation suffered in recent decades far surpasses the entirety of degradation experienced since the inception of the world up to the advent of the industrial revolution (Milman, 2015). This points to the fact that corporations are largely responsible for these degradations, and the power to reduce such equally rests in their bosom.

Traditionally, the focus of business organisations has been on profit maximisation, but in order to achieve the objective of sustainability, focus has shifted to the economic consequences of ESG activities. This shift is intensified by the pressures faced by firms from social and environmental legislations, as well as ethical codes and principles (Kocmanova et al., 2012). Other factors have also contributed to this paradigm shift. Some firms report more ESG activities in order to enhance their reputation and public image, thereby improving their financial performance (economic rationality motivating ecological rationality), while others limit their ESG activities and disclosures due to the fear of increased costs that may arise from engaging in more ESG activities and the concordant disclosures (Chen, Feldman & Tang, 2015).

An organisation does not, and cannot exist within a vacuum, but exists within an environment. This environment consists of the social and ecological factors from which the organisation receives its legitimacy and profits, and to which it is expected to provide benefits. An organisation that does not cater to the sustainability of its environment, though it makes profits presently, would not be able to sustain those profits in the future. Where would the profits continually emanate from when the environment and people that are supposed to continually provide such profits are on a deteriorating path? An organisation that wants sustained profits and long-term survival would continue to strive for positive influence on the environment within which it operates because as the environment prospers, so does the organisation. The continuous commitment of an organisation towards environmental, social and governance issues provides consistent competitive advantage, thereby functioning as an intangible asset that ensures continuous value creation for the organisation through consistent improvements in financial performance (Ferrero-Ferrero, Fernandez-Izquierdo, & Munoz-Torres, 2016).

Just as you cannot teach accounting students in tertiary institutions ‘financial accounting’ without ‘management accounting’ (as it is essential for accountants to not only report profits, but also to have a concise working knowledge of the activities and operations that led to the profits), so also it would be mundane to focus on financial reporting without recourse to ESG. This is because ESG factors play a major motivational role in the determination of profits; which is the primary objective of many organisations, along with fostering sustainability of not just the business, but the entire planet, if adequately utilised. Economic activities of organisations leave devastating effects on the environment. Focus on ESG helps to mitigate against these negative effects.

The development of standards for the incorporation of ESG metrics into financial reporting might be the best bet yet. Several international organisations have worked on developing standards for an integrated ESG framework in order to achieve its objective of obtaining and maintaining a balance among the pillars of sustainability. Notable among these are the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and the International Integrated Reporting Council (IIRC). Continual development of sustainability standards by these organisations is aimed at harmonising the ESG framework across national borders; in order to aid mutual comparison of national economies, industries and corporations (Kocmanova et al., 2012). These bodies however focus on standards that integrates qualitative ESG data as opposed to quantitative ESG data.

The ideal standards for sustainability are those that would focus on the monetisation of ESG indices and their direct integration with financial data. The development of such standards would however seem complicated, but then again, the initial development of financial reporting standards suffered same fate in the 19^{th} century (Riahi-Belkaoui, 2000). Many attempts have been made in the social accounting literature at developing constructs of what is generally referred to as sustainability reporting. These experiments executed variously by practitioners, lobby groups, policy makers and the academia include constructs such as full cost accounting, corporate social and environmental reporting, and triple bottom line accounting (Atkins et al., 2015). Corporate reporting has begun a voyage on more integrated modes of reporting in order to provide stakeholders with a more comprehensive overview of the true state of the firm's performance. Our study acknowledges that though these approaches may lead to increased quantity and quality of ESG disclosures, they however do no sufficiently satisfy general sustainability needs. These constructs of sustainability reporting do not impose sufficient responsibility on organisations for the effect of their operations and activities.

