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Abstract

Since the 2008 global financial crisis, the financial performance of banks has been cyclic and unstable, largely due to poor monetary policies and inadequate regulation. The increasing push from legal, regulatory, and public advocacy forces for banks to adopt environmental, social, and governance (ESG) policies has also significantly impacted operational costs. However, there is a scarcity of comprehensive studies on how environmental practices affect the financial performance of banks in Kenya and Africa, using globally recognized environmental metrics. This study aimed to explore this relationship for listed banks in Africa. This study aimed to examine the relationship between environmental practices and the financial performance of listed banks based in Africa. This study adopted the positivism philosophy and the explanatory non-experimental research design. The study was anchored on shareholders' value theory, stakeholders' theory, signaling theory and the legitimacy theory. The target population was all the listed banks in Africa, while the sample which was selected through purposive sampling, comprised the fifteen listed banks in Africa which had environmental scores in the London Stock Exchange Group (LSEG) database and which had consistently reported on financial performance over the study period, from 2013 to 2022. The study used secondary data on environmental sustainability scores and financial performance which were obtained from the London Stock Exchange Group. Data analysis included descriptive and inferential statistics, with panel multiple regressions to account for time and cross-sectional dimensions. Financial performance was proxied by return on assets (ROA). The regression results established that environmental practices had a moderate positive impact on financial performance. In addition, the study established that adoption of environmental sustainability initiatives by banks in Africa was at a moderate level. The study recommends that commercial banks in Africa prioritize the implementation of environmental sustainability initiatives to optimize financial performance, although the financial benefits may not be immediate. The study contributes to the existing body of knowledge by offering a comprehensive examination of the relationship between environmental sustainability practices and financial performance within the specific context of commercial banks operating in Africa.

Keywords: *Environmental Practices, Financial Performance, Green Banking, London Stock Exchange Group, Sustainability.*

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1.1 Background to the Study

Stability of the banking sector directly contributes to overall economic stability, because of the critical role of banks in promoting savings and investments (Abisola, 2022). Hussein (2010) contends that banks serve as the backbone of the financial system which supports the economy. The stability of the banking industry is largely anchored on performance (Maluki, 2021). Poorly performing banks have higher risks of being delisted (Kroes & Manikas, 2014). Beyond profitability, firm value is also critical to shareholders for value maximization (Gitagia, Wamugo & Omagwa, 2020).

Globally, the financial performance of financial institutions has been on a general decline (Timoumi, Mohamed & Zeitun, 2015). McKinsey (2022) reports that the global average return on equity (ROE) for banks has decreased from 16.2% in 2000 to about 8% in 2021, excluding the significant drop to around 4% in 2008 due to the global financial crisis. Notably, African banks were less integrated with the global financial system during this crisis and were not significantly affected (Ozili, 2017).

Since 2016, the banking sectors in Egypt, Kenya, Morocco, Nigeria, and South Africa have seen a notable decline in profitability, with an average annual decrease of two percentage points, as reported by McKinsey in 2022. This trend reflects various challenges, including regulatory changes and market volatility. Specifically, in Kenya, the profitability of banks, measured by ROE, has declined significantly from about 30% in 2012 to roughly 14% in 2020 (CBK, 2021). This downturn in Kenya, representative of the broader trend across Africa's major banking markets, underscores the pressing need for strategic adjustments and innovations within the sector to navigate the evolving economic and competitive landscape.

Decreasing profitability of banks could create a negative impact on economic growth at national, continental and global levels, considering that one of the global forces that is changing the way banks operate and has a significant cost impact is the push from legal, regulatory and public interest advocacy forces for institutions including banks to implement environmental, social and governance (ESG) policies and initiatives. On the other hand, the cost of compliance with environmental sustainability requirements globally appears to be on an increase. Embracing sustainability is no longer a choice but a strategic imperative for businesses aiming to thrive in a rapidly changing world (Goel, 2023).

According to PwC (2022), costs related to environmental sustainability are projected to increase to over 21% of total investments by 2026. Furthermore, a forecast by Deutsche Bank, Germany shows an even further expected growth of sustainability investments and costs globally, which will pass the USD 130 trillion mark by year 2030 (Deutsche Bank, 2020). Nevertheless, banks are often seen as leaders in adopting environmentally friendly practices (Jo et al., 2015). There is a growing societal pressure on banks to revise their business models to enhance their contributions toward environmental protection. One way that banks show their commitment to the environment is by offering "green" financial products, like car loans with lower interest rates for customers buying electric or low-emission vehicles.

