Iosr Journal Of Economics And Finance (Iosr-Jef)
E-Issn: 2321-5933,P-Issn: 2321-5925.Volume 15, Issue 2 Ser. 1 (Mar. – Apr. 2024),Pp 54-68
www.Iosrjournals.Org

Environmental Sustainability Reporting AndFinancial Performance Of Firms Listed At The Nairobi Securities Exchange, Kenya

Geoffrey C Kipngetich
[1]*department Of Accounting And Finance, Kenyatta University, Kenya*

Dr. James Gatauwa, Phd
[2] *Department Of Accounting And Finance, Kenyatta University, Kenya*

Despite the benefits associated with environmentally sustainable reporting however, most firms in developing countries like Kenya only implement such practices to for compliance reasons. This study sought to establishing whether their performance and environmental sustainability reporting are related of Nairobi Security Exchange (NSE) listed firms. Specific objectives include climate action reporting, responsible consumption and production reporting, sustainable innovation reporting and reporting on the success of NSE listed companies' utilization of sustainable energy. Stakeholder, institutional theory, the theory of CSR, and theory of impression management all lend support to the study. An explanatory design was employed. The target population was 116 respondents from 58 firms listed in NSE. The study adopts census approach to study all the Listed firms. The data collection instrument to be used was a semi-structured questionnaire. While theme analysis was used to examine quantitative data, descriptive, inferential, and other statistics was employed. A multiple linear regression model was adopted for analysis. The diagnostic tests used in the research include normality test, multicollinearity test, Heteroscedasticity, linearity and analysis of variance. The study established that sustainable energy use reporting, sustainable innovation reporting, Sustainable energy use reporting, and sustainable innovation reporting significantly influences financial performance, this accounts for the variation in financial performance among companies listed on the NSE and concluded that there is a high correlation between the financial performance of firms listed on the NSE. Environmental sustainability reporting variables were found to have a statistically significant effect on financial performance. When applied effectively, environmental sustainability reporting may enhance financial performance. Furthermore, the research suggests that companies listed on the NSE should employ sustainability reporting in the following strategic ways: incorporating sustainability into the business model, accepting responsibility for the sustainability performance of products and services, including the whole company, and engaging in collaborations.

Keywords: ***Environmental Sustainability Reporting,Financial Performance,Nairobi Securities Exchange, Climate Action Reporting, Sustainable Innovation Reporting, Sustainable Energy Use Reporting, Sustainable Innovation Reporting***

INTRODUCTION

Goals of a business are often thought of as increasing profits and providing greater value to the company's shareholders. When pursuing these objectives, the corporate sector regularly transgresses business regulations, causes environmental and ecological harm, and endangers employee safety (Skouloudis et al., 2019). Something that financiers, clienteles, vendors, régimes, and workers should be aware of. All of these parties are forcing the organization's management to do more and assume more responsibility for raising their ethical and social duties (Khan, 2019). These stakeholders are at danger as a result of firms being reprimanded because of the damaging effects that their operations have on the environment, their workers, and society. The solvency, value reduction, public impression, and public trust of the organization are ultimately impacted by these accounting crimes and staff abuse (Ehsan et al., 2018). Corporation's singular emphasis on making returns has negative effects on society at large and has put the world on a very precarious trajectory. Especially in poorer nations, businesses don't give environmental issues much thought. Global warming is occurring at a quicker rate than previously due to ongoing greenhouse gas emissions (IPCC, 2014). Because of this, the biological system keeps deteriorating, and global warming also causes extreme weather phenomena like cyclones and droughts. Greenhouse gas emissions are a result of the excessive energy consumption in daily life and economic activities that we engage in to improve our standard of living and wealth.

Sustainability reporting entails the disclosure and expression of ESG objectives, as well as the tracking of an organization's progress in achieving them. Through sustainability reporting, businesses may show how they perform and what they've done in relation to a range of sustainability issues, such as the environment, society, and governance (Gallego lvarez, &Ortas 2017). By allowing stakeholders to have a greater grasp of performance outside of the bottom line, it helps organizations be more forthcoming about the dangers and possibilities they confront. Reporting on sustainability provides a number of advantages, such as increased customer confidence, greater brand reputation, more innovation, and even better risk management. Various methods, such as the use of reputable sustainability reporting frameworks like GRI or CDP, can be used to integrate sustainability reporting within your corporate social responsibility programs, Use rating systems like the Dow Jones Sustainability Index (DJSI) or recommendations like those established by the IIRC to incorporate sustainability performance into your overall performance disclosures. (Gallego lvarez, &Ortas 2017)

The need for greater private sector accountability and transparency is expanding across many markets, including both developed and developing nations. Businesses are under more pressure than ever to produce, evaluate, data about their sustainability performance should be made available to the public due to the possible threats their products and services cause to people's health and the environment (Masud et al., 2018). Corporate sustainability reporting, a possible method to create data, it can help with the transition to a low-carbon, resourceefficient, and inclusive green economy to measure progress and evaluate how businesses contribute to global sustainable development goals.

Financial performance is the difference between the industry's actual outputs or outcomes and its anticipated outputs. Performance also denotes to the completion of the objectives of an institute after the conclusion of a project or program. However, when it comes to definition and assessment, the idea of performance is challenging. Performance metrics can be divided into two basic categories, according to Ravelomanantsoa, Ducq, and Vallespir (2019): the ones that are concerned with outcomes and the ones that focus on the elements that influence outcomes. It follows from this that frameworks for performance evaluation may be developed around the concepts of outcomes and determinants. It has been described as the outcome of an activity, and the best way to measure corporate performance is said to rely on the kind of company being assessed as well as the goals that was attained via that assessment (Amahalu, Nweze, & Obi, 2017).

Through adoption of environmental sustainability reporting, some performance measures can be attained including company reputation, consumer confidence, innovation as well as improved risk management. Executives are aware of the importance of a company's reputation. Strongly recognized companies attract more talent. Due to the perception that they provide superior value, they may typically charge more. More loyal and diverse products and services are bought by their customers. Consumer confidence measures how hopeful people feel about their own financial situations as well as the state of the economy as a whole. Given that in the majority of countries, private consumption makes up around two-thirds of all economic activity, it is a crucial source of economic statistics. Consumer confidence is frequently strong while the economy is expanding. Because of this, people typically spend more money than they would during other times, especially on pricey items and durables. Consumer spending is increasing, which contributes to the expansion of the economy (Ravelomanantsoa, Ducq, &Vallespir, 2019).

The financial performance of any company is shown using indicators like the profits, earnings, and increase in share price, (Lee-Kuen, Sok-Gee, & Zainudin, 2017). How effectively a corporation uses the resources at hand during the course of its main business operations to create revenue may also be used to measure financial success. Financial performance also provides information about a company's long-term financial stability and allows for comparison with other companies operating in the same sector. The ROCE, ROA, and ROE are returns on capital employed accounting ratios are used to assess performance in the corporate governance literature (Yawson, 2006). Similar to this, other methodologies like the method that emphasizes economic value added, are employed in addition to accounting-based methods to evaluate shareholders' value by calculating an entity's profitability after taking into account its entire cost of capital. The commonly used criteria of "capital adequacy, asset quality, management, earnings, and liquidity" are additional ones that profit-making organizations use to assess their financial success.

Statement of the Problem

Nairobi Stock Exchange (NSE) Plc have experienced inconsistent financial performance between 2019 and 2022. In 2019 for instance, the data available on the NSE (2022) website shows a total income of Ksh. 715.6 million which was a decline from 782.4 million recorded in 2018. The profit before tax for the year 2019 was 104.5 million a significant decline from 240.9 million in 2018. The following year, 2020 further saw a decline in total income to 670 million but an increase in profits before tax to 218.9 million. In 2021, NSE's total income increased to 714.3 million while profit before tax declined to 210.9 million (NSE, 2022). Thus, there have, have been inconsistent performance of NSE Plc over the last four years and thus the need to understand some of the issues leading to such inconsistencies.

