Effect of Environmental, Social and Governance (ESG) Disclosures on Shareholders' Wealth Maximization

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Abstract

Companies in the world are putting up efforts to add values to their corporations' bottom lines by engaging in sustainable business practices. However, it is quite worrisome that most companies particularly in Nigeria are not fully committed to the environment and society where they derive resources for their economic activities and they do not also have the desire to empower and promote corporate responsiveness to other stakeholders. The main objective of this study therefore was to examine the effect of environmental, social and governance (ESG) disclosures on shareholders' wealth maximization drawing samples from industrial goods firms listed on the floor of the Nigerian Exchange Group from 2013-2022. The independent variable of this study being ESG disclosure was proxied by environmental performance disclosure, social performance disclosure and governance performance disclosure, while the dependent variable being shareholders' wealth was proxied by Economic value added (EVA) and market value added (MVA). Expost facto research design was employed, secondary data were employed and purposive sampling technique was adopted to select twelve industrial goods firms. To test the hypotheses formulated and further analyze the study, ordinary least square regression technique was adopted and the statistical software used was E views version 10. From the analysis of the study, it was realized that environmental performance disclosure has a non-statistically significant positive effect on the economic value added; social performance disclosure has an insignificant positive effect on economic value added; governance performance disclosure has a significant positive effect on the economic value added; environmental performance disclosure has a significant positive effect on the market value added; social performance disclosure has an insignificant positive effect on market value added; governance performance disclosure has a significant positive effect on market value added of listed industrial goods companies in Nigeria. It was thus concluded that ESG disclosures have insignificant effect on shareholders' wealth of listed industrial goods firms in Nigeria. It therefore recommended among others that companies should initiate, adopt and disclose eco -friendly ESG policies as this is capable of enhancing the shareholders' wealth of these companies in the long run.

Keywords: Business practices, value added, market value added, economic value added, Nigerian exchange group, environmental, social and government disclosures

Background to the study

Investors are gradually recognizing the impact of ESG performance on risk mitigation and wealth creation. Stakeholders and decision makers look beyond profitability and are increasingly making business decisions based on the environmental, social and governance (ESG) information of a particular company or organization. They believe that companies that integrate ESG risks and opportunities into their core operations and business strategies are more likely to deliver sustainable and long-term value to their stakeholders. According to Lubis and Rokhim (2021), a risk management approach that incorporates ESG considerations provides the company with useful data to identify emerging risks arising from mega trends such as climate change, new regulations, technology change; and develop internal responsibilities and systems to address these risks and improve performance over time. Today, investors and asset managers believe that ESG can have a material impact on the long-term performance of their investment portfolios and demand that ESG analysis forms part of the fundamental work of investment (OECD, 2017). Most institutional and retail investors have integrated ESG considerations into their investment decision-making. Based on this, companies are moving their focus from short-term profit maximization to long-term environmental, social, and governance (ESG) objectives. Most business leaders are now cognizant of the growing importance of ESG concerns, which may have an effect on an organization's financial health as well as its reputation in the marketplace.

ESG is an acronym for environment, social and governance; an investment concept and corporate evaluation standard that focuses on the environmental, social and governance performance of companies rather than financial performance. Hassani and Banini (2022) noted that investors—can assess the contribution of companies in promoting sustainable economic development and fulfilling social responsibility by observing corporate ESG disclosures. Environment (E) focuses on the impact of enterprise operation and investment activities on the environment, such as resource utilization and pollutant emission. Social (S) focuses on the coordination and balance between the company and its stakeholders. Governance (G) focuses on the internal governance structure and governance rules of the company (Duuren et al., 2016).

The main reason professional investors consider ESG-related information is not to derive reputational benefit but to determine whether a company is adequately managing risk and aligning its strategy for long-term returns. In more recent investors' surveys, the pursuit of maximisation of financial returns and enhanced risk-management have been consistently highlighted as key motivating reasons for committing to ESG integration. The goal of business has shifted from focusing on only generating shareholder value to creating long-term stakeholder value and sustained growth that takes into consideration the environmental, social, and governance (ESG) performance of companies. Similarly, sustainability factors have evolved into a critical component of financial decision making across all asset classes (Liu et al., 2022). Investors are increasingly interested in companies' sustainability strategies and approaches to better understand their exposure to various ESG risks and their ability to manage and mitigate those risks and create business value.

Statement of the problem

Contemporary debate on sustainable enterprise development has raised awareness of environmental, social and governance practices. This poses emerging challenges for companies to do their business in a more ethical and responsible manner. Companies in the world are putting up efforts to add values to their corporations' bottom lines by engaging in sustainable business practices. However, it is quite worrisome that most companies particularly in Nigeria are not fully committed to the environment and society where they derive resources for their economic activities and they do not also have the desire to empower and promote corporate responsiveness to other stakeholders. A firm's perceived negligence or irresponsible environmental behavior can lead to regulatory sanctions, hostility from host community, long-term negative reputation in the eyes of the investors, customers and the suppliers; and could ultimately result in the firm being less attractive in the market thus making investors to lose confidence in such firms.

According to the reviewed literature, an organization's ability to effectively integrate its resources in activities that maximize wealth or enhance its coexistence with firm value is critical to its sustainability and survival. The managements are expected to help the organization achieve its goals by providing resources or relevant information for decision- making. Input and output evaluation techniques have revealed that a corporation's financial and non-financial gains are dependent on its ability to integrate its corporate resources to the needs of stakeholders, even when there is no monetary gain. Stakeholder pressure, according to studies has a significant impact on ESG disclosures. They also stated the significance of ESG disclosures varies greatly by industry. Multinational corporations have the ability to spread an ESG disclosure culture, particularly if they have done so in their home country. Local environmental reporting is heavily reliant on the government, customers, shareholders, and environmental activists, according to studies.