Shakil et al. (2019) point out a significant gap in the research concerning the impact of environmental initiatives on the financial performance of banks, particularly in the context of developing countries. Further, most of the studies conducted on environmental sustainability in Kenya and Africa have mainly relied on the researchers' interpretation on best measures of

sustainability due to lack of clear guidelines and standards. Mumo (2022) in a study on sustainability practices and stock returns at the Nairobi Stock Exchange relied on disclosures as compiled by the Capital Markets Authority; Kimilu (2021) relied on the voluntary financial statements disclosures by Kenyan companies in assessing the impact of environmental initiatives on performance; Awadzie et al (2022) relied on audited financial statements to assess sustainability compliance and performance of banks in Africa.

The London Stock Exchange Group (LSEG) stands out as a pivotal source of environmental, social and governance sustainability scores and related data that is acknowledged on a global scale, alongside other notable providers such as S&P Global, Bloomberg and Moody's, as highlighted by Berg, Fabisik, and Sautner (2021). Available data in Africa indicates that only fifteen banking institutions have consistently reported adequate information to facilitate computation of environmental sustainability scores at least over the last eight years (LSEG, 2023). These banks are based in South Africa, Egypt and Morocco which are among the top five of Africa's biggest banking markets, the others being Kenya and Nigeria (McKinsey, 2022). However, Kenya and Nigerian banks are still at an early stage of adopting a comprehensive environmental sustainability reporting structure (LSEG, 2023; Kenyan Bankers Association, 2022).

The limited number of researches in Africa on the link between environmental sustainability and bank performance, limited access to globally recognised sustainability metrics which has led to different interpretations, limited disclosures by banks on sustainability and different conclusions reached in previous studies created credible research gaps for this study. This study relied on secondary data from the LSEG.

2.1 Theoretical Literature Review

The study was grounded on four theories: shareholders' value theory, stakeholders' theory, legitimacy theory, and signaling theory. The shareholders' value theory, introduced by Friedman in 1970, posits that spending firm resources on social responsibility activities depletes company resources and negatively affects profitability (Saleh, Zulkifli & Muhamad, 2011). This theory supports the profit maximization motive, emphasizing that a firm's primary goal should be to increase profits for the benefit of its shareholders (Lagoarde et al., 2012). In contrast, the stakeholders' theory, proposed by Edward Freeman in 1984, suggests that shareholders are merely one of many stakeholders, including employees, environmentalists, vendors, governmental agencies, customers, and the wider society. This theory emphasizes creating a nexus between the firm and its diverse stakeholders (Jones et al., 2018), requiring firms to negotiate various "social contracts" (Eccles & Krzus, 2018). This theory is critical as it highlights the broader network of stakeholders that sustainability practices aim to benefit.

The next theory is the legitimacy theory which was developed by Deegan (2002). The theory states that organizations continually seek to ensure that they are operating within the bounds and norms of their respective societies. The society provides the environment and resources used by the firm, and for which it owes its existence (Deegan, 2002). According to Suchman (1995,) legitimacy is a perception that a firm's activities fit within the societal norms and values.

The fourth theory is the signaling theory which is attributed to Akerlof and Arrow (1970). Spence (1974) further developed it into signal equilibrium theory. The theory states that a good firm can separate itself from a bad one by sending superior signals to the capital market. In terms of the signaling theory, environmental performance can be used to reduce or close the gap in information

asymmetry, as well as any conflicts of interest between corporations and their stakeholders, especially creditors (Suttipun, 2023). The signaling theory was adopted in this study to explain the impact of environmental exertions on financial performance because the companies send good signals of nonfinancial information represented by sustainability exertions to stakeholders such as creditors who use the information for their decision-making including on extending funding (Lo & Kwan, 2017).

2.2 Empirical Literature Review

Several studies have explored the impact of ESG practices on performance. Awuor (2023) investigated the relationship between environmental, social, and governance (ESG) practices and the financial performance of commercial banks in Uganda, adopting both positivist and post-positivist research philosophies along with an explanatory research design. The study utilized multivariate regression analysis, revealing that combined ESG practices have a slightly positive effect on Return on Equity (ROE) and a slightly negative effect on Return on Assets (ROA). However, it did not consider the individual effects of each ESG component, a gap identified in other studies where each component might influence performance differently. Additionally, the measurement of ESG adoption was not aligned with international benchmarks.