There have also been inconsistent between firms in different industries. For instance, according to bank performance records, the banks' earnings increased by an average of 34% to reach cumulative profits of Sh85.4 billion between January and June 2022, up from cumulative profits of Sh63.86 billion that they recorded in the first half of 2021 (NSE, 2022). Similarly, the automobile and accessories industry have been recording increased performance with Car & General (K) Plc recording turnover of Shs. 17.1 billion in 2021 against 12.1 billion in 2020. The company recorded gross profits of Shs. 887 million in 2021 which was over 300% higher than in 2020 (Car & General, 2022). However, the manufacturing firms have recorded declining performance. For instance, according to KIPPRA (2021), manufacturing industries' industrial division fell to 3.5% in 2019 from 4.4% in 2018. This reduction is linked, 42% of manufacturing companies have been compelled to work at less than 50% of their potential capacity due to macroeconomic challenges, to a decline in consumption goods production and a global recession brought on by Corona virus illness (COVID-19) (KAM, 2021) leading to poor financial performance.

Although the type of the information to be released is still up for debate, a company's readiness to engage in sustainable reporting and to supply all stakeholders with the necessary information demonstrates their care for the environment as well as the social license to continue their activities (Overland, 2007). In order to meet the suppliers', consumers', and regulatory authorities' ever-changing needs, marketplaces today are becoming more competitive. The demand on businesses to prosper both now and in the future is increased by each of them. Impact of sustainable financial reporting on business success has received a lot of attention in recent years, and it continues to do so in today's business environment. Companies are being pushed to broaden their emphasis from a short-term and limited financial perspective toward social, economic, and environmental sustainability. In order to succeed and lead in future markets, corporations must improve their corporate social responsibility policies and shift their culture to one that values social and environmental concerns.

The necessity to conserve the ecosystem and growing concern about global environmental concerns have made environmental sustainability reporting more important for both developed and developing countries. The literature has garnered popularity as a result. Due to the demand for consumer transparency, shareholders, other investors, and public increases, sustainability reporting has established itself as an essential tool that businesses and organizations may employ (Martínez et al. 2016). Through sustainability reports, businesses voluntarily divulge details on how their activities affect the economy, the environment, and society. This helps companies to be more forthcoming about their sustainability performance, whether it is successful or unsuccessful (Nobanee& Ellili 2016). Additionally, this increased transparency offers investors the chance to set more precise valuations and better deploy their resources to businesses that will have an impact that is more favourable. Better competitive positions and more market benefits result from this (Fracarolli Nunes & Lee Park, 2017; Milne & Grey, 2013).

Despite the benefits associated with environmental sustainable reporting, most firms in developing countries like Kenya only implement such practices to for compliance reasons. This raises the

question of whether the benefits associated with this kind of reporting are only theoretical in nature or whether firms are not aware of them. this study sought to use primary data in determining if environmental sustainability reporting and the profitability of NSE listed companies are related.

Objectives

I. TodeterminetheeffectofclimateactionreportingonfinancialperformanceofNSElistedFirms.
II. ToexaminetheeffectofresponsibleconsumptionandproductionreportingonfinancialperformanceofNSE listed Firms.
III. To establish the effect of sustainable innovation reporting on financial performance ofNSElisted Firms.
IV. To establish the effect of sustainable energy use reporting on financial performance ofNSElisted Firms.

Organization of the Paper

This research study is divided into sections, beginning with an introduction that discusses fundamental topics and context. It also examines the theoretical literature review, research methods, data analysis, and findings and recommendations.

THEORETICAL LITERATURE REVIEW

Institutional Theory

This idea was created by Goguen and Burstall in 1984. The approach emphasizes the organization's surroundings as a critical factor in defining its structure and behaviours. Changes in the business climate may push an organization to revolutionize or establish fresh plan to put into effect, even if it does not want to. The idea has focused on how the organizational environment shapes the organizational structure and commercial operations. According to institutional theory, organizational decisions are influenced by social and cultural elements that are regarded appropriate given the organization's structure rather than being simply directed by well-organized and rational aims. It also takes into account how such arrangements degrade and fail, and how their leftovers influence new formations. In the successful decades following introduction of Institutional theories, there have debates on its applicability to the organization setting. According to North (1990), institutions are social norms or, to put it more technically, humanly created limitations that influence how people interact

According to the hypoproject, companies become similar as a result of pressure for authenticity, implying that businesses dealing with comparable products are more inclined to adapt to continuously changing client needs by emulating their market leaders (Gauthier, 2013). Furthermore, the theory emphasizes organizational social behaviour, defining formations, practices, and protocols as organizational strategies (Aksom&Tymchenko, 2020). The institutional theory provides a framework for investigating how businesses engage with their workforces and other stakeholders, as well as how technology might aid in the establishment of that connection through time. The theory can still help modern organizational strategies, methods, and structures, as well as policies. In some cutthroat and unstable contexts, organizations' relationships with various stakeholders in their environment have an impact on how they decide how employees' careers will grow. Organizational decisions, according to institutional theory, are not primarily motivated by rational objectives. In the study, the idea is utilized to describe how social norms and regulations with an impact on performance based on organizational technology can transform an organization. This research will apply this theory to the important areas that influence leadership in creating firm policies, plans, and processes, and showing how they are ingrained when the organization interacts with its surroundings, which affects how they operates. The propensity for institutionalized organizational structures and procedures to be taken for granted, regardless of the consequences for efficiency, is highlighted by institutional theory in particular by the legitimation processes that it highlights (Hoffman & Marc, 2002).

Institutional theory's detractors (Willmott, 2015) have already acknowledged that the theory provides a thorough criticism of all theories that fail to pay enough attention to how human behavior is institutionalized as well as different iterations of rationalist analysis. Munir (2011) accused institutional theorists of being useless and condemned them for having little interest in the 2008 global financial crisis. In fact, there was just one conference of organization theorists in the early wake of the crisis, despite their being multiple high-profile gatherings of economists. The institutional theory as adopted in the present study explains how different forms of pressures forces organizations to enact environmental sustainability reporting actions such as Climate action reporting. In accordance with institutional theory, there are three different sorts of elements that might result organizational tactics, structures, and practices are isomorphic. These impulses include coercion, norm, and imitation (DiMaggio & Powell, 1983). Coercion is caused by strong personalities, normative constraints cause firms to become more environmentally conscious, and they assert that to comprehend changing cultural norms, institutional study is necessary. and organizational responses to environmental challenges Ball and Craig (2010) found that. normative motivations are affected by a social obligation to comply that is based on a need for the community or on what a group of people or an organization should be doing. (March and Olsen, 1989). The theory therefore explains and supports the climate action, reporting and sustainable innovation reporting variable that's why the study has adopted the theory.

Stakeholder Theory

In his book on strategic management, Edward Freeman created the stakeholder theory in 1984 (Freeman, 1984). According to the theory's central tenet, an organization need to consider the opinions of a larger range of interested people, sometimes referred to as stakeholders (Minyu, 2012). The requirement to take into account all stakeholders led to the development of stakeholder theory, which is basically about managing stakeholder relationships and their conflicting interests (Preble, 2005). The managers' role in stakeholder management is to protect each group's long-term interests as well as the firm's long-term viability (Locality, 2011). The groups of individuals that are essential to the existence and development of the business are known as stakeholders, according to Freeman, Harrison, Wicks, Permar, and Colle (2010). The links between a company's stakeholders, such as its customers, partners, employees, investors, and community members, are emphasized by the stakeholder theory of capitalism. The idea is that a business should provide value for all parties, not only its shareholders.