From the review of empirical studies, it was found out that the Non- industrial goods sector seemed to be neglected as most of the studies focused on banks, ICT firms, pharmaceutical firms, manufacturing firms (Nguyen et al., 2022; Shaikh, 2022; Taiwo et al., 2022; Wu et al., 2022). It was also realized that the previous studies used other performance measures like EPS, ROA, ROE, Tobins Q, market capitalization and so on (Cheng et al., 2023; Iliemena et al., 2023; Parikh et al., 2023; Carnini et al. (2022), Friske et al., 2022). More so it was also noted that some previous empirical studies used only one measure of shareholders wealth, - EVA (Parikh et al., 2023; Dočekalová et al., 2022; Schiessl et al., 2022) and MVA- (Taiwo et al., 2022; Zumente & Bistrova (2021). Worst still is there was no unanimous agreement from previous studies on the effect of ESG disclosure on shareholders' wealth because of divergent findings. Thus it was against the above identified gaps that this study was undertaken to ascertain the effect of ESG disclosure on shareholders' wealth of industrial goods firms using two measures of shareholders' wealth.

Objectives of the study

The main objective of this study was to examine the effect of ESG disclosure on shareholders' wealth of listed industrial goods companies in Nigeria. However, the specific objectives of this study were to;

1. To examine the effect of environmental performance disclosure on economic value added of listed industrial goods companies in Nigeria.

- 2. To ascertain the effect of social performance disclosure on economic value added of listed industrial goods companies in Nigeria.
- 3. To determine the effect of governance performance disclosure on economic value added of listed industrial goods companies in Nigeria.

Research hypotheses

In order to answer the above research questions, the following hypotheses were formulated and tested in this study:

Ho1: Environmental performance disclosure does not have any significant effect on economic value added of listed industrial goods companies in Nigeria.

H₀₂: Social performance disclosure does not have any significant effect on economic value added of listed industrial goods companies in Nigeria.

Ho3: Governance performance disclosure does not have any significant effect on economic value added of listed industrial goods companies in Nigeria.

Conceptual framework

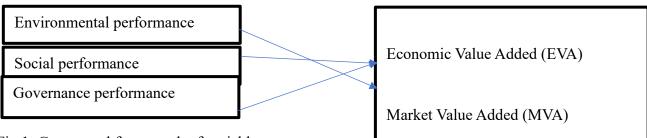


Fig 1: Conceptual framework of variables

Source: Researcher's conceptualization (2023)

Environmental, social and governance (ESG) performance

ESG is an acronym for Environment, Social and Governance, an investment concept and corporate evaluation standard that focuses on the environmental, social and governance performance of companies rather than financial performance (Liu et al., 2022). ESG disclosures refer to the disclosures of companies' footprints and investment on the environment, social, and governance issues. Investors can assess the contribution of companies in promoting sustainable economic development and fulfilling social responsibility by observing corporate ESG disclosures. Environment (E) focuses on the impact of enterprise operation and investment activities on the environment, such as resource utilization and pollutant emission. Social (S) focuses on the relationship between the company, focuses on the coordination and balance between the company and its stakeholders while Governance (G) focuses on the internal governance structure and governance rules of the company (Duuren et al., 2016; Liu et al., 2022). In other word, ESG is an offshoot of sustainability without the economic performance aspect. The idea of sustainability stems from the concept of sustainable development which became common language at the World's first Earth Summit in Rio in 1992. It can be synonymous with triple bottom line reporting, corporate responsibility reporting and sustainable development reporting, but increasingly, these terms have become more specific in

meaning and therefore, subsets of sustainability reporting (KPMG, 2018). **Environmental** performance disclosure

Environment (E) aspect of ESG focuses on the impact of enterprise operation and investment activities on the environment, such as climate change, carbon emissions, pollution, resource efficiency and biodiversity. According to Ohaka and Obi (2021), the main take of this component of ESG is that companies should respect, protect, and make efforts to restore the environment. That is, it is concern with an organisation's impact on living and non-living natural systems, including ecosystems, land, air, and water. Environmental indicators cover performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste). Businesses should utilize natural and manmade resources in an optimal and responsible manner and ensure the sustainability of resources by reducing, reusing, recycling and managing waste. Businesses should take measures to check and prevent pollution. They should assess the environmental damage and bear the cost of pollution abatement with due regard to public interest. By this companies should continuously seek to improve their environmental performance by adopting cleaner production methods, promoting use of efficient energy and environment friendly technologies and use of renewable energy (KPMG, 2018). Companies should also develop Environment Management Systems (EMS) and contingency plans and processes that help them in preventing, mitigating and controlling environmental damages and disasters, which may be caused due to their operations or that of a member of their value chain.

Social performance disclosure

The Social (S) aspect of ESG disclosure has to do with disclosures about human rights, labour standards, health & safety, diversity policies, community relations and development of human capital (health & education). Wood (2021) defined social performance as a business organization's configuration of principles of social responsibility, processes of social responsiveness and policies, programs and tangible outcomes as they relate to the firm's social relationships. It is a construct that emphasizes a company's responsibilities to multiple stakeholders, such as employees and the community as a whole, in addition to its traditional responsibilities to economic shareholders (Turban & Greening, 2017).). It is defined as the obligation of the company to improve social welfare for stakeholders in long-term period and sustainably (Jamali et al., 2017).