Similarly, Hedström and Dahlsjö (2023) explored the effect of environmental sustainability scores on financial and portfolio performance in companies across China and Sweden. Their findings indicated no evidence of a relationship between environmental sustainability and financial performance. Notably, the study included the timeframe of the Covid-19 pandemic in its data sample but did not analyze its potential effects on stock prices and performance. To address this, the current study incorporates Covid-19 as a dummy variable for 2020 and 2021, the years most affected by the pandemic in Africa.

In the context of US commercial banks, Ersoy et al. (2022) examined the impact of environmental practices on market value, introducing bank size as a moderating variable. Their findings demonstrated a U-shaped relationship between market value and the environmental pillar score (ENV), highlighting the nuanced influence of environmental practices on market valuation.

Savić and Bonic (2022) delved into the influence of environmental performance reporting on the profitability of European companies from 2012 to 2020. Using a descriptive research methodology and data from 60 companies listed in the Global Reporting Initiative database, their analysis, which employed both descriptive and inferential statistical techniques with a focus on Multiple Linear Regression, revealed a notable positive correlation between environmental performance indicators and return on total assets (ROA). This implies that transparency in sustainability efforts enhances profitability. However, their study did not consider the potential ramifications of the Covid-19 pandemic in 2020.

Awadzie et al. (2022) studied the relationship between sustainability reporting and bank performance in Africa, concluding that there is a positive relationship between environmental sustainability reporting and ROA. However, this study relied on subjective measures of sustainability ratings and did not reference internationally accepted sustainability scores from global ESG databases.

In a similar vein, Haibo and Manu (2022) investigated the impact of financial performance on environmental performance in selected banks in North and South Africa. Their results indicated

that carbon emission had a significant negative impact on financial performance in North African countries, whereas in South African countries, carbon emission had a statistically positive impact. The study's reliance on internally generated data that lacked validation through internationally accepted ESG benchmarks was a key limitation.

Lastly, Thumbi and Ragui (2019) examined the relationship between environmental factors and the performance of commercial banks in Kenya, identifying a positive relationship. However, the study broadly defined environmental factors without aligning them with the conventional global context. The current study will scope environmental factors based on guidelines provided by the London Stock Exchange Group, ensuring a more standardized approach.

3.0 Research Methodology

This study was grounded in the positivism approach, which emphasizes research based on observable social reality to produce credible data (Saunders et al., 2009). An explanatory non-experimental research design was adopted, deemed ideal as the independent variables were beyond the researcher's influence. The target population comprised all 145 listed banks operating in Africa, with a purposive sample of fifteen banks selected from the London Stock Exchange Group (LSEG) database for their consistent financial and sustainability data from 2013 to 2022. Secondary data on environmental sustainability scores were obtained from the LSEG database, recognized as a reliable source by numerous scholars globally (e.g., Elisa & Guido, 2023; Dragomir et al., 2022). The study lagged environmental sustainability scores by one year to observe their impact on financial performance, a method used in prior research (Ersoy et al., 2022; Maranga et al., 2022), and included a dummy variable for Covid-19 to account for its impact on 2020 and 2021.

The study sought to test the following null hypothesis:

- H₀₁:** Environmental practices do not have a significant effect on the financial performance of listed commercial banks in Africa.
- H₀₂:** Social practices do not have a significant effect on the financial performance of listed commercial banks in Africa.
- H₀₃:** Governance practices do not have a significant effect on the financial performance of listed commercial banks in Africa.
- H₀₄:** Size of the bank does not significantly moderate the relationship between environmental, social and governance (ESG) practices and the financial performance of listed commercial banks in Africa.

The study utilized multiple linear regression to analyse the data. The control variables in the study were social sustainability scores, governance sustainability scores and size of the bank. A dummy variable was introduced for Covid-19 in years 2020 and 2021.