Stakeholder theory has been shown to be crucial for CSR initiatives as well as organization management. The idea proposes that shareholders are not the only ones who contribute to corporation's performance, according to Freeman et al., (2021). Stakeholders have a direct impact on how an organization conducts its business. According to the stakeholder project, directors have a responsibility to both shareholders and stakeholders. They will run the company to their benefit. This theory's flaw is that it runs counter to the goal of corporate profitability. through promoting the equal treatment of all parties involved. According to Sternberg (2019), this idea violates the rights. Theory undermines free market processes by not taking capitalism into account and by doing away with the function of the government. Groups of stakeholders, varying stakeholder dependency, variable salience, numerous inclusions, stakeholder effect, central position in the model, numerous links, and interactions all exhibit heterogeneity (Fassin, 2008).

Freudenreich et al. (2020) contend that there is no one model for identifying the goals of an organization. It also takes moral and financial concerns into account. It also offers directors a goal and encourages fairness for all parties with an interest in the organization. The interests of the stakeholders must come first. Stakeholder theory promotes an environment in which social wealth is produced for the benefit of all, according to Dmytriyev et al.'s (2021) evidence. Stakeholder theory successfully combines ethics and economics. If a company's primary objective is to maximize financial gain for its shareholders, it will never succeed. It must endure criticism from several parties, including creditors, clients, staff, and suppliers. After all, a shareholder's investment has a direct impact on the health and performance of the company. Consequently, the whole business was nefit if directors keep stakeholders in mind. Different academics have, however, drawn attention to the shortcomings of stakeholder theory. For instance, Key (1999) contends that stakeholder theory lacks definition and cannot, therefore, be operationalized in a form that permits scientific examination.

Stakeholder theory, it is said, does not provide any criterion for making decisions that would effectively direct corporate governance. Others, such as Hörisch et al. (2020), contend that stakeholder theory is meaningless and presents an unrealized picture of how businesses function. Different groups, each with its own unique set of wants. CSR initiatives are or need to be strategically targeted to meet these demands. Whether a company's corporate responsibility program meets the expectations of its many stakeholders will determine its effectiveness. Therefore, a company's stakeholders must provide input on how important they believe these various priorities should be balanced. ensuring that its action is viewed as important by the company and its stakeholders, the firm must define, confer with, and involve these stakeholders in its program. Some businesses are far along in this process of communication. Pesqueux and Damak-Ayadi (2003) strongly criticize the "misleading obviousness" of stakeholder theory. They first consider its descriptive appearance as a pragmatic screen that hides the militant discourse that it supports. For instance, it seems obvious that stakeholder theory is based on psychological and sociological concerns.Pesqueux and Damak-Ayadi (2003) strongly criticize the "misleading obviousness" of stakeholder theory. They first consider its descriptive appearance as a pragmatic screen that hides the militant discourse that it supports. For instance, it seems obvious that stakeholder theory is based on psychological and sociological concerns.

The "misleading obviousness" of stakeholder theory is harshly criticized by Pesqueux and Damak-Ayadi (2003). They start by analyzing its descriptive look as a practical cover for the aggressive rhetoric it promotes. For instance, it is apparent that the psychological and social problems at the core of stakeholder theory. According to Key (1999), stakeholder theory lacks definition and cannot be operationalized in a way that permits scientific analysis. Others contend that stakeholder theory does not offer any standards for decision-making that would appropriately guide corporate governance, such as a commentator on my first piece at Conglomerate. The majority of detractors, like Teppo (2006), believe that stakeholder theory is meaningless and presents an unrealized picture of how businesses function. While some stakeholder models accomplish each of these goals, the real problem is in the sheer number of variations on the concept that it may be challenging to even know where to begin when offering critique.

In the present study’s context, reporting practices, such as gathering Data from business units with various goals offer not only a step toward assessing and monitoring the overall corporate responsibility performance, but also a real chance to demonstrate a commitment to ethical business practices. The context for consumption and production sustainability reports is as follows: First, they significantly provide companies a chance to express their commitment to ethical business practices while also helping to formalize their CSR views. As a result, the theory clarifies the consumption and production reporting variable.

Corporate Social Responsibility Theory

American economist Howard Bowen introduced the idea of CSR in his book Social Responsibilities of the Businessman (Bowen & Johnson, 1953). This is the idea that companies willfully incorporate social and environmental concerns into their routine business operations and relationships with stakeholders. CSR comprises properly managing a company's current and the effects of future social and environmental changes on the neighbourhoods where it conducts business and on society at large (Gabrieth, 2009). The fundamental tenet of the CSR theory as a management concept is the conviction that business should be directed toward not only its own profits but also to take into account social interests while also raising the company's worth. Corporate social responsibility is often divided into four categories: economic, ethical, charitable, and environmental responsibility.

Socially conscious actions, according to CSR proponents, may benefit an enterprise by enhancing worker attraction and retention, reducing environmental hazards by preventing dangerous situations, and differentiating companies to boost consumer loyalty (Ahluwalia, 2022). the acceptance of "triple bottom line" performance, which takes into account not only owners' financial returns but also societal and environmental benefits at large, may also be argued for by CSR proponents (Chowdhury, 2019). Milton Friedman and other conservative opponents, on the other hand, have argued against CSR, claiming that a corporation's aim is to maximize profits for its shareholders and that it has no need to engage in CSR obligations to society at large. The critics' claim that managers shouldn't choose social reasons on behalf of a broad group of owners is one of their main points (Saeed & Sroufe, 2021). Instead, CSR critics contend that companies serve society best when revenues are distributed to owners, who may then make charity contributions or engage in other socially conscious activities as they see suitable. Instead than attacking the CSR idea, other detractors provide instances of subpar CSR initiatives (Ahluwalia, 2022). For instance, the phrase "greenwashing" refers to situations where firms have invested much more money in marketing their "greenness" (i.e., running sustainably) than in the ecologically friendly activities themselves (Ahluwalia, 2022). Critics see them as dishonest, if not downright unscrupulous, attempts to influence the public's impression of a firm without requiring it to genuinely help the environment.

According to recent research and as a specific philosophy of how businesses engage with the community and the wider world, CSR is made up of four duties: environmental, philanthropic, ethical, and economic responsibility. Even though it is not required by the letter or spirit of the law, upholding moral principles is the ethical obligation that is more heavily emphasized in the current study (Chowdhury, 2019). This is the key tenet of the theory, and it depends on a steadfast corporate culture that views the corporation as an integral part of society with the types of obligations such membership frequently entails. At many industrial sites, hazardous waste is a natural consequence of the fabrication process. Despite the fact that they have nothing to do with the particular industry, organizations nevertheless have a charitable obligation to support social programs. Businesses are obligated to provide contributions to the public good in methods determined by the needs of the neighbourhood, just like everyone else in the world. The notion goes on to argue that every invention a company makes should address the welfare of the community in which it is located. It thus supports the sustainable innovation reporting.

Impression Management Theory

Goffman (1959) developed the impression management theory. Impression management, commonly referred to as self-presentation, describes the techniques employed by individuals or groups to try and influence how others view them (Goffman, 1959). People have the power to persuade others to react to them in positive ways by giving off certain impressions about their skills, attitudes, intentions, status, emotional reactions, and other traits. It is standard practice for individuals and organizations to exert influence over one another in order to achieve a variety of objectives. Although earlier theorists (Burke, 1950; Hart & Burk, 1972) provided viewpoints on the individual as a performer, the first to formulate a detailed theory on how one presents themselves was Goffman (1959). Goffman established the guiding concepts and laid the groundwork for what is now known as impression management (IM) in his well-known work.

Additionally, when analyzing other organizational behaviour phenomena where image issues may be prominent, researchers have taken an IM viewpoint. For instance, scholars have examined feedback seeking, organizational citizenship behaviour, and leadership and management through an IM lens (Morrison &Bies, 1991; Yun, Takeuchi, & Liu, 2007; Gardner & Avolio, 1998). As a result, in addition to more conventional analyses of IM in organizational contexts, academics have discovered a wide range of applications for IM ideas in their efforts to explain a wide range of workplace occurrences. The study of IM at the organizational level has also been done, however it is not as thorough as the study of IM at the person level. According to this research, firms may employ IM strategies to shape their perception among a range of constituents (Thornbury & Little, 2007). All of these IM study projects indicate that image issues frequently influence a variety of organizational behaviours, include more people than simply those who use IM, and happen at different levels.