Sustainability reporting has therefore become a glorified concept utilised to conceal the original intent of corporations which seemingly has not changed since the era of the industrial revolution. It has inadvertently become a farce paraded by companies to project an image of concern for social and environmental issues while continuing to engage in "business as usual" (deVilliers et al., 2014). While the society and environment continues to experience a gloomy outlook, corporations continue to report massive profits. A handful of these corporations are emitters of greenhouse gases and firms whose activities impinge directly on the environment. This scenario continues to play out despite increased qualitative ESG disclosures by these corporations which begs the question of such disclosures enhancing accountability. These increased disclosures seem to be a form of 'window dressing' and not motivated by the genuine intention of protecting the environment (Atkins et al., 2015).

Current sustainability disclosures have served little to mitigate the spate of social and environmental degradation. In correcting these anomalies in 'sustainability disclosures', the study advocates the monetisation and holistic integration of ESG indices into the financial reporting framework. How would we as accountants be able to contribute to sustainability of the society and environment if we cannot bring organisations (that we primarily report for) to realise the extent of their negative externalities such as environmental pollution, environmental degradation, ozone depletion, nitrification, greenhouse effects and act to forestall such occurrences? The best way to effectively communicate to these organisations is through the language they properly understand; accounting numbers. The idea of the monetisation of ESG externalities appears to be a radical approach in engendering sustainability, but given the current spate of climate change, a radical approach might be the only probable solution. Despite the seemingly 'crude' nature of the quantification of the costs and benefits of ESG indices, it would serve the very important role of drawing organisations' attention to the impact of their business activities. If organisations know the cost implications of their social and environmental activities, they would pay more attention to those activities. Though these quantification techniques would initially tend to be imperfect until subsequent refinements, it is much better to utilise them, even in their 'crude' state, than to assume that the inherent costs of the indices is zero (Cuckston, 2013).

Environmental costs would generally be the easiest of the ESG indices to incorporate quantitatively into the financial statements. This could be achieved by first utilising appropriate measurement apparatus to determine the volume of toxic emissions by each organisations. This apparatus could be in form of a metre that measures the degree of toxic emissions. Different forms of emissions would be categorised based on their degree of toxicity and each category would be assigned different quantitative values (probably per cubic metres or cubic feet). The quantitative values assigned would be graduated as the degree of toxicity increases. Mandatory standards would have to be put in place for all corporations concerned to have such apparatus and regulatory authorities in place to ensure compliance. The total metre readings for an accounting period would be costs that would be recorded by the emitting corporation as expenses in their profit or loss statement. These emission costs would not only be represented as seemingly arbitrary figures in the financial statements, but the regulatory body or any other relevant body set up for the purpose would be saddled with the responsibility of collecting such funds from the corporations. The remittance of the overall recorded emission costs by the corporation transforms such costs into actual cash outflows with the ability to reduce the profit of the organisation. Corporations that do not comply with the above analogy would also be liable to fines as prescribed by the relevant authorities.

A justification for the above analogy can be inferred from the divergent schools of thought that exists as to the cost implications of engaging in environmentally positive activities and disclosures. Casual empiricism indicates that one school of thought is of the opinion that the cost implications for an organisation increases as the organisation takes steps to incorporate cleaner production means into its mechanism of operation, while the opposing school of thought stipulates that if effective mechanism exist for the appropriate measurement of environmental pollution, then companies would realise that it is more cost efficient to engage in cleaner production which also helps the firm to escape environmental pollution fines and penalties. This is because engagement in the production of environmentally harmful products appear to be less costly as the negative impacts of those processes are not being accounted for, and corporations that engage in such are most often not subjected to strict regulations, fines and penalties. If firms were made to realise the implications of harmful and toxic production through cost mechanisms and appropriate regulations, then they would realise that it is overall (economically, socially and ecologically) more beneficial to engage in the production of cleaner and environmentally friendly products bolstered by the presence of the 'green goodwill' element. Further studies can also build on our proposition to develop means of quantitative inculcation of the social and seeming problematic governance element.