The following empirical model was used:

$$ROA_{it} = \beta_0 + \beta_1 ENV_{it-1} + \beta_2 SOC_{it-1} + \beta_3 GOV_{it-1} + \beta_4 SIZ_{it-1} + \beta_5 COVID-19_t + \epsilon_{it}$$

Where:

ROA_{it} = Return on assets of bank i at time t

β_0 = Regression constant

β_{1-5} = The coefficients of the variables

ENV_{it-1} = Environmental sustainability score of bank i at time t-1

SOC_{it-1} = Social sustainability score of bank i at time t-1

GOV_{it-1} = Governance sustainability score of bank i at time t-1

SIZ_{it-1} = Size of the bank

$COVID-19_t$ = A dummy variable representing the COVID-19 pandemic crisis applied only in year 2020 and 2021.

ϵ_{it} = Error term.

4.0 Research Findings and Discussions

The study employed a comprehensive statistical approach encompassing both descriptive and inferential techniques for analysis. Descriptive analysis provided an initial overview of the dataset's characteristics, utilizing measures of central tendency, dispersion, and distribution shape to offer insights into the distributional properties of the variables under investigation. Inferential statistics were thereafter employed to explore the association between Environmental sustainability and financial performance, considering social sustainability score, governance sustainability score and size of the bank as control variables.

4.1 Descriptive Statistics

The study conducted a comprehensive descriptive analysis, presenting a detailed overview of statistical measures for the variables under examination. This included essential metrics that is, the mean, standard deviation, minimum and maximum values, providing valuable insights into the central tendency, dispersion, and range of each parameter. Table 1 summarizes these descriptive statistics.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Environmental Score	150	44.58	31.71	0.00	96.39
Social Score	150	49.13	28.15	1.80	96.97
Governance Score	150	45.58	22.09	3.94	90.98
Bank Size	150	11.70	2.05	7.05	14.87
ROA	150	0.03	0.02	-0.04	0.09

Source: Study Data (2024)

The Environmental Score represented the level of engagement with environmental practices among listed commercial banks in Africa. With an average score of 44.58 out of 100 among the sampled banks, it suggested a moderate commitment to environmental sustainability within the banking industry. However, the substantial standard deviation of 31.71 indicated a wide dispersion of scores, ranging from minimal to near-full engagement. This variability reflects differences in priorities, capabilities, or perceptions regarding environmental sustainability across the banks. Banks scoring higher on this metric may have implemented green banking initiatives such as sustainable lending, energy efficiency programs, or carbon footprint reduction strategies, while those with lower scores may have yet to fully integrate environmental considerations into their operations.

Return on Assets (ROA) measured the efficiency of listed commercial banks in Africa in generating profits from their assets. With an average ROA of 0.03, banks in the sample achieved a modest level of profitability relative to their asset base. The standard deviation of 0.02 suggested some variability in profitability performance across banks, with some achieving higher returns while others struggled to generate profits efficiently. The range from -0.04 to 0.09 indicated that while most banks were profitable, there were outliers with negative returns, indicating potential inefficiencies or financial challenges.

4.2 Correlation Analysis

Correlation analysis provides valuable insights into the potential impact of environmental practices on bank profitability. Table 2 summarizes the correlation analysis between the variables.

Table 2: Correlation Analysis

	ROA		Environmental score	Social score	Governance score	Bank size
ROA	1.000					
Environmental score	0.320*	-0.023	1.000			
p-value	0.0001					
Social score	0.8039*	0.074	0.221*	1.000		
p-value	0.0000		0.0067			
Governance score	0.748*	-0.193*	0.232*	0.668*	1.000	
p-value	0.0000	0.0180	0.0042	0.0000		
Bank size	0.207*	-0.031	0.360*	0.046	0.138	1.000
p-value	0.0110		0.0000			

Source: Study Data (2024)