Impression management, defined by Brennan et al. (2009), is the technique people use to attempt to influence how others see them. According to Jaworska and Bucior (2017), self-representation is the primary goal of impression management. According to Ahmad and Hossain (2019), businesses frequently only release information that would help stakeholders establish favourable perceptions of the corporation.

A broad theory that may explain how IM functions in various circumstances is likewise lacking. For instance, Ashford and Northcraft (1992) if minorities have to put on a show of uniformity to appear committed, do they also have to participate in more IM to appear to be responsible members of the organization? Do they also exhibit less of a propensity to sell issues? What is the universal explanation for why positive assessments of counter stereotypical or counter normative IM happen more frequently than negative ones? Simply put, there hasn't been much effort to explain how contextual or situational aspects impact concerns about information management in these varied organizational contexts. In order to impress stakeholders with the organization's success, they carefully pick the facts and phrases they use. This aids in closing the legitimacy gap. One component that is important to modern stakeholder is the reliable and sustainable energy use. Reporting on this aspect can appease stakeholder and hence this theory supports the dependent variable of financial performance

Empirical Literature Review

Climate Action Reporting and Financial Performance

Tzouvanas (2019) studied climate change and performance in answering the question on whether environmentally performing firms gain financial benefits. Secondly, the study sought to determine if disclosing environmental information allaies investors' worries, and, finally, whether temperature swings cause financial system instability. Under the contrasting views of neoclassical and instrumental stakeholder theory, the relationship is explored using data for 288 European manufacturing enterprises from the years 2005 to 2016. According to the study, companies that perform better in terms of the environment also tend to be more successful, and the conditional distribution of the link between environmental and financial performance may be described as positive and diverse. It achieved this by enhancing a quantile regression framework with a collection of instrumental factors to more accurately approximatively represent environmental performance. Tzouvanas (2019) again shown that environmental disclosure decreases risk in an asymmetrical manner using a panel data set of 288 enterprises covering the years 2005 to 2016 in 17 European nations. Additionally, the findings show that the legitimacy theory and the stakeholder theory, as well as the slack resource argument, are the best explanations for this link. Predictions based on management opportunism, however, seem to be false. Results further show that the conditional distribution's response to the idiosyncratic risk of environmental disclosure is significantly variable.

Climate action reporting was included as a variable in Fred's (2012) evaluated Kenyan commercial banks' corporate governance and financial performance. researcher used an analytical cross-sectional design. All 44 banks made up the study's sample. To get sample representation of complete population, 0.3 was chosen as the sample ratio. 13 CEOs of the banks that were included in the sample. CEOs of the sampled banks were given questionnaires to complete in order to collect primary data. Additionally, secondary sources were employed to gather information, including information spanning five years from public annual reports and corporate sources. The study revealed adoption of environmental action reports positively impacted performance.

On the other hand, Kipkorir (2016) investigated the factors that influence listed companies' environmental reporting practices at the NSE. The study was census-like in character because the full population of NSE-listed enterprises as of August 2016 was examined. Using a descriptive design. Data for research came from CSR and annual reports. In order to determine an appropriate measure for each research variable, a five-year average from 2011 to 2015 was taken. The collected data were examined using SPSS version 22. An analysis of variance (ANOVA) and a coefficient of determination were used in the research model as inferential statistics, with a 95% confidence level. The study's findings revealed that the NSE's listed businesses' environmental reporting index was quite low, and that there was a poor correlation between profitability and financial leverage.

Consumption and Production Reporting and Financial Performance

The role of sustainable development goal disclosures in promoting ethical production and consumption was examined by Gunawan, Permatasari, and Tilt (2020). The information was compiled from 453 annual reports and 44 reports on sustainability of Indonesian listed firms between 2014 and 2016. 585 reports made up the total number of data observations. The content analysis approach was used to examine the disclosures in the annual and sustainability reports. The investigation first focused on sustainability reports. However, due to the low amount of sustainability reports, yearly reports for the study's most recent year, 2016, were also examined. According to a content study of the 2016 annual report, Indonesian businesses frequently promote the development of healthy, prosperous, and communities and cities that are sustainable, responsible in their production, consumption, and education that is of the highest calibre.

Climate change, sustainable production, and business performance were investigated by Harjoto et al. (2021). The project made the case that there are connections between an organization's environmental, social, and ESG score and its efforts to combat climate change and promote sustainable consumption and production. Along with this, the authors propose a link between business success, climate action, and sustainable consumption and production, this supports the view based on natural resources. Utilizing Trucost environmental and Paris alignment data, the study found a correlation between a company's overall ESG score and its commitment to sustainable production, consumption, and climate action. While a company's sustainable consumption and production methods and climate action are negatively connected (not aligned) with social and governance scores, the environmental score is positively correlated. Additionally, for every 1% improvement in a company's capacity to achieve these objectives, sustainable consumption, production, and climate action yield 0.3%–0.8% annualized extra stock returns and 12.5%–20% greater return on assets (ROA).

SDG 12 reporting in Kenya was examined by Makworo and Kasiva (2021), who also evaluated the level of implementation. covers four fundamental areas: land use and food systems, water resources and energy resources, consumption, and the coastal and marine environment The report looked at the situation with SCP in Kenya. Kenya lags behind in analyzing its present consumption and production patterns and lacks a national strategy to direct the implementation of SCP. In each of the sectors, the country has advanced toward sustainable production and consumption, according to secondary data and the authors' study-related experiences. It still presents a significant difficulty to separate wellbeing from environmental deterioration. The paper suggests funding agricultural research, utilizing farmers' knowledge and easing their access to markets; balancing the water supply for both urban and rural areas; overcoming technical obstacles in rural water supply systems; reducing pressure on coastal resources by creating alternative employment opportunities; connecting all domestic households to electricity; and increasing the production of clean energy. It is advised that all stakeholders work together, with each one playing their proper part, in order to achieve sustainability in the aforementioned areas by the year 2030.

Sustainable Innovation Reporting and Financial Performance

The performance of industrial businesses and the link between sustainable innovation methods and those practices was examined by Kneipp et al. (2019). This quantitative analysis was conducted by using a research survey in industrial enterprises in Brazil. The researchers built a systematic questionnaire for data collecting using the conceptual model. Likert was used for closed-ended questions. Data collecting tool was tested by specialists in innovation and sustainability. The findings demonstrated that there are strong positive correlations between a number of factors connected to sustainable innovation techniques and corporate success, supporting the initial stated premise.

Effects of sustainable innovation on organizational performance was shepherded by Dommerholt and Soltanifar (2021). The study used a framework for sustainable innovation. We offer our own concept of sustainable innovation, elaborate on the innovation compass and diverse innovation spaces, and place them inside the suggested framework by analyzing the existing literature on sustainable innovation and looking at real-world instances. According to the experts, the social benefit of sustainable innovation is greatest if it aids in the shift of the economy towards a circular economy and multiple value generation. The traditional economic system prioritizes incremental innovation that increases efficiency in order to improve things. The researchers come to the conclusion that starting the transition to a circular or sustainable economy necessitates radical changes, with business model innovation being one of the most notable.

Mwasiaji, (2020) studied the idea of sustainable innovation reporting and examined sustainability reporting for SMEs. The study found that SMEs confront a number of challenges, such as inadequate financing, which makes it less important to prioritize operations that are essential for sustainable development in favour of immediate financial gains. Additionally, many lines of study on the financial success of businesses and the Sustainable Development Goals have produced contradictory findings. The paper therefore made the case that small and medium-sized businesses can only truly engage in allowing the if business owners are aware of the link between present operations, the sustainability agenda, and financial success, they were able to integrate sustainability considerations into their core operations.