According to Adams (2012), corporate social performance (CSP) is the arrangement of social responsibility principles, social responsiveness processes, policies, programs, and observable results in relation to the company's social relationships. According to Turban and Greening (1997), CSP is a concept that highlights a company's obligations to various stakeholders, including workers and the community at large, in addition to its customary duties to financial shareholders. Lubis et al. (2019) defined social performance as an organization's increasing commitment to work toward the betterment of its workforce in order to achieve ethical values and to improve the organization's overall performance, both of which can support the nation's economic development.

Governance performance disclosure

The governance (G) aspect of ESG has to do with corporate governance, corruption, rule of law, institutional strength, transparency (NSE, 2018). A good corporate governance system is an essential element in optimizing the performance of a business in the best interests of shareholders, limiting agency costs and favoring the survival of corporations (Fama & Jensen, 1983). Corporate

governance encompasses the processes, principles, and values that guide the management and oversight of companies, ensuring transparency, accountability, and sustainability, while creating value for stakeholders over the long term (Malaysian Code of Corporate Governance, 2012). Board of directors is one of the most important elements of corporate governance mechanism in overseeing the conduct of the company's business (Said et al., 2019). According to Organization for Economic Co-operation and Development (OECD, 2017), corporate governance deals with the rights and responsibilities of a company's management, its board, shareholders and various stakeholders. How well companies are run affects performance, market confidence and private sector investment. It is the system by which business corporation are directed and controlled. The corporate governance structure specifies the distribution of right and responsibilities among different participants in the corporation, such as the board, managers, shareholders, and other stakeholders and spells out the rules and procedures for making decisions on corporate affairs.

Shareholders' wealth maximization

According to Bhasin and Shaikh (2013), shareholders' wealth is defined as what remains of a company's profit after loan providers and essential expenses have been paid. This leftover is the wealth attributable to stockholders over a specific time period. In other words, it is that part of periodic profits attributable to the shareholders and which serves as an indicator of financial health (Jean, 2019). Also, Adaramola and Oyerinde (2014) defined shareholders' wealth as the estimated future earnings, expressed in present value, that go to the company's owners. These anticipated future profits are typically given as dividends, which are paid out on a regular basis, and as revenues from the sale of shares. They also emphasized that common shareholders receive dividend payments from corporate profits.

Economic value added (EVA)

EVA can be defined as an economic benefit over profit that remains to the equity holders after considering all economic costs. It is a measure of performance that provides a useful assessment of how much wealth has been added to the shareholders during a period (ICAN, 2014). Its underlying premise focus on the fact that real profitability occurs when additional wealth is created for shareholders and that projects should create returns above their cost of capital. It was developed by Stern Steward in 1991 which he noted is the performance measure most directly linked to the creation of shareholders wealth over time. This is supported by research conducted by Uyemura et al., (2016) which stated that, EVA has the strongest correlation with shareholders' value added. In the last few years, EVA has become one of the most accurate measures of shareholders' value creation around the world. Performance appraisal using EVA approach direct the attention of management to the interests of shareholders as managers will only undertake investments that maximize returns and minimize capital cost levels so that the value of the company can be maximized (Arowoshegbe & Emeni, 2023).

Economic Value Added (EVA) is a concept that measures added value by lowering the cost of capital resulting from a company's investments (Jankalová & Kurotová, 2020). In other words, EVA is a measure of profitability minus the cost of capital. EVA can thus be defined as the net operating profit minus an appropriate charge for the opportunity cost of all capital invested in a business. As such, EVA is an estimate of true economic profit, or the amount by which earnings exceed or fall short of the required minimum rate of return that shareholders and lenders could obtain by investing in comparable risk securities (Petrescu & Apostol, 2009). The underlying

concept is that investors require a rate of return that compensates them for the use of their capital or the equivalent of their opportunity cost, and the level of risk undertaken (Du et al., 2018).

Environmental, Social and Governance (ESG) disclosure and shareholders' wealth Relationship between ESG performance and economic value added (EVA)

In common parlance, companies that successfully disclose and manage ESG concerns are frequently seen to be more resilient and capable of creating long-term value. Positive ESG performance improves reputation and brand value, attracting socially conscious investors as well as a broader investor base. This increased interest may result in enhanced liquidity, easier access to cash, and potentially higher stock prices, which will benefit shareholder wealth (World Economic Forum, 2022). Furthermore, as legislative frameworks stress ESG disclosure, companies that meet these criteria may face less legal risks and related expenses, adding to the favourable association between ESG disclosure and shareholder wealth.

When organizations prioritize and publicly report on programs that improve employee well-being, community development, and human rights, a positive association between social performance disclosure and Economic Value Added (EVA) is evident. Employee satisfaction, engagement, and productivity can be improved by disclosing fair compensation, comprehensive benefits, and a dedication to work-life balance. Such human capital enhancements boost operational efficiency, resulting in increased net operating profits and a beneficial impact on EVA. Furthermore, when businesses effectively communicate their socially responsible practices to the public, their brand reputation and consumer loyalty improve. Socially conscious consumers may gravitate toward enterprises that implement ethical business practices, resulting in higher sales and market share, and so contributing to a positive relationship between social performance disclosure and EVA.