Correlation analysis revealed a significant association between Environmental Score and Return on Assets (ROA), with a moderate positive correlation ($r = 0.320^*$, $p < 0.05$), indicating that banks with higher environmental performance tended to have higher returns on assets. This finding aligns with studies by Savić and Bonic (2022) and Awadzie et al. (2022), which also reported a positive correlation between environmental performance and financial metrics such as ROA. Additionally, a strong positive correlation was observed between Social Score and ROA ($r = 0.8039^*$, $p < 0.05$) and Governance Score and ROA ($r = 0.748^*$, $p < 0.05$). These results are consistent with Ersoy et al., (2022), who highlighted the nuanced impact of governance and social practices on financial performance, and Haibo and Manu (2022), who noted that good governance practices can significantly enhance financial performance. Furthermore, the analysis indicated a moderate positive relationship between Bank Size and ROA ($r = 0.207^*$, $p < 0.05$), supporting the notion that larger banks often have more resources to invest in ESG practices. This finding align with the study by Hedström and Dahlsjö (2023), who suggested that company size might influence the efficacy of sustainability practices. In summary, the correlation analysis reinforces empirical evidence from various studies, establishing that ESG practices, particularly environmental factors, positively influence bank profitability, highlighting the importance of comprehensive ESG strategies for enhancing financial performance and sustainability in the banking sector.

4.3 Regression Analysis

Multiple linear regression analysis was undertaken to analyse the relationship between environmental scores and return on assets, controlling for social scores, governance scores and size of the bank. Table 3 presents the results of the regression analysis.

Table 3: Regression Results

ROA	Coef.	Std. Err.	t	P>t
Environmental Score ENV	0.00018	0.00006	2.880	0.005
Social Score SOC	0.00001	0.00002	0.480	0.629
Governance Score GOV	0.00013	0.00002	7.620	0.000
Bank size	0.00035	0.00028	1.240	0.216
Dummy variable Covid	-0.00001	0.00083	-0.010	0.995
_cons	0.01400	0.00391	3.580	0.000

F test that all $u_i=0$: $F(14, 130) = 46.89$

Prob > F = 0.0000

overall $R_{Sq} = 0.5607$

Source: Study Data (2024)

The results of the regression analysis showed that Environmental Score had a significant positive effect on ROA ($\beta = 0.00018$, $p = 0.005$), implying that higher environmental performance was associated with higher financial performance. Additionally, the Dummy Variable representing the COVID-19 pandemic demonstrates a non-significant negative coefficient (-0.00001) on ROA, indicating a minor decrease in ROA during the pandemic.

In summary, the findings suggest that environmental practices play a significant role in influencing the financial performance of listed commercial banks in Africa, in terms of ROA. These insights are valuable for banks and policymakers seeking to enhance sustainability practices and financial performance in the African banking sector.

Previous studies on the subject provide further support for these findings. Savić and Bonic (2022) explored the influence of environmental performance reporting on the profitability of European companies over the period from 2012 to 2020. Their findings revealed a notable positive correlation between environmental performance indicators and return on total assets (ROA). Similarly, Kaakeh and Gokmenoglu (2022) investigated the relationship between environmental performance and financial performance of Chinese firms, focusing on the period during and after the COVID-19 pandemic. They concluded that even in times of economic uncertainty, firms with robust environmental strategies tended to maintain or improve their financial performance.

Furthermore, Awadzie et al. (2022) examined the impact of environmental sustainability reporting on bank performance in Africa. Their study revealed that transparency in environmental efforts positively correlates with financial performance metrics such as ROA. Additionally, Buallay

(2019) explored the correlation between environmental disclosure and financial performance in the European banking sector. The study found that banks that actively disclose their environmental impacts tend to exhibit higher financial returns, supporting the notion that proactive environmental management and transparent communication about such practices are appreciated by investors and can lead to higher market valuation and profitability.

Jo et al., (2015) conducted a comprehensive analysis across 29 countries and found a positive relationship between environmental performance and financial outcomes in banks. Their study supports the idea that effective environmental management can enhance a bank's profitability by reducing costs associated with waste and inefficiency, improving operational performance, and enhancing customer and investor appeal.

These studies collectively corroborate the findings of the current analysis, emphasizing the significant positive impact that environmental practices can have on the financial performance of banks. They highlight that integrating environmental considerations into operational and strategic frameworks is not only a matter of regulatory compliance or ethical responsibility but is also a sound business strategy that can lead to tangible financial benefits. By adopting sustainable practices, banks can enhance their operational efficiency, foster innovation, improve stakeholder relations, and ultimately achieve better financial outcomes. This body of literature underlines the importance of environmental sustainability in the banking sector and offers robust evidence that such practices are integral to achieving long-term success and stability in the financial markets.