Sustainable Energy Use Reporting and Financial Performance

Effect of environmental reporting on financial performance of Fortune 500 corporations worldwide was done by Zami (2020). The research used empirical information from 2013 to 2017. Reducing greenhouse gas emissions, waste, and water use were examples of reliable and sustainable energy use. The sample size was set at 50 based on observations of 250 organizations, even though the target population was the top 100 CSR-recognized Fortune 500 corporations. Utilizing expressive statistics, correlation, and regression analysis, analysis was done. A reduction in one of the nominated variables, namely waste, had a significant and negative effect on financial performance, but a drop in another variable, namely greenhouse gas emissions and water use, influenced financial performance favourably and significantly. As a result, this study suggests that businesses use eco-friendly resources to draw in stakeholders and protect the environment. It also implies that companies must give environmental reporting their full attention if they want to increase profits.

Simionescu et al. (2020) investigated the relationship between energy, water, and garbage usage and company performance. With data from 2009 to 2020, panel data evidence from the S&P 500 IT sector was used. The quantitative framework included firm- and corporate-specific factors such as PB, ROA, ROE, ROC, and ROIC. The empirical findings supported a negative impact of total water usage on PB but a favourable influence on ROA by calculating multivariate panel data regression models. Total waste had a negative impact on all of the chosen performance metrics, according to the econometric results, although total energy consumption had no statistically significant impact.

Kalomba (2020) conducted research on Kenyan enterprises registered on the Nairobi Securities Exchange discover relationship between sustainability reporting and competitive advantage. methodology was descriptive cross-sectional survey. 63 companies at the NSE made up the target population. The study's core data came from online surveys that were used to gather it. The study made use of multiple regression. It was discovered that sustainable reporting is moderately inclined by economic, societal, and ecological aspects. It showed a substantial relationship between competitive advantage and sustainable reporting methods, such as accurate and sustainable energy consumption reporting

Conceptual Framework

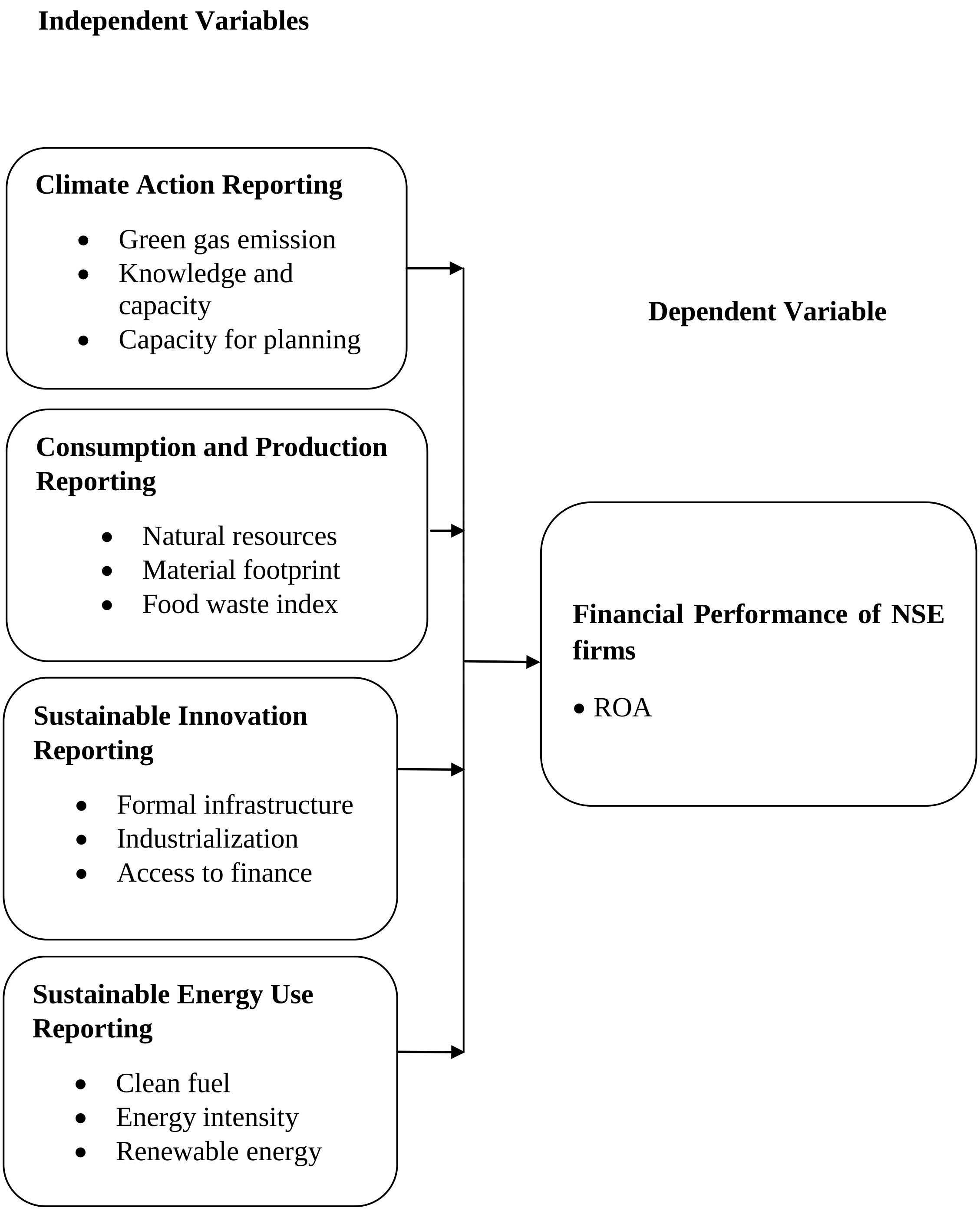

Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

In this study, an explanatory research design was employed. This methodology demonstrates that the research sought to explain rather than just describe the phenomena being investigated (Leavy, 2017). Analysis of the issue with the goal of uncovering the order of link between the variables focus of explanatory research. This research aims were to investigate the association between NSE-listed company performance and environmental sustainability reporting.The pieces that make up the target population include things like persons, chunks of an organization, or families that have particular characteristics things the researcher is curious about (Roller &Lavrakas, 2015). Target population are firms listed in NSE. Thus, the target population is 58 firms listed in NSE (2022). The targeted respondents were financial directors and mangers in the respective firms for a total of 116 respondents. Translating to two respondents per firm. Census method was used for this study, which sampled the complete target population. Since the target population is small, this was done. Deriving a sample was thus unnecessary (Parker & Gallivan, 2011).

Semi-structured questionnaires were used in this study's data collection (Orodho, 2004). The subtopics obtained from the study goals as mentioned in appendix II was used to structure the questions. The majority of the questions was graded out of five. Participants was able to express their opinions on a scale of aptitude about numerous factors relevant to the study subjects. The open-ended questions provided a chance for explanations. It was done by drop and pick. where the respondent had enough time to fill the questionnaire. Some questionnaire was sent via email.Before beginning the entire data collection process, a pilot study was conducted. Pretesting is done to make sure the tool will produce the desired result (Janghorban et al., 2014). To assess internal consistency, utilize the Cronbach's alpha test. When determining how effectively a series of items evaluates a certain behaviour or set of qualities inside a test, Cronbach's alpha measures consistency within the instrument. Cronbach's alpha, also known as the dependability coefficient, calculates the strength of a collection of variables' positive correlations with one another. The degree to which an instrument can measure what it was designed to measure is known as its validity. Researchers and evaluators should consider the three major types of validity: content, concept, and criterion validity (Zohrabi, 2013). Content validity is the degree to which items correctly assess or represent the essence of the characteristic or trait that the researcher is attempting to gauge. This was guaranteed in this study by evaluation by subject-matter experts. Construct validity is the degree to which a measuring method properly represents a construct and yields an observation that differs from that produced by a measure of another construct (Zohrabi, 2013). Correlational analysis was used in this study to evaluate this. criteria-related validity is the extent to which an instrument's findings are consistent with an external criterion, often another measurement from a different instrument, either now or in the future. The ratio of two measurements' correlation coefficients, which was employed in this study, is a typical indicator of this kind of validity. The research supervisor(s) will examine the items to ensure the validity of the instrument.