We therefore canvass the development of a concise integrated framework which adequately captures, in a single financial report, both financial data and systematic ESG data in quantitative terms. In order to effectively achieve this goal, ESG data would have to be internalised. This would be achieved through the development of valuation models that can be used to effectively determine the degree of both positive and negative ESG externalities, in order to aid their quantification. The development of these valuation models would be enhanced by the creation of a market for the ESG externalities, and the imposition of costs on them. This sounds like a daunting task, but then again, financial accounting and management accounting as we know them today began as daunting tasks, both with shortcomings that have largely been overcome and continues to be tackled. The important thing is to realise that major challenges would be involved, understand these challenges, and face them head on. Regulators would play a major part in this respect, as they would be saddled with the pricing of the ESG externalities. It would also be important to carry along relevant stakeholders in this pricing process, and this would include the corporations upon which such costs would be imposed, the public that bears the brunt of the ESG externalities, along with other interests such as accounting practitioners, institutions, government and the academia.

We opine that the pricing of the ESG externalities should be uniform for all corporations irrespective of operations, size and industry, varying only in degree of toxicity. Also, the wholesome integration of ESG indices into the existing financial reporting framework would not necessarily be a complex phenomenon in itself. This is because adequate infrastructure already exists in place for financial reporting, and it is upon these infrastructure that any further infrastructure needed for the integration of the ESG indices would be embedded.

Theoretical Underpinning

Our study anchors its theoretical framework on the system theory. The system theory takes a holistic view of phenomenon, and highlights that all phenomenon consists of connected and interrelated parts that make up the whole. “Systems theory aims to explicate dynamic relationships and interdependence between components of the system and the organization-environment relationships. A system is established based on the structure and patterns of the relationships emerging from interactions among components” (Lai & Lin, 2017:2). The system theory highlights that organisations would function more effectively when their respective parts and components are substantively related and connected (Scott, 1974). In this vein, qualitative ESG disclosures do not give substantive credibility to the linkage of sustainability reporting to financial reporting. The accountants’ world centres on the organisation as it exists within an environmental framework (excluding the ecological sense of the environment), but the organisation cannot exist in an ecological vacuum.

Organisational activities exists as an interaction between the organisation itself and its social and ecological environment (Aldrich & Pfeffer, 1976). The organisation utilises resources obtained from the environment, and disposes the wastes from its activities back into the environment. These cycle of events creates a systematic structure between the organisation and its environment. Within this system, social and environmental capital are continually impoverished in lieu of man-made capital. While the man-made capital is disclosed in the financial reports, the social and environmental capital are mostly ignored. This creates a system problem; as one part of the system cannot be captured while the other part is neglected. The picture of activities presented by accountants is then only a partial view of events, jeopardising actions and decisions. It is therefore essential for accountants to develop models to cater for the totality of these interactions. These models would have to be ideal and concise, as opposed to being artificial, arbitrary models that would be misleading. As asserted by Gray (1990), to stipulate that phenomenon which cannot easily be measured is not important connotes blindness, and to say that phenomenon that cannot easily be measured do not exist is suicide.

5. Conclusion

Sustainability reporting has evolved through time, but there seems to be no significant impact of the reporting framework on sustainable development. Our study indicates that the perceived ability of the current state of ESG reporting to engender true sustainability is a mere illusion. A revolution of the reporting framework therefore becomes essential in order to address the shortcomings that have hitherto existed. The study proposes the monetisation of ESG externalities and the incorporation of such monetary values into the financial reporting framework of organisations. The rationale behind this proposal is based on the eventual awareness that the revolution would bring to the corporations involved; as they initially strive to keep their profits going, but are unconsciously compelled to engage in the production and procurement of cleaner products, and the provision of services in a manner that is more socially and environmentally friendly.