5.0 Conclusion

The study concludes that environmental practices positively influence the financial performance of listed commercial banks in Africa, particularly in terms of Return on Assets (ROA). The moderate positive correlation between Environmental Score and ROA suggests that banks with stronger environmental performance tend to achieve higher returns on assets. Overall, these findings underscore the importance of integrating Environmental practices into bank operations to enhance financial performance.

6.0 Recommendation

The study recommends that commercial banks in Africa prioritize the integration of environmentally sustainable initiatives into their operations, given the positive impact of environmental practices on Return on Assets (ROA). This involves a strategic focus on adopting green banking technologies, reducing carbon footprints, and implementing eco-friendly policies throughout the banking infrastructure.

The study contributes to the existing body of knowledge by providing a comprehensive examination of the relationship between sustainable banking practices and financial performance within the specific context of commercial banks operating in Africa. While most existing literature on sustainability practices and financial performance predominantly draws from studies conducted in Western contexts, this research fills a crucial gap by assessing the applicability and effectiveness of sustainability initiatives within the unique socio-economic and regulatory landscape of African countries. This contextualized perspective is essential for informing the development of tailored strategies and policies that promote sustainable finance and inclusive economic development across the continent.

Furthermore, this study lays the groundwork for future research into the relationship between environmental sustainability practices and financial performance within the African banking

sector. One potential area for further investigation is a comparative analysis of sustainability practices and financial performance between listed commercial banks and other financial institutions, such as non-listed banks, credit unions, and microfinance institutions. Additionally, future research could delve deeper into the specific mechanisms through which environmental sustainability practices influence financial performance within the banking sector. For instance, studies could explore the mediating effects of factors such as customer loyalty, employee satisfaction, and risk management practices on the relationship between environmental sustainability practices and financial performance. By examining these mediating pathways, researchers can gain a more comprehensive understanding of the underlying drivers of financial performance in relation to environmental sustainability initiatives.

REFERENCES

- Abisola, A (2022). The Nexus Between Bank Size and Financial Performance: Does internal control adequacy matter? *Journal of Accounting and Taxation* Vol. 14(1), pp. 13-20, January-March 2022. <http://www.academicjournals.org/JAT>
- Awadzie, D.M., Soku, M.G & Awadzie, D.M., (2022). Sustainability Reporting and The Financial Performance of Banks in Africa. *Journal of Business, Economics and Finance (JBEF)*, 11(1), 43-57. <http://doi.org/10.17261/Pressacademia.2022.1551>
- Awuor, L. (2023). A Study on the effect of Environmental Social and Governance adoption and bank characteristics on the financial performance of commercial banks in Uganda [Strathmore University]. <http://hdl.handle.net/11071/13365>
- Berg, F., Fabisik, K. & Sautner, Z. (2021). Rewriting History II: The (Un)Predictable Past of ESG Ratings. *European Corporate Governance Institute*. Finance Working Paper 708/2020, SSRN: <https://ssrn.com/abstract=3722087> or <http://dx.doi.org/10.2139/ssrn.3722087>
- Buallay, A. (2019). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal*, Vol. 30 No. 1, pp. 98-115.
- Central Bank of Kenya, (2021). Commercial Banks Weighted Average Rates. <https://www.centralbank.ke/commercial-banks-weighted-average-rates/>
- Chollet, P. & Sandwidi, B. W. (2018), CSR engagement and financial risk: A virtuous circle? International evidence, *Global Finance Journal*, Vol. 38, pp. 65-81.
- Deegan, C. (2002), Introduction: The legitimising effect of social and environmental disclosures—a theoretical foundation, *Accounting, Auditing & Accountability Journal*, Vol. 15 No. 3, pp. 282-311
- Deutsche Bank. (2020.). ESG investing: roots to return. <https://flow.db.com/more/macro-and-markets/esg-investing-roots-to-return>
- Dragomir, V.D., Batae, O.M., Ionescu, B.S. and Feleaga, L.I (2022). The Influence of ESG Factors