Data analysis is the procedure a researcher uses to describe and compare data in order to extract meaning and value from both quantitative and qualitative data using statistical approaches (Albers, 2017). This data's qualitative data was thematically evaluated. On the other hand, descriptive statistics methods as well as inferential statistics, ANOVA, and correlation analysis to be utilized to assess the quantitative data. The SPSS version 28 software was used in the analysis. Tables and figures was used to show the findings. The mathematical technique adopted for this study was linear regression. Data analysis is the process a researcher uses to describe and compare data in order to extract meaning and value from both quantitative and qualitative data using statistical approaches (Albers, 2017). This data's qualitative data was thematically evaluated. On the other hand, descriptive statistics methods (mean, standard deviation, minimum, maximum, and trend analysis) as well as Multiple panel regression analysis, analysis of variance (ANOVA), and correlation analysis are examples of inferential statistics be used to assess the quantitative data.

DATA ANALYSIS

The data was analyzed using 97 valid questionnaires. Response rates were really good. A large number of people responded to the research study (Kothari& Garg, 2015).

Descriptive Statistics

ROE represented descriptive statistics, which included averages and standard deviations for financial performance.

Climate Action Reporting

Table 1: Climate Action Reporting

	N	Mean	Std. Deviation
We report the greenhouse gas emitted by our firms	97	3.31	.769
We report the levels of Greenhouse gas emissions	97	3.78	.857
Our sustainability report contain information on the knowledge possessed by the firm on climate action	97	3.64	.831
We undertake capacity planning for climate action activities	97	3.73	.941
Average		**3.651**	**0.850**

(Field Data, 2024)

Respondents rated the statements on climate action reporting that were tabulated and shown in Table 1 using the Likert scale, climate action reporting had an SD of.850 and an overall mean of 3.651. This suggests that sustainable energy use reporting significantly influences financial performance, which accounts for the variation in financial performance among companies listed on the NSE. The study's conclusions are comparable to those of some previous studies that have looked at other fields, such as the findings by Tzouvanas (2019), Fred (2012), and Kipkorir (2016).

Consumption and Production Reporting

Table 2 Consumption and Production Reporting

	N	Mean	Std. Deviation
Wereporton theeffort weadopt inmaintainingnaturalresources	97	3.42	.775
Theeffortsreported areactuallyimplemented	97	3.73	.919
Inourreportingweshowmaterialfootprintofourconsumptionandp roduction	97	3.63	.833
Weprovidefood wasteindex	97	3.35	.925
Reportingconsumptionandproduction datafostersenvironmentalreporting	97	3.04	.934
Average		**3.43**	**0.877**

(Field Data, 2024)

Examining the statements on reporting on consumption and output (Table 2), the following conclusions are reached: Consumption and production reporting had a 3.43, and the SD was.877. This suggests that consumption and production reporting significantly influence financial performance, which accounts for the variation in financial performance among companies listed on the NSE. The study's conclusions are comparable to those of some previous studies that have looked at other studies and fields, such as the findings by Gunawan, Permatasari, and Tilt (2020), Harjoto et al. (2021), and Makworo and Kasiva (2021).

Sustainable InnovationReporting

Table 3 Sustainable InnovationReporting

	N	Mean	Std. Deviation
We have appropriate infrastructure for sustainability attainment	97	3.48	.818
We report the infrastructure in our reports	97	2.89	.828
We have access to financial services for sustainable innovation	97	3.74	.939
We disclose our industrialization activities	97	3.08	1.048
Average		**3.30**	**0.91**

(Field Data, 2024)

To analyze the statements on sustainable innovation reporting that were calculated and shown in Table 3, Based on the findings, Sustainable innovation reporting had a mean of 3.30 and SD of 0.91 which suggests that sustainable innovation reporting significantly influences financial performance, which accounts for the variation in performance among companies listed on the NSE. The study's conclusions are consistent with various other researchers' investigations into related subjects, including the findings by Kneipp et al. (2019), Dommerholt and Soltanifar (2021), and Mwasiaji (2020).

SustainableEnergyUseReporting
Table 4.SustainableEnergyUseReporting

	N	Mean	Std. Deviation
We strive for cleaner fuels	97	3.91	.723
We report on energy intensity	97	3.38	.871
We reduce the use of fossil fuels	97	2.98	.968
We report on our energy usage	97	3.94	.517
We report on the renewable energy we have utilized	97	3.68	.771
Average		**3.578**	**0.770**

(Field Data, 2024)

Table 4 presents the results of an assessment of sustainable energy consumption reporting had an SD of.770 and an overall mean of 3.578. This suggests that sustainable energy use reporting significantly influences financial performance, which accounts for the variation in financial performance among companies listed on the NSE. The study's conclusions are comparable to those of some previous studies that have looked at other fields, such as Zami (2020), Simionescu et al. (2020), and Kalomba (2020).

Inferential Statistics

This section is set out to detail the findings of correlation analysis and regression to link environmental sustainability reportingand financial performance. Diagnostic tests were run to ascertain the appropriateness of data for inferential statistics.

Regression Results

Multi Regression Analysis
The study evaluated the strength of the correlation between predictors and response variables using the coefficient of determination. The composite index for reporting on sustainable energy usage, sustainable innovation, consumption and production, and climate action was constructed using mean scores for many factors.

Diagnostics Tests
Prior to drawing deductions and conclusions, diagnostic tests were carried out to evaluate the study data's degree of accuracy and to determine whether it is sufficient.

Multi Collinearity
When predictor variables are strongly associated and do not provide unique information in a regression model, this is referred to as multicollinearity (Verbeek, 2012). A multi-collinearity test was conducted using both the variable's tolerance and the VIF value. If the tolerance and VIF values are both more than 0.2 and less than 10, respectively, there is no multi-collinearity. Table 5 presents the multi-collinearity results.

Table 5Multicollinearity Test Using Tolerance and VIF

	Collinearity Statistics	
Variable	**Tolerance**	**VIF**
Climate action reporting	0.832	1.048
Consumption and production reporting	0.782	1.174
Sustainable innovation reporting	0.964	1.414
Sustainable energy use reporting	0.862	1.263

(Field Data, 2024)

Each variable had a tolerance value more than 0.2 and a VIF value less than 10, according to Table 5 findings. Alin (2010) states that the presence of multi-collinearity is suggested by a VIF > 10. The absence of a variable with a VIF of 10 in this study suggests that the independent and dependent variables are not multiple correlated, which may be properly inferred. Akinwande, Dikko, and Agboola (2015) assert that a predictor variable is better if its VIF is smaller.

Normality Test

If the data is properly described and regularly distributed (linear), it may be determined by performing a normality test. It is a determination of whether data in statistical tests are normal. Since they have the highest power of all tests for normality, the Kolmogorov-Smirnov and Shapiro-Wilk tests were used to determine if the variables were normal. Because a multivariate regression model was used to assess the research, which requires that the dependent variable satisfy the requirement of normality, the dependent variable should be regularly distributed. Table 6 are normalcy results.In order to obtain effective parameter estimates, the data set must have a normal distribution. Research data that is not effectively represented by a normal distribution might result in inaccurate estimations and conclusions, claims Greene (2012).

Table 6: Test for Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre test	.264	97	.000	.804	97	.000
Post test	.245	97	.000	.819	97	.000
a. Lilliefors Significance Correction						

(Field Data, 2024)

Table 6 demonstrates that the significant level attained was.000 using the Kolmogorov-Smirnov and Shapiro-Wilk tests, suggesting that the data were normally distributed in accordance with Shapiro-Wilk. The research also included regression analysis using the Kolmogorov-Smirnov test, which demonstrated that the data were distributed uniformly.