Prior studies on ESG (deVilliers et al., 2014; Higgins et al., 2014; Stubbs & Higgins, 2014) support the integration of qualitative ESG indicators in decision making. This study disagrees with prior literature on this front and advocates the development of a concise set of financial reports integrated with quantitative ESG data. The holistic integration of ESG data with corporate financial data would place both disclosures on equal footing leading to fundamental changes in investment practices and corporate management. It is also a necessity as it would bring about an alignment of market forces with social interests. The development of a quantitative integrated reporting framework would also provide a remedy for the principal/agent (owner/executives) dilemma highlighted by Friedman (1970), as the execution of an updated reporting framework that inculcates monetised ESG would impose mandatory reporting of responsibility indices automatically shifting the burden away from the executives. This holistic integration can however only be possible given the willingness of governments, regulatory institutions, stock exchanges, professional accounting bodies and the academia along with consumers, investors, corporations and the community at large to acknowledge the importance of ESG and therefore support and drive such incorporation. However, given the lax attitude of governments and corporations to issues of sustainability, the NGOs have a major role to play as a driving force for consensual negotiations and collaborations between both parties.

Beyond the concepts of accountability, transparency, stakeholder empowerment and responsible investment, this study focuses on a major goal of ESG reporting; sustainable development. Sustainable development cannot be achieved if corporations that are the greatest culprits of environmental degradation cannot be made aware of the extent of their negative impacts on the environment. What better way therefore can corporations be motivated to reduce the extent of their negative impacts on the environment and society, than through the monetisation of those negative impacts? In order to effectively capture the attention of the corporations, the ESG externalities caused by them should be reported in the language best understood by the corporations; through the use of accounting numbers. Despite the relatively uncertain, seemingly subjective and probably contestable nature of the monetisation of ESG externalities, in our opinion, it remains the best immediate solution to achieving the goal of sustainable development. ESG disclosures remaining in their current; mostly voluntary, stand-alone state would simply increase the risk of ESG being a mere passing fad that would eventually fade away.

References

Akhter, S., & Dey, P. K. (2017). Sustainability reporting practices: Evidence from Bangladesh. *International Journal of Accounting and Financial Reporting, 7*(2), 61-78.

Aldrich, H. E., & Pfeffer, J. (1976). Environments of organisations. *Annual Review of Sociology, 2*, 79-105.

Atkins, J., Atkins, B. C., Thomson, I., & Maroun, W. (2015). 'Good' news from nowhere: Imagining utopian sustainable accounting. *Accounting, Auditing & Accountability Journal, 28*(5), 651-670.

Bebbington, J. (2001). Sustainable development: A review of the international development, business and accounting literature. *Accounting Forum, 25*(2), 128-157.

Brundtland Report (1987). *Our common future*. Report of the World Commission on Environment and Development presented at the General Assembly of the United Nations.

Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews, 12*(1), 85-105.

Chen, L., Feldman, A., & Tang, O. (2015). The relationship between disclosures and corporate social performance: Evidences from GRI reports in manufacturing industry. *International Journal of Production Economics, 170*, 445-456.

Clarkson, P., Li, Y., Richardson, G., & Vasvari, F. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy, 30*, 122-144.

Cuckston, T. (2013). Bringing tropical forest biodiversity conservation into financial accounting calculation. *Accounting, Auditing & Accountability, 26*(5), 688-714.

Del-Bosco, B., & Misani, N. (2016). The effect of cross-listing on the environmental, social, and governance performance of firms. *Journal of World Business*, *51*(6), 977-990.

deVilliers, C., Rinaldi, L., & Unerman, J. (2014). Integrated reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal*, *27*(7), 1042-1067.

Ferrero-Ferrero, I., Fernandez-Izquierdo, M. A., & Munoz-Torres, M. J. (2016). The effect of environmental, social and governance consistency on economic results. *Sustainability, 8*, 1-16.

Friedman, M. (1970, September 13). The social responsibility of business is to increase its profit. *New York Times Magazine.* Retrieved from: http://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html

Gray, R. H. (1990). *The greening of accountancy: The profession after Pearce*. London, England: Certified Accountants Publications Ltd.

Higgins, C., Stubbs, W., & Love, T. (2014). Walking the talk(s): Organisational narratives of integrated reporting. *Accounting, Auditing & Accountability Journal*, *27*(7), 1190-1216.

Husted, B. W., & de Sousa-Filho, J. M. (2016). The impact of sustainability governance, country stakeholder orientation, and country risk on environmental, social and governance performance. *Journal of Cleaner Production*, *30*, 1-10.