Relationship between social performance disclosure and economic value added (EVA)

Conversely, a negative relationship between social performance disclosure and EVA may emerge due to the costs associated with implementing and maintaining social initiatives. Investments in employee training, diversity programs, and community development, while contributing to long-term sustainability, can represent short-term expenditures that impact profitability and EVA. Moreover, companies engaging in social performance disclosure may face increased scrutiny and public activism, potentially leading to reputational damage that negatively affects customer loyalty and sales.

On the other hand, due to the costs associated with launching and maintaining social initiatives, a negative link between social performance disclosure and EVA may emerge. While investments in staff training, diversity programs, and community development contribute to long-term sustainability, they can also represent short-term expenditures that have an influence on profitability and EVA. Furthermore, corporations that engage in social performance disclosure may face heightened scrutiny and public action, potentially resulting in reputational harm that harms consumer loyalty and sales.

In Abutaber and Maswadeh (2022); and Amahalu (2018), social responsibility disclosure was found to have a significant positive effect on EVA. Furthermore, Tsoutsoura (2004), Mohr and Webb (2005), Hayne (2010) and Luo and Bhattacharya (2009) found positive relationship between social responsibility disclosures and financial performance. On the contrary, Schiessl et al. (2022)

found that CSR negatively affects EVA. Further negative findings include Jayachandra et al., (2013), and Hasan et al., (2021) who found negative relationship between social disclosure and firm performance. Branco and Rodrigues (2008) and Reverte (2009) all found negative relationship between social performance disclosure and profitability. No relationship was however found in Lin et al. (2019).

Theoretical framework

Stakeholder theory by Freeman (1984)

This study was anchored on the stakeholder theory which was propounded by Freeman Edward in 1984. It is one of the major approaches to social, natural and administration investigation. Scholars portray stakeholders as "those people who can influence or be influenced by the activities associated with existence of the entity or as "the people who depend on the firm to attain their individual objectives and on whom the firm depends on for its existence (Matope & Vaye 2022). The idea of stakeholder theory began to receive significant attention in organizational and management research after the publication of Strategic Management: A Stakeholder Approach by Edward Freeman in 1984. The theory refers to how business works at its best, and how it can work. It is about value creation, trade and how to manage the business effectively. The stakeholder theory argues that firms have a moral obligation to consider and appropriately balance the interest of all stakeholders (Freeman, 1984). Successful firms protect the interest of different stakeholder groups such as: shareholders, creditors, employees, suppliers, customers, communities and the public (Matope & Vaye, 2022). The stakeholder theory has fundamentally become a basis of knowledge for companies to secure their relationship with stakeholders through social and environmental reporting. ESG reporting is considered as a strategic approach by which organizations denote stakeholders participation and reduce information asymmetry. It has been recognized that organizations that consider stakeholders' requirements tend to show a better a performance than those which do not (Marsat & Williams, 2021).

Empirical framework

There have been some literatures environmental, social and governance study and financial performance and some of them are discussed below. Bifulco et al., (2023) delved into the relationship between ESG scores and market values, specifically exploring the moderating role of CSR committees defined as organizational subcommittees of boards of directors providing social and environmental recommendations. A panel dataset was constructed, encompassing all listed companies in STOXX Europe 600 from 2014 to 2020, utilizing data from the Refinitiv Eikon database. The sample consisted of 600 European listed companies in the STOXX Europe 600 Index, with a total of 4800 firm-year observations and the study employed ex post facto research design. The findings revealed a negative relationship between ESG scores and stock prices. However, the presence of a CSR committee as a moderating variable did not yield significant evidence of ESG score impact on market values. The study suggested that the CSR committee's role may be more centred on monitoring management activities rather than significantly influencing ESG in achieving higher market performance. This study dne outside Nigeria focused on market value and covered a period from 2014 -2020.

Cheng et al., (2023) examined the effects of ESG-related information disclosures on firm value and assess the relationship between ESG scores and firm value, utilizing a Chinese dataset.

Employing a fixed-effects panel regression model while controlling for corporate attributes, the study focused on the impact of ESG performance on firm value, measured in terms of enterprise multiples. Secondary data were employed and the expost facto research design was used. The findings indicated that the disclosure of ESG-related information led to a significant increase in firm value, with this relationship intensifying after the onset of the pandemic. Notably, the influence of ESG scores on firm value became significant specifically in the post-pandemic period. The study highlighted that while environmental scores significantly affected firm values, the scores in the social and governance categories did not demonstrate a similar impact. This study also specifically focused on market value and not shareholders value added.

Iliemena et al., (2023) assessed the effect of corporate governance reporting on shareholders' wealth measured using the values of earnings per share in the periods 2013 to 2020. A total of 73 listed manufacturing companies on NGX Group formed the population while judgmental sampling yielded 37 manufacturing companies that formed the sample. The secondary data were obtained from the annual reports and sustainability reports using ex-post facto research design. Statistical tests were carried out using multiple regression analysis. Results from the study revealed governance reporting index has a positive effect on earnings per share. Thus, the study concluded that corporate governance plays a positive role in increasing the wealth of the shareholders from the perspective of the sustainability objective of corporations and recommended that listed entities should strive for an increase in earnings by pursuing objectives targeted at enhancing corporate governance sustainability reporting through firm transparency and stakeholder-consciousness.

Parikh et al., (2023) studied the relationship between environmental, social, and governance (ESG) scores and shareholders' wealth, aiming to establish potential criteria for future investments. Utilizing a linear regression model, the study focused on analysing the impact of ESG scores on the equity returns of 225 Indian companies. The empirical findings revealed a positive impact of the governance (G) factor on equity returns, while indicating a negative impact of the environmental (E) factor on equity returns. Interestingly, the impact of the social (S) factor was deemed insignificant. Consequently, the study concluded that financial motivations may serve as catalysts for companies to adopt E- and S-factor practices. The results underscored the significance of governance practices for companies in enhancing shareholders' wealth.