Heteroscedasticity

Heteroscedasticity testing was done using the Breusch-Pagan/Cook-Weisberg test to see if the error terms in the cross-sectional analysis of the data are correlated across observations. Since the study questions were transformed into hypotheses, the null hypoproject will not be taken into consideration if the p-value is less than 0.05. Heteroscedasticity is present when the big chi-square value is bigger than 9.22 (Sazali, Hashida, Jegak, &Raduan, 2009). Heteroskedasticity was not an issue for this study, according to Table 7's chi-square value.

Table 7: Heteroscedasticity Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance

Variable: financial performance

chi2(1)	=	0.37
Prob > chi2	=	0.5218

(Field Data, 2024)

The results shown in Table 7 suggest that the p-value exceeds 5%. The data were not heteroscedastic as the reported result was 0.5218>0.05, which prevented the null hypothesis from being rejected at a critical p-value of 0.05.

Correlation Matrix

Table 8: Correlation Matrix

Variables		Financial Performance	Climate action reporting	Consumption and production reporting	Sustainable innovation reporting	Sustainable energy use reporting
Financial Performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Climate action reporting	Pearson Correlation	.758**	1			
	Sig. (2-tailed)	0.000				
Consumption and production reporting	Pearson Correlation	.633**	.314**	1		
	Sig. (2-tailed)	0.000	0.000			
Sustainable innovation reporting	Pearson Correlation	.809**	.648**	.235**	1	

	Sig. (2-tailed)	0.000	0.000	0.000		
Sustainable energy use reporting	Pearson Correlation	.721**	.731**	.635**	.455**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

(Field Data, 2024)

Table 8 demonstrates how climate action reporting was connected to and significantly correlated with financial performance (r = .758, p = .000). This implied that an improvement would lead to better financial performance of firms listed in NSE since climate action reporting had a good and substantial influence. Consumption and production reporting has a favorable relationship with financial performance in a substantial way, as shown by (r = .633, P= .000). This also suggested that because consumption and production reporting have a moderate impact, improving it will result in better financial performance of firms listed in NSE and the firm performance. The finding showed that financial performance of firms listed in NSE was highly significant and linked with sustainable innovation reporting (r = .809, p = .000). This also suggested that improving sustainable innovation reporting will result in better financial performance of firms listed in NSE. Finally, sustainable energy use reporting was shown to be both connected and substantially related to financial performance of firms listed in NSE (r = .721, p = .000). This also suggests that an improvement in sustainable energy use reporting will result in improved financial performance of firms listed in NSE. Furthermore, this shows a high correlation between the financial performance of firms listed in NSE and climate action reporting, consumption and production reporting, sustainable innovation reporting, and sustainable energy use reporting.

Table 9 Model Summary Multivariate Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.674[a]	.478	.450	.58189

(Field Data, 2024)

a. Predictors: (Constant), sustainable energy use reporting, consumption and production reporting, sustainable innovation reporting, climate action reporting

The regression as financial performance of firms listed in NSE was conducted with data from 97 respondents that was tested. Results show a positive association of R = .674 and R^2 = .478. It means that the financial performance's variance was 47.8% of firms listed in NSE can be explained by sustainable energy use reporting, consumption and production reporting, sustainable innovation reporting, climate action reporting as in Table 9. however, Other variables not examined in this study can account for 52.2 % of the difference.

Table 10ANOVA[a]Results for Model Summary

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	37.677	4	8.269	24.209	.000 [b]
1 Residual	32.117	93	.337		
Total	**69.794**	**97**			

a. Dependent Variable: Financial performance of firms listed in NSE

b. Predictors: (Constant), sustainable energy use reporting, consumption and production reporting, sustainable innovation reporting, and climate action reporting

(Field Data, 2024)

The model provides a strong fit to the data since the values of F = 24.209 demonstrate that all of the predictor parameters statistically and substantially impact firms listed in NSE financial performance. Table 10 demonstrates that, at the level of significance of 0.000, or less than 0.05, the total regression model strongly predicts the dependent variable.

Table 11: Regression Coefficients[a] for Multivariate Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1571	.377		1.514	.001	.876	2.271
Climate Action Reporting	368	.128	.339	3.127	.003	.123	.582
Consumption & Production Reporting	311	.124	.284	2.687	.000	.181	.512
Sustainable Innovation Reporting	429	.116	.243	2.343	.002	.136	.445
Sustainable Energy Use Reporting	260	.101	.111	.653	.001	.289	.426

a. Dependent Variable: Financial performance of firms listed in NSE

(Field Data, 2023)

As a result, the regression model for the study is: Y= β0 + β1X1 + β2X2 + β3X3+ β4X4

Financial performance of firms listed in NSE =.1571 +.368 (climate action reporting) +.311 (consumption and production reporting) +.429 (sustainable innovation reporting) + .260 (sustainable energy use reporting)

The study's findings revealed that the predictor variables have a significant positive impact on financial performance of firms listed in NSE. The findings indicate that environmental sustainability reporting and financial performance has a significant relationship, p 0.05 (P = 0.00). As a result, the values of the predictor factors are statistically significant with a p-value of 0.05, suggesting that raising the mean index of the predictor variables should enhance the financial performance of firms listed in NSE enterprises. Table 11 provides a summary of the results. According to the model, sustainable innovation reporting was the predictor variable that had the greatest impact on financial performance of firms listed in NSE, followed by climate action reporting, consumption and production reporting and sustainable energy use reporting, which had the least influence on financial performance of firms listed in NSE

CONCLUSIONAND RECOMMENDATIONS

Conclusions

The overall objective was to determine the influence of environmental sustainability reporting on the financial performance of NSE-listed firms, and it was specially to determine the effect of climate action reporting, responsible consumption and production reporting, sustainable innovation reporting, and sustainable energy use reporting on the financial performance of NSE-listed firms. the study concluded that climate action reporting and financial stability were statistically significantly related and that an improvement and focus on climate action reporting would lead to better financial performance for firms listed on the NSE since climate action reporting had a good and substantial influence. It can be concluded that consumption and production reporting, have a favorable relationship with financial performance in a substantial way and improving responsible consumption reporting will result in better financial performance of firms listed in the NSE. On the effect of sustainable innovation reporting on financial performance of NSE listed Firms and the study concluded that the financial performance of firms listed in the NSE was highly significant and linked with sustainable innovation reporting, and firms that will invest on sustainable innovation reporting will result in better financial performance. And finally on sustainable energy use reporting on financial performance of NSE listed Firms, and the study concludes that sustainable energy use reporting was shown to be both connected and substantially related to the financial performance of firms listed in the NSE, and an improvement in sustainable energy use reporting will result in improved financial performance.

Recommendations

The policy recommendations are informed by the environmental sustainability reporting, which has a significant relationship with the financial performance of firms listed in the NSE. Environmental sustainability reporting variables were found to have a statistically significant effect on financial performance. When applied effectively, environmental sustainability reporting may enhance financial performance. Furthermore, the research suggests that companies listed on the NSE should employ sustainability reporting in the following strategic ways: incorporating sustainability into the business model, accepting responsibility for the sustainability performance of products and services, including the whole company, and engaging in collaborations. The study recommends also that management and legal advisors of organization should provide an overview of the legislation and implementation advice, stressing the need of starting early to move beyond a compliance focus and using the regulations to define goals and acquire inspiration for future efforts.

Owing to the importance of this field, numerous contributions in several forms have been contributed to the literature. Other researchers may choose to employ the sound-specific objectives and related objectives used in this study in other situations. The research offers the following theoretical foundations for reporting on environmental sustainability and financial performance: Researchers from different fields can also use these theories. The study provides a thorough conceptual framework that illustrates the fundamental connection between financial performance and environmental sustainability reporting. This framework will serve as a roadmap for future research. This study presents a comprehensive, feasible empirical model based on direct effects. This will improve modelling efficacy even further in future studies. The study makes a number of policy and practice suggestions that, if followed, will improve the financial performance. In order to steer and provide guidance for future research in this field of study, suggestions for more research have been documented.

REFERENCES

Ahluwalia,S.(2022).Acritiqueofcorporatesocialresponsibilityinlightofclassicaleconomics.*AMS Review*,1-5.