Ilaboya, O. J., & Ohiokha, F. I. (2016). Determinants of the changing volume of corporate annual financial reports: Empirical evidence from Nigeria. *DBA Africa Management Review*, *6*(2), 45-53.

Killian, S. (2010). No accounting for these people: Shell in Ireland and accounting language. *Critical Perspectives on Accounting*, *21*, 711-723.

Kocmanova, A., Docekalova, M., Nemecek, P., & Simberova, I. (2012). *Sustainability, environmental, social and corporate governance performance in Czech SMEs*. Retrieved from: https://www.researchgate.net/publication/265186811

Krechovska, M., & Prochazkova, P. T. (2014). Sustainability and its integration into corporate governance focusing on corporate performance and reporting. *Procedia Engineering*, *69*, 1144-1151.

Lai, C., & Lin, S. (2017). Systems theory. In C. R. Scott and L. Lewis (Eds.), *The international encyclopaedia of organisational communication*, 1-18. John Wiley & Sons Inc.

Lokuwaduge, C. S., & Heenetigala, K. (2016). Integrating environmental, social and governance (ESG) disclosure for a sustainable development: An Australian study. *Business Strategy and the Environment*, *26*(4), 438-450.

Lu, W., & Taylor, M. E. (2016). Which factors moderate the relationship between sustainability performance and financial performance? A meta-analysis study. *Journal of International Accounting Research*, *15*(1), 1-15.

Maunders, K. T. (1996). *Environmental accounting: Is it necessarily an oxymoron?* University of Hull, Working Paper Series No. HUSM/KT/28.

Mervelskemper, L., & Streit, D. (2017). Enhancing market valuation of ESG performance: Is integrated reporting keeping its promise? *Business Strategy and the Environment*, *26*(4), 536-549.

Milman, O. (2015, January 15). Rate of environmental degradation put life on earth at risk, says scientists. *The Guardian*. Retrieved from: https://www.theguardian.com/environment/2015/jan/15/

Moneva, J. M., Archel, P., & Correa, C. (2006). GRI and the camouflaging of corporate unsustainability. *Accounting Forum, 30*(1), 121-137.

Odia, J. (2013). *Determinants and consequences of corporate social and environmental disclosures* (Unpublished Doctoral Thesis). Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, Nigeria.

Orr, D. (2004). *Earth in mind: On education, environment and the human prospect*. Washington: Island Press.

Owen, D., Gray, R., & Bebbington, J. (1997). Green accounting: Cosmetic irrelevance or radical agenda for change. *Asia-Pacific Journal of Accounting*, *4*(2), 175-198.

Pavlopoulos, A., Magnis, C., & Iatridis, G. E. (2017). Integrated reporting: Is it the last piece of the accounting disclosure puzzle? *Journal of Multinational Financial Management*. Retrieved from: http://dx.doi.org/10.1016/j.mulfin.2017.05.001

Plumlee, M., Brown, D., Hayes, R. M., & Marshall, R. S. (2015). Voluntary environmental disclosure quality and firm value: Further Evidence. *Journal of Accounting and Public Policy, 34*, 336-361.

Rezaee, Z. (2016). Business sustainability research: A theoretical and integrated perspective. *Journal of Accounting Literature*, *36*, 48-64.

Riahi-Belkaoui, A. (2000). *Accounting theory* (4th ed.). London, UK: Thomson Learning.

Scott, W. G. (1974). Organization theory: A reassessment. *Academy of Management Journal*, *17*(2), 242-254.

Sttubbs, W., & Higgins, C. (2014). Integrated reporting and internal mechanisms of change. *Accounting, Auditing & Accountability Journal, 27*(7), 1068-1089.

Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal, 33*, 885-913.

Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review, 53*(1), 112-134.

Wilburn, K., & Wilburn, R. (2013). Using global reporting initiative indicators for CSR programs. *Journal of Global Responsibility, 4*(1), 62-75.