Abutaber and Maswadeh (2022) aimed at analysing the effect of disclosing social responsibility in its various dimensions (social, workers, and environment), on the Economic Value Added (EVA). The study population consisted of the Jordanian industrial companies listed in the Amman Stock Exchange (ASE), which numbered (43) companies until the end of the year (2019), the sample size of this study was (36) companies by the simple random sampling method. The financial reports published in the ASE were relied upon, and for the purpose of determining the elements of disclosure of the social responsibility items (society, workers, and environment), each of the social responsibility variables was measured as a dummy. The study relied on the model suggested by Khan et al., (Khan S, Chouhan V, Chandra B, Goswami S (2012) for measurement of value creation Vis-À-Vis EVA: analysis of select BSE companies. In order to test the hypotheses of the study, a multiple regression test was used. The study reached the disclosure of social responsibility towards the society came in the first order with a positive impact on the EVA, followed by the disclosure of social responsibility towards the environment. Among the

most important recommendations was the necessity of activating the laws and legislations that obligate companies to disclose social responsibility in the Jordanian annual financial reports.

Aydoğmuş et al., (2022) examined the impact of Environment, Social, and Governance (ESG) performance on firm value and profitability, leveraging a substantial dataset to enhance understanding of this relationship. The findings indicated that the overall ESG combined score exhibits a positive and significant association with firm value. Notably, individual social and governance scores were found to have a positive and significant relationship with firm value, while the environment score did not exhibit a significant relationship. Conversely, it was observed that the ESG combined score, as well as the individual scores for Environment, Social, and Governance, all demonstrated positive and significant relationships with firm profitability. These results suggested that investing in high ESG performance holds the promise of delivering financial returns for the firm, impacting both its value and profitability positively.

Carnini et al. (2022) analysed the impact of environmental, social, and governance (ESG) disclosure on firm performance, considering the growing attention from stakeholders towards a firm's ESG practices. Grounded in the Agency and Signalling theory frameworks, the paper specifically focused on Italy, where Legislative Decree 254/2016 implemented the European Directive, mandating comprehensive disclosure by the largest firms (those with more than 500 employees) about their social and environmental activities starting from 2017. Utilizing panel regression analysis on a sample of the largest Italian listed companies over a 10-year period (2011 to 2020), the study revealed a positive relationship between environmental, social, and governance disclosure and firm performance, measured by EBIT. The study's findings provided valuable insights for stakeholders, decision-makers, policymakers, and academics, enhancing their understanding of the impact of ESG disclosure on firm performance, both holistically and individually across each pillar.

Dočekalová et al., (2022) presented a structural model designed to verify the causal relationship between sustainability and economic value added. The study's findings revealed that a definitive and singular relationship between corporate sustainability and economic value does not exist. The structural modelling results prompted a methodological refinement of the sustainable value model ESGVA. This improved model encompassed all four dimensions of corporate sustainability, namely environmental, social, corporate governance, and economic aspects. The case study illustrated the substantial variations in outcomes when employing a purely economic concept of company value compared to a value that incorporates environmental, social, and corporate governance factors. The model's relevance extended to the realm of comparative analysis in socially responsible investments, highlighting how sustainable value offers additional insights into corporate performance. It was emphasized that such information could prove valuable for individual investors in their decision-making processes.

Friske et al., (2022) investigated the correlation between voluntary sustainability reporting and firm value, measured by Tobin's q. Developed from signalling theory and the sustainability reporting literature, three main hypotheses were tested using a large panel of reporting and non-reporting organizations spanning the period 2011–2020. The results obtained from a fixed-effects panel model indicated a general negative relationship between sustainability reporting and Tobin's q. However, a noteworthy finding was that this relationship gradually turned positive over time. The study concluded that sustainability reporting initially acts as a costly signal but eventually

contributes to enhancing firm value as companies improve their communication of sustainability initiatives to stakeholders, and investors become more adept at evaluating reports. Furthermore, in the analysis of sustainability reporting organizations, it was found that external assurance was positively associated with Tobin's q, suggesting that external audits contribute to increasing the credibility of reports.

Gholami et al., (2022) explored the relationship between corporate environmental, social, and governance (ESG) performance disclosure and profitability, with a specific focus on the distinctions between the financial and non-financial sectors. Utilizing an extensive Australian sample spanning the 2007–2017 period sourced from Bloomberg's database, a panel regression model was employed to assess the connection between corporate ESG performance disclosure and profitability, including an industry-specific analysis. Rigorous robustness tests were conducted to address methodological, sample selection, endogeneity, and causality issues associated with corporate ESG performance disclosure. The study revealed a positive association between higher corporate ESG performance disclosure and company profitability. However, the industry comparison analysis unveiled notable differences between financial and non-financial sectors. Specifically, for companies in non-financial sectors, except for corporate governance, there was no significant association between corporate environmental and social elements and a company's profitability. The empirical findings suggest that improving corporate ESG performance disclosure benefits shareholders and stakeholders in the long run, but the link between environmentally and socially responsible conduct and profitability appears significant primarily in the financial industry. As a recommendation, the study suggested that regulators create a conducive institutional environment to promote ESG performance in the financial industry, thereby enhancing ESG awareness, supporting economic development, and offering implications for both regulators and corporations.