Ahluwalia,S.(2022).Acritiqueofcorporatesocialresponsibilityinlightofclassicaleconomics.*AMS Review*,1-5.

Algehed, J. (2015). *Sustainable Consumption: A Knowledge Base.* . Mistra.

Bennett, N. J., & Satterfield, T. (2018). Environmental governance: A practical framework toguidedesign,evaluation,and analysis.*Conservation Letters, 11*(6),e12600.

Berkhout, F. (2012). Adaptation to climate change by organisations. *Wiley Interdisciplinary Reviews Climate Change, 3*, 91-106.

Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: state-of-theart and steps towards a research agenda. *Journal of Cleaner Production, 45*, 9-19.

Bossle, M., de Barcellos, M., Vieira, L., & Sauvée, L. (2015). The drivers for adoption of eco-innovation. *Journal of Cleaner Production, 45(5)*.

Bowen, H. R., & Johnson, F. E. (1953). *Social responsibilities of the businessman... with acommentarybyF. ErnestJohnson*. New York.

Chowdhury, F. (2019). Corporate Social Responsibility: To What Extent Businesses ShouldContributefrom Theoretical Perspective.

Chan, S., Weitz, N., Persson, Å., & Trimmer, C. (2018). *SDG 12: Responsible Consumption and Production. A Review of Research Need* . Environment Insitute of Stockholm.

Crowther, D. (2012). *A Social Critique of Corporate Reporting: Semiotics and Web-based Integrated Reporting.* Farnham: Gower Publishing.

Dmytriyev, S. D., Freeman, R. E., &Hörisch, J. (2021). The relationship between stakeholdertheory and corporate social responsibility: Differences, similarities, and implications forsocialissues in management.*Journal of ManagementStudies*, *58*(6), 1441-1470.

EgyptianInstituteofdirectors(2016).TheEgyptianCorporateGovernanceCode.ThirdRelease.

Retrievedfromfile:///C:/Users/SIMON/Downloads/egypt_cg_code.pdf

Ehsan,A.,&Yang,Q.(2018).Optimalintegrationandplanningofrenewabledistributedgeneration in the power distribution networks: A review of analytical techniques. *AppliedEnergy*,*210*, 44-59.

Freeman, R. E., Dmytriyev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-basedviewof thefirm.*Journal of Management*, *47*(7), 1757-1770.

Freudenreich, B., Lüdeke-Freund, F., &Schaltegger, S. (2020). A stakeholder theory perspectiveonbusinessmodels:Valuecreationforsustainability.*JournalofBusinessEthics*, *166*(1),3-18.

Gallego-Álvarez, I., &Ortas, E. (2017). Corporate environmental sustainability reporting in thecontextofnationalcultures:Aquantileregressionapproach. *InternationalBusinessReview*,*26*(2), 337-353.

Gholami, A., Sands, J., & Rahman, H. U. (2022). Environmental, Social and Governance Disclosure and Value Generation: Is the Financial Industry Different? . *Sustainability, 14(5)*, 26-47.

Githaiga, P. N., & Kosgei, J. K. (2022). Board characteristics and sustainability reporting. A case of listed firms in East Africa. Corporate Governance. *The International Journal of Business in Society*.

Gunawan, J., Permatasari, P., & Tilt, C. (2020). Sustainable development goal disclosures: Dotheysupportresponsibleconsumptionandproduction?*JournalofCleanerProduction*, *246*,118989.

Harjoto, M. A., Kownatzki, C., Alderman, J., & Lee, R. (2021). Sustainable Consumption andProduction,ClimateChangeandFirmPerformance. *TheJournalofImpactandESGInvesting*,*2*(2), 8-34.

Hörisch,J.,Schaltegger,S.,&Freeman,R.E.(2020).Integratingstakeholdertheoryandsustainabilityaccounting:Aconceptualsynproject. *JournalofCleanerProduction*, *275*,124097.

Jones, M. (2015). Accounting for the environment: Towards a theoretical perspective for environmental accounting and reporting. *Accounting Forum, 34*, 123-138.

Khan,M.(2019).Corporatesustainabilitypracticesimpactonfirmfinancialperformance: EvidencefromtheBankingSectorofPakistan. *CityUniversityResearchJournal*,*9*(2),427-438.

Kinyua, S. M. (2020). Impact of Corporate Sustainability Reporting on Stock Returns of FirmsListedattheNairobiSecuritiesExchange(master project,universityofNairobi).

Kneipp, J. M., Gomes, C. M., Bichueti, R. S., Frizzo, K., & Perlin, A. P. (2019). Sustainableinnovationpracticesandtheirrelationshipwiththeperformanceofindustrialcompanies.*Revista deGestão*.

Masud,M.,Kaium,A.,Nurunnabi,M.,&Bae,S.M.(2018).Theeffectsofcorporate governanceonenvironmentalsustainabilityreporting:EmpiricalevidencefromSouthAsiancountries.*Asian Journalof Sustainability andSocial Responsibility*, *3*(1),1-26.

Matisoff, D. C. (2013). Different rays of sunlight: Understanding information disclosure and carbon transparency. *Energy Policy, 55*, 579-592

Mbuthia, J. N., & Gatauwa, J. M. (2022). Corporate sustainability practices and financial performance of firms listed in the Nairobi Securities Exchange, Kenya. *International Academic Journal of Economics and Finance, 3 (7)*, 89-112

Mwasiaji, E. (2020). Sustainability Reporting in the Context of Small and Medium BusinessEnterprisesin Kenya:AConceptual Framework. *International Journal of Business Marketing and Management (IJBMM), 5(1)* 13-22.

Orazalin,N.,&Mahmood,M.(2019).DeterminantsofGRI-basedsustainability reporting:evidence froman emergingeconomy.*International Journal of Research and Innovation in Social Science (IJRISS), 7(6),* 1608-1636,

Ravelomanantsoa, M. S., Ducq, Y., &Vallespir, B. (2019). A state of the art and comparison ofapproachesforperformancemeasurementsystemsdefinitionanddesign. *InternationalJournalof Production Research, 57*(15-16), 5026-5046.

Reisch, L. A., Cohen, M. J., Thøgersen, J. B., Tukker, A., & Krause, K. (2016). *Sustainable Consumption: Research Challenges.* Mistra.

Roslender, R., & Nielsen, C. (2021). Accounting for the value expectations of customers: Re-imaginingtheIntegratedReportinginitiative. *CriticalPerspectivesonAccounting*, *81*,102244.

Saeed,A.,&Sroufe,R.(2021).Performance,Risk,andCostofCapital:TrendsandOpportunitiesforFutureCSRResearch.*Journalof RiskandFinancial Management*,*14*(12), 586.

Schiederig, T., Tietze, F., & Herstatt, C. (2012). Green innovation in technology and innovation management; an exploratory literature review. *R&D Management, 42(2),* 180-192

Shad, M. K., Lai, F. W., Shamim, A., & McShane, M. (2020). The efficacy of sustainabilityreporting towards cost of debt and equity reduction. *Environmental Science and StudyutionResearch*,*27*(18), 22511-22522.

Simionescu, L. N., Gherghina, Ș. C., Sheikha, Z., & Tawil, H. (2020). Does water, waste, andenergyconsumptioninfluencefirmperformance?PaneldataevidencefromS&P 500InformationTechnologySector. *InternationalJournalofEnvironmentalResearchandPublicHealth*, *17*(14), 5206.

Skouloudis,A.,Malesios,C.,&Dimitrakopoulos,P.G.(2019).Corporatebiodiversityaccountingandreportinginmega-diversecountries:Anexaminationofindicatorsdisclosedinsustainabilityreports.*Ecological Indicators, 98,* 888-901

Wahyuni, D., & Ratnatunga, J. (2015). Carbon strategies and management practices in an uncertain carbonomic environment – lessons learned from the coal-face. *Journal of Cleaner Production, 96*, 397-406