<https://doi.org/10.53819/81018102t7051>

- on Financial Performance in the Banking Sector During the Covid-19 Pandemic. *Economic Computation and Economic Cybernetics Studies and Research*, Issue 4/2022; Vol. 56.
- Du Toit, E. & Lekoloane, K., (2018). Corporate Social Responsibility and Financial Performance: Evidence from The Johannesburg Stock Exchange, South Africa, *South African Journal of Economic and Management Sciences*. 21(1) October 201821(1)DOI:10.4102/sajems.v21i1.1799
- Eccles, R. G., Ioannou, I. & Serafeim, G. (2014), The Impact of Corporate Sustainability on Organizational Processes and Performance, *Management Science*, Vol. 60 No. 11, pp. 2835-2857
- Elisa, M. & Guido, P. (2023). ESG Dimensions and Bank Performance: An Empirical Investigation in Italy. *Corporate Governance Journal*. VOL. 23 NO. 3 2023, pp. 563-586,
- Ersoy, E.; Swiecka, B.; Grima, S. & Özen, E. (2022); The Impact of ESG Scores on Bank Market Value? Evidence from the U.S. Banking Industry. *Sustainability* 2022, 14, 9527. <https://doi.org/10.3390/su14159527>
- Freeman, R.E. (1984) Strategic Management: A Stakeholder Approach. Pitman, Boston. [https://www.scirp.org/\(S\(351jmbntvnsjt1aadkozje\)\)/reference/referencespapers.aspx?referenceid=1209107](https://www.scirp.org/(S(351jmbntvnsjt1aadkozje))/reference/referencespapers.aspx?referenceid=1209107)
- Friedman, A. L. & Miles, S. (2002), Developing Stakeholder Theory, *Journal of Management Studies*, Vol. 39 No. 1, pp. 1-21
- Gitagia, F., Wamugo, L. & Omagwa, J. (2020). Dividend Decisions, Economic Growth and Firm's Value of Firms Listed at Nairobi Securities Exchange Kenya. *Research Journal of Finance and Accounting* www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847
- Gitagia, P. (2020). Financial Management Decisions and Firm Value of Selected Firms Listed at Nairobi Securities Exchange, Unpublished PhD Study, Egerton Repository.
- Goel, P. (2023). Implications of Corporate Governance on Financial Performance: An Analytical Review of Governance and Social Reporting Reforms in India. *Asian Journal of Sustainability and Social Responsibility*, 3(4).
- Hedström, A. & Dahlsjö E (2023). ESG Scores and financial performance – A Comparison between China and Sweden. *Jönköping International Business School* May 2023.
- Hussein, K. (2010). Bank-Level Stability Factors and Consumer Confidence – A Comparative Study of Islamic and Conventional Banks. *Journal of Financial Services Marketing*, 15(3), 259–270.
- Jo, H., Kim, H. & Park, K. (2015), Corporate Environmental Responsibility and Firm Performance in the Financial Services Sector. *Journal of Business Ethics*, 131(2), 257–284. <https://doi.org/10.1007/s10551-014-2276-7>;

- Jones, H. & Felps, W. (2018). How Applying Instrumental Stakeholder Theory can Provide Sustainable Competitive Advantage. *The Academy of Management Review*, 43(3), 371–391. <https://doi.org/10.5465/amr.2016.0111>
- Kaakeh, M % Gokmenoglu, K. (2022). Environmental performance and financial performance during COVID-19 outbreak: Insight from Chinese firms. *Environmental Economics and Management*. Volume 10 - 2022 | <https://doi.org/10.3389/fenvs.2022.975924>
- Kenya Bankers Association (2021). State of the Banking Industry Report 2020. Available at <https://www.kba.co.ke/wp>
- Kimilu, C. N. (2021). The Effect of Environmental, Social and Governance Disclosures on Firm Value of Firms Listed on The Nairobi Securities Exchange Unpublished PhD Thesis, Strathmore University. <http://hdl.handle.net/11071/12701>
- Kroes, J.R., & Manikas, A.S. (2014). Cash Flow Management and Manufacturing Firm Financial Performance: A Longitudinal Perspective. *Int. J. Production Economics*, 14(8), 37-50. <https://doi.org/10.1016/j.ijpe.2013.11.008>
- Lagoarde-Segot, T. & Leoni, P. L. (2013). Pandemics of the Poor and Banking Stability, *Journal of Banking & Finance*, 37(11), 4574–4583.
- LSEG (2023). Accessible at lseg.com/en
- Maluki, P (2021). Financing Economic Growth. The Banking Sector and its Contribution to Microeconomic Stability in Kenya. Unpublished PhD Thesis. Nanyang Technological University, Singapore. <https://www.ntu.edu.sg/cas/news-events/news/details/financing-economic-growth>
- Maranga, D.O. (2022) Investment Decisions and Financial Performance of Non- Financial Firms Listed at the Nairobi Securities Exchange, Kenya. Unpublished PhD Thesis. Kenyatta University.
- Maranga, D.O., Jagongo, A. & Koori, J (2020). The Mediating Effect of Financial Leverage on the Relationship between Investment Choices and Financial Standing of Non-Financial Firms Listed at the Nairobi Securities Exchange, Kenya, *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*. 2020 Vol. 9
- McKinsey & Company. (2023) What is ESG? Available at: <https://www.mckinsey.com/featuredinsights/mckinsey-explainers/what-is-esg>
- McKinsey's Global Banking Annual Review (2022). Available at: <https://www.mckinsey.com/industries/financial-services/our-insights/global-banking-annual-review>
- Mumo, B. (2022). The Effects of ESG Reporting on Stock Returns of Firms Listed at The Nairobi Stock Exchange. Unpublished PhD Thesis. University of Nairobi.