Kumar and Firoz (2022) scrutinized the relationship between Environmental, Social, and Governance (ESG) disclosures and Corporate Financial Performance (CFP) within the Indian context. The study employed Return on Capital Employed (ROCE) and Return on Assets (ROA) as measures of CFP, while ESG overall disclosure and factor scores were obtained from Bloomberg Terminals. The final dataset included 77 companies spanning the period from 2015 to 2019. Eight different Ordinary Least Squares (OLS) multivariate regression analyses were conducted, with the initial two focusing on overall ESG disclosure scores and the subsequent six examining each of the E, S, and G factors while controlling for variables such as company size, leverage, BTMV, age, growth, ownership, and industry. The study's findings confirmed the hypothesis that improved ESG disclosure practices have a positive and significant impact on CFP. The regression results indicated a positive relationship between ESG disclosure scores and CFP, as well as individual ESG factor scores, except for social disclosures. The study highlighted that enhanced ESG disclosures not only contribute to improved CFP but also foster a positive corporate image, credibility, and ethical practices. Additionally, the research identified statistically significant positive links between organizations' leverage and growth with CFP across all regression models. However, no evidence was found to support the influence of sample firms' size, BTMV, age, industry, and ownership on CFP.

Research design

This study will adopt ex-post facto research design based on the secondary data collated from

annual financial reports of selected listed industrial good firms in Nigeria. This design was suitable for this study since the event had already taken place therefore, the information already existed.

Population of the study

This research work will cover all industrial goods firms listed on the floor of Nigerian Exchange Group for the period 2013- 2022. According to the Nigerian Exchange Group factbook, the total number of listed industrial goods companies in Nigeria as at December 2022 was 13 companies.

Sample size and sampling technique

In other to have a homogenous sample size, those companies that were listed after the study period of 2013 were deselected. And based on this Bua cement was deselected and the final sample size of this study was 12 listed industrial goods firms. Thus, the sampling technique employed was purposive sampling technique.

Sources of data collection

In this study, secondary data source will be employed which has been justified in other studies. Secondary data was preferred due to its reliability, acceptability, and availability. The data for the sampled industrial companies were sourced from the Nigerian Exchange Group fact books and related companies' annual financial reports for the periods covered in the study. Content analysis methodology was employed to obtain data for the ESG disclosure proxies.

Content analysis

This study will employ content analysis method for collecting data particularly, for the proxies of environmental performance disclosure, social performance disclosure and governance performance disclosure. Content analysis is defined as a method in which qualitative data are converted to quantitative data systematically to aid analysis (Clarke & Gibson-Sweet, 1999). This method is defined as a research technique that helps in making replicable and valid inferences from data and assumes that the extent of disclosure signifies the importance of the disclosed topic to the reporting entity (Campbell et al., 2003). In content analysis, word counts, sentence counts, average lines and proportion of pages can be employed, and a researcher is free to choose the method considered most convenient (Hasan,et al., 2021). The data for ESG variables were obtained from the annual report of the studied oil industrial firms using this technique through the researcher's designed disclosure checklist.

The disclosure checklist

The instrument employed for collection of the data for ESG disclosure was the researcher's designed checklist (Appendix 3). This checklist was developed based on Global Reporting Initiatives disclosure guidelines. Environmental, social and governance disclosure indexes were calculated based on the number of occurrences and the level of disclosure. If there was an occurrence of an indicator in the company's financial statement, the researcher assigned the value of '1' but if there was no occurrence of such indicator, the researcher assigned '0'. The index score was arrived at by dividing the sum of occurrences by the total number of possible scores, thus;

Disclosure index = Actual disclosure Expected disclosure

Method of data analysis

The data set was first subjected to pre-regression analyses which included descriptive statistics analyses, correlation analyses. The descriptive statistics was employed to examine the characteristics of the data in terms of mean, maximum, minimum, and standard deviation. The correlation analysis was adopted to evaluate the association among the variables, and check for possible collinearity among the variables of interest. The ordinary least square regression analyses technique as a method of data analyses was employed to establish the effect of ESG reporting on shareholders' wealth, and identify the direction of the effect, if any.

Decision rule: The decision rule for accepting or rejecting the null hypotheses was based on the probability values (p-Values). The null hypotheses should be rejected if the p-values are more than 0.05 and accepted if the p-values are less than 0.05.

Model specification

The econometric model used in this study was adapted from the model specified by Schiessl et al. (2022) and Bifulco et al. (2023) which was modified to fit this study and this is represented below; Shareholders wealth = f(ESG disclosure)

EVA =f(Environmental performance disclosure, social performance disclosure, governance performance disclosure)

MVA =f(Environmental performance disclosure, social performance disclosure, governance performance disclosure)

EVA_{it} =
$$\beta_0 + \beta_1$$
ENPD_{it} + β_2 SOPD_{it}+ β_3 GOPD_{it} + μ_{it} (1)
MVA_{it} = $\beta_0 + \beta_1$ ENPD_{it} + β_2 SOPD_{it}+ β_3 GOPD_{it} + μ_{it} (2)
Where:
EVA = Economic value added

MVA market value added **ENPD**

Environmental performance disclosure

SOPD Social performance disclosure

Governance performance disclosure **GOPD**

Constant β_0

Slope Coefficient β_1 - β_3 Stochastic disturbance μ =ith industrial goods firms = time period

Data Analysis and Discussion of Findings

Descriptive statistics

In this section, the study provided some basic information for both the explanatory and dependent variables of interest. Each variable was described based on the mean, standard deviation, maximum and minimum. Table 1 displays the descriptive statistics for the study.

Table 4.1 Descriptive statistics of the effect of ESG disclosures on shareholders' wealth of listed industrial goods firms in Nigeria

	EVA	MVA	ENPD	SOPD	GOPD
Mean	9044190.01	417209820.	0.639636	0.665182	0.731727
Median	97090.3606	392443.700	0.640000	0.670000	0.770000
Maximum	205005927.	3063874299	0.820000	0.870000	1.000000
Minimum	-50376511.4	-336754201.	0.430000	0.470000	0.540000
Std. Dev.	31321021.1	936566660.	0.122272	0.130058	0.128341
Skewness	3.89383822	1.81241216	-0.136925	0.046727	-0.041683
Kurtosis	21.2640430	4.55720236	1.798617	1.817826	1.961937
Jarque-Bera	1806.856	71.33606	6.958944	6.445401	4.970741
Probability	0.000000	0.000000	0.030824	0.039847	0.083295
Sum	9.95E+08	4.59E+10	70.36000	73.17000	80.49000
Sum Sq. Dev.	1.07E+17	9.56E+19	1.629585	1.843746	1.795372
Observations	110	110	110	110	110

Source: Author's computation (2023)

Table 4.1 above presents the descriptive statistics of the variables of this study. From the table, economic value added (EVA) shows a minimum of -N50,376,511,400; meaning that the lowest EVA in the industrial goods sector between 2013-2022 was -N50,376,511,400. The highest however, was N205,005,927,000 and the sector's average came in at N9,044,190,010. The standard deviation which shows the degree of dispersion was N31,321,021,100 and indicated that economic value added in the industrial goods sector was relatively high.

Now for the disclosures, starting with environmental performance disclosure (ENPD), the highest disclosure score was 0.82 (23 out of 28 items), the lowest score was 0.43 (12 items), average score was 0.64 (about 18 items) and the standard deviation was 0.12 (3 items). With these statistics, it's reasonable to say that the environmental performance disclosure in the sector is relatively moderate. It appears to be a mixed scenario with room for improvement in certain aspects of environmental performance disclosure.

Furthermore, social performance disclosure (SOPD) showed a minimum score of 0.47 (7 out of 15 items), a maximum of 0.87 (13 items), an average of 0.67 (10 items) and a standard deviation of 0.13 (2 items). These statistics however, suggests same case as the environmental performance; room for improvement.

Finally, the governance performance disclosure (GOPD) showed an average score of 0.73 (9 items), a minimum of 0.54 (7 items), a maximum of 1.00 (13 of 13 items) and a standard deviation of 0.13 (2 items). With these statistics, it seems that the governance performance disclosure in the sector was relatively high between the study period.

Data analyses

4.2.1 Correlation analysis

Table 4.2 Correlation analysis for the relationship between ESG disclosures and economic value added (EVA) of listed industrial goods firms in Nigeria

	EVA	ENPD	SOPD	GOPD
EVA	1.000000			
ENPD	0.157494	1.000000		
SOPD	0.038306	-0.027947	1.000000	
GOPD	0.302794	0.042988	-0.134405	1.000000

Source: Author's computation (2023)

Table 4.2 above revealed a weak positive correlation of 0.16 between economic value added (EVA) and environmental performance disclosure (ENPD). Moreover, there was no discernible relationship (0.03) between economic value added and social performance disclosure (SOPD). Finally, governance performance disclosure (GOPD) exhibited a weak positive correlation with economic value added (EVA), with a coefficient of 0.30.

Regression analysis

Table 4.3 Regression analysis for the effect of ESG disclosures on Economic value added of listed industrial goods companies in Nigeria – Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	4.969534	1.167500	4.256559	0.0000
ENPD	0.583528	0.979783	1.595569	0.0528
SOPD	0.377454	0.937384	0.402668	0.6880
GOPD	0.000531	0.939501	2.000565	0.0096
R-squared	0.304900	Mean dependent var		5.593597
Adjusted R-squared	0.285227	S.D. dependent var		1.230100
S.E. of regression	1.244825	Akaike info criterion		3.312533
Sum squared resid	159.6076	Schwarz criterion		3.412452
Log likelihood	-173.2205	Hannan-Quinn criter.		3.353039
F-statistic	7.169055	Durbin-Watson stat		2.379968
Prob(F-statistic)	0.000250			

Source: Author's computation (2023)

The pooled OLS regression for model 1 above shows an F-statistic of 7.169055 with p-value of 0.000250 indicating that the model is fit for statistical inference and that overall, ESG disclosures have significant effect on the economic value added of the companies of under study. The model gave an R-squared value of 0.304900 which means that 30% of the changes in the dependent

variable can be explained by the independent variables of this study. However, the unexplained part is captured in the error term.

Test of hypotheses

The regression results in table 4.3i s used to test the following hypotheses:

Hypothesis one

Ho₁: Environmental performance disclosure does not have any significant effect on economic value added of listed industrial goods companies in Nigeria.

From the regression results presented in table 4.8, the effect of environmental performance disclosure (ENPD) on economic value added (EVA) showed a coefficient of 0.583528 with a corresponding probability value of 0.0528 (>0.05). This connoted acceptance of the null hypothesis and the rejection of the alternate. Therefore, Environmental performance disclosures does not have any significant effect on the economic value added of listed industrial goods firms in Nigeria.