- Oana-Marina B, Dragomir, V.D. & Feleaga, L. (2020). Environmental, Social, Governance (ESG), and Financial Performance of European banks. *Journal of Accounting and Management Information Systems* 3:480-501.
- Ochego, E.M., Omagwa, J. & Muathe, S. (2019). Corporate Governance, Financial Performance and Firm Value; Empirical Evidence from Commercial Banks in Kenya. *International Journal of Finance & Banking Studies* (2147-4486), Vol 8 No 4, 2019. <https://doi.org/10.20525/ijfbs.v8i4>
- Orumwense E.K. & Orumwense O. (2023) Effect of Corporate Governance on Financial Performance of Quoted Commercial Banks in Nigeria, *European Journal of Accounting, Auditing and Finance Research*, Vol.11, No. 4, pp.1-14
- Ozili, P. K (2017). Bank Earnings Smoothing, Audit Quality and Procyclicality. *Review of Accounting and Finance*. Google Scholar
- PricewaterhouseCoopers. (2022). ESG-focused Institutional Investment Seen Soaring. <https://www.pwc.com/gx/en/news-room/press-releases/2022/awm-revolution-2022>
- PwC & KBA, (2022). Launch of The Kenyan Banking Sector Total Tax Contribution Study. <https://www.kba.co.ke/launch-of-the-kenyan-banking-sector-total-tax-contribution-study-by-pwc-and-kba/>
- PWC (2022) The Financial Focus. <https://pwc-kenya.foleon.com/financial-focus-magazine-2020/financial-focus-2022-part-i/foreword>
- PWC Report (2023) An ESG for Africa? <https://afrique.pwc.com/fr/actualites/decryptages/esg-for-africa.html>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Understanding Research Philosophies and Approaches. *Research methods for business students*, 4, 106-135.
- Savić, A & Bonic, L (2022). Analysis of the Impact of Reporting on Environmental Performance Indicators on the Profitability of European Companies. *Facta Universitatis Series Economics and Organization*. December 2022
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610. https://doi.org/10.1007/978-3-642-28036-8_471
- Suttipun, M. (2023). ESG Performance and Corporate Financial Risk of the Alternative Capital Market in Thailand. *Cogent Business & Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2168290>
- Thumbi, G., & Ragui, M. (2019). Environmental Factors and Performance of Commercial Banks in Kenya. *International Journal of Current Aspects*, 3(VI), 149-175. <https://doi.org/10.35942/ijcab.v3iVI.83>

- Velte, P. (2017), Does ESG performance have an impact on financial performance? Evidence from Germany, *Journal of Global Responsibility*, Vol. 8 No. 2, pp. 169-178:
- Waweru, F.W., Memba, F.S. and Njeru, A. (2016). Relationship between forward-looking information disclosure and financial performance of non-financial firms listed in Nairobi Securities Exchange, Kenya. *International Journal of Academic Research*. December 2016 Edition. DOI:[10.6007/IJARBS/v6-i11/2449](https://doi.org/10.6007/IJARBS/v6-i11/2449)
- Xie, J., Nozawa, W., Michiyuki, Y., Fujii, H. and Managi, S. (2017). Do Environmental, Social, And Governance Activities Improve Corporate Firm Value? *Business Strategy and The Environment*, Volume 28, Issue, February 2019 Pages 286-300