Hypothesis two

Ho₂: Social performance disclosure does not have any significant effect on economic value added of listed industrial goods companies in Nigeria.

Table 4.8 also presented 0.377454 and 0.6880 as coefficient and p-value respectively, for the effect of social performance disclosure (SOPD) on economic value added (EVA). The p-value was evidently greater than the 0.05 significance level which indicated the acceptance of the null hypothesis and rejection of the alternate one. The acceptance of null hypothesis was further supported by the t-statistic of 0.402668 which was less than the critical value of t; 1.982383. Therefore, social performance disclosure does not have any significant effect on the economic value added of the firms under study.

Hypothesis three

Ho₃: Governance performance disclosure does not have any significant effect on economic value added of listed industrial goods companies in Nigeria.

Model 1's regression output later proved that governance performance disclosure (GOPD) has a significant effect on economic value added (GOPD) of the firms under study. Evidenced by the t-calculated value (2.000565) which was greater than its critical value (1.982383) and also the probability value of 0.0096, greater than 0.05 along with a coefficient of 0.000531. On that note, the null hypothesis was rejected and the alternate accepted, which means that social performance disclosure has a significant effect on the economic value added of listed industrial goods companies in Nigeria.

4.4 Discussion of findings

Environmental performance disclosure and economic value added

The results obtained from the first regression model in table 4.8 revealed that environmental performance disclosure; 0.583528[0.0528] has a non-statistically significant but positive effect on the economic value added of listed industrial goods firms in Nigeria. The positive coefficient shows a direct relationship between environmental performance disclosure and EVA but lacked sufficient evidence to support this relationship. Insignificant relationship also exists in Ogochukwu and Grace (2022) who discovered an insignificant negative relationship between environmental

disclosure and shareholder wealth; and also, Sarumpaet (2005) who discovered no link between environmental performance and firm performance. Contrary findings however, exist in Amahalu (2018) who discovered a positive and significant relationship between environmental performance and economic value added in the literature, Ahmad et al., (2017) who found that environmental performance disclosure has a positive significant impact on firm performance and Patten (2002) who found a negative relationship between environmental performance disclosure and firm performance among others.

Social performance disclosure and economic value added

The relationship between social performance disclosure and economic value added yielded a positive and insignificant result; 0.377454[0.6880]. This means that social performance disclosure has no significant effect on the economic value added of listed industrial goods companies in Nigeria. This finding is in contrary to that of Aras, Aybars and Kutlu (2010), Lin et al. (2019), and Arafat, Warokka and Dewi, (2012) who also found no relationship. Abutaber and Maswadeh (2022); and Amahalu (2018), however provided evidence that social responsibility disclosure has positive effect on EVA (significant). Further contrary findings exist in Schiessl et al. (2022) who found that CSR negatively affects EVA, Hasan, Singh and Kashiramka (2021) who found negative relationship between social disclosure and firm performance, and Cormier et al. (2005), Branco and Rodrigues (2008) and Reverte (2009) who all found negative relationship between social performance disclosure and profitability.

Governance performance disclosure and economic value added

The statistics result for the effect of governance performance disclosure on economic value added showed a significant positive one; 0.000531[0.0096]. This finding suggests that as governance disclosure increases, the economic value added of the studied firms increases too. In other words, an increase in the level of disclosure would significantly increase the economic value of the said firms. According to Fama and Jensen (1983), good corporate governance system is an essential element in optimizing the performance of a business in the best interests of shareholders, limiting agency costs and favouring the survival of corporations. Similar findings exist in Ogochukwu and Grace (2022) who found a positive significant relationship between governance disclosures and EVA. Likewise, Xie et al. (2019), Gompers et al., 2003), Beiner et al. (2004) all found positive relationship between governance disclosure and financial performance. Despite these, contrary findings exist in studies of Rouf (2012) (negative relationship between governance disclosure and financial performance) and Cheung et al. (2008) (no relationship).

Conclusion

Based on the findings of this study, it was concluded that ESG disclosures have significant effect on shareholders' wealth of listed industrial goods companies in Nigeria. Specifically, it was concluded that environmental performance disclosure has no significant effect on economic value added but positively affects market value added; social performance disclosure has no significant effect on both economic value added of listed industrial goods companies in Nigeria and finally, governance performance disclosure has positive effect on both economic value added of listed industrial goods firms in Nigeria.

These findings on Environmental, Social, and Governance (ESG) disclosures highlighted their enormous impact on shareholder value. A thorough assessment of these aspects revealed that

responsible and transparent ESG disclosures play a critical role in determining investor attitudes and financial outcomes. While the significance of specific ESG components varies, they all contribute to the creation of long-term shareholder value. Companies that embrace ESG concerns not only align with changing societal expectations, but they also stand to improve their reputations, attract ethical investors, and ultimately contribute to the long-term increase of shareholder value. It is therefore safe to conclude that recognizing the interconnectivity of ESG variables and shareholder wealth emerges as a fundamental need for firms seeking long-term success in today's dynamic corporate market.

Recommendations

Based on the result of empirical findings the following recommendations were made for the study;

- 1. It was recommended that companies should continue to disclosure their environmental responsibilities even though it does not have a significant effect on economic value added being a measure of shareholders' wealth.
- 2. Since social performance disclosure does not have any significant effect on economic market value added of the firms under study, firms should reassess their social impact strategies and make some improvements as in the long run, it may enhance the wealth of shareholders.
- 3. Given the significant effect on governance performance disclosure, firms should comprehensively disclose their corporate governance activities as investors place more confidence on this disclosure parameter

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