

Impact of Environmental, Social, and Governance Factors on Investment Decision-Making of Cement Manufacturing Companies in Kenya

Benard Muange^{1*}, Dr. Stephen Kanini², Dr. John Kiarie³
School of Business and Leadership Studies, St. Paul's University
Corresponding author's Email: muangeben@yahoo.com

Accepted: 29 September 2025 || Published: 15 October 2025

Abstract

This study sought to assess the impact of ESG factors on the investment choices made by cement manufacturing companies in Kenya. This study employed a mixed methods design, targeting hierarchical management levels within Cement manufacturing companies, including top management, middle management, and first-line managers (supervisors). A census approach was adopted for this study, whereby all 159 management team members from the eight cement manufacturing companies were included in the study. This approach ensured comprehensive data collection from all three management levels. The study made use of primary data, adopting a well-designed combined closed and open-ended questionnaire for data collection. Correlation, regression and descriptive statistics were used in data analysis. The findings revealed that a significant correlation exists between Environmental, Social, and Governance (ESG) factors and investment decision-making, as shown by a correlation coefficient of $R=0.868$. The regression coefficient results revealed that all three predictor variables had a positive and significant impact on investment decision-making ($p < 0.05$). The study concludes that environmental, social, and governance factors play a crucial role in influencing investment decisions within the cement manufacturing sector in Kenya. The study recommends that policymakers concentrate on reinforcing the enforcement of environmental regulations and enhancing their clarity to increase the impact of environmental factors on investment decisions. To encourage businesses to invest in clean technologies and sustainable practices, the government should think about enacting more targeted, transparent, and easily accessible incentives, such as tax breaks, grants, and low-interest green financing.

Keywords: *Environmental factors, Social factors, and Governance factors, investment decision-making*

How to Cite: Muange, B., Kanini, S., & Kiarie, J. (2025). Impact of Environmental, Social, and Governance Factors on Investment Decision-Making of Cement Manufacturing Companies in Kenya. *Journal of Finance and Accounting*, 5(7), 1-19.

1. Introduction

Organizational values have significantly changed as a result of companies embracing sustainable approaches. The demands of clients and civil legislation have served to further fuel this. Including Environmental, Social, and Governance considerations in sustainable investing is the most popular and quickly growing investment approach (Rusu, 2020). ESG

considerations are becoming more and more important to investors as they work to maximize returns while also promoting sustainable and ethical business practices. Investors include non-financial ESG issues in their appraisal processes to ascertain a company's growth prospects and related risks. According to Kula et al. (2023), "ESG" stands for "environmental, social, and governance," and describes how corporate operating frameworks include these factors. These days, sustainable business strategies are a must for every company serious about long-term success. Actually, ESG strategies and reports are intrinsic to the business plans of socially responsible organizations.

The process of making investment decisions in emerging economies is becoming more complex due to the rising demand for responsible and sustainable business practices (Madaan & Singh, 2019). As investors increasingly focus on non-financial factors like regulatory compliance, social welfare, and governance standards, companies frequently encounter difficulties in effectively incorporating these elements into their strategic frameworks. Insufficient regulatory enforcement, a lack of incentives, and inconsistent adoption of responsible practices result in a gap between investor expectations and the actual conduct of businesses (Madaan & Singh, 2019). This gap exposes organisations to financial and reputational risks and raises concerns regarding the long-term viability and competitiveness of firms in rapidly changing policy and market environments.

The importance of addressing ESG problems when making investment choices is becoming more apparent to investors who want their portfolios to represent their values and promote sustainable corporate practices. Right now, there are two main reasons why investors all around the globe place a high value on ESG investments. A managed portfolio's performance may be enhanced, and portfolio risk can be reduced via ESG investing, which also promotes ethical investment practices (Ziolo et al., 2019). In order to determine the financial health of an organisation, credit rating agencies already reveal the disclosure of the ESG score (Rusu, 2020). Environmental, Social, and Governance considerations present a window regarding the view on a company's long-term profitability and earnings capability. By following ESG standards, a company mitigates its risk of profit volatility and reputational hazards. Park and Jang (2021) stated that an ESG score is applied to protect investors from potentially detrimental stocks.

Before deciding on investment choices, investors are required to consider ESG factors in Africa, which may really help in ensuring that the sustainability of any investment remains over time, in the short run, its financial performance, market competitiveness, and risk management. Real-life examples relating to the importance of ESG factors to investors were provided by Aich et al. (2021). Another recent study by Dmuchowski et al. (2023) established that companies with lower ESG profiles or scores allow more carbon emissions, may perhaps be left facing tail risks. The results support the idea that shareholders are mostly there to lower risk and that considering ESG factors when making investment decisions can help lower portfolio risks that aren't compensated for. As a result, more and more banks are working with the companies in their portfolios to lower the risks of exposure (Almeyda & Darmansya, 2019).

On the contrary, Rooh and Hussain (2022) assert that a firm will always be worth more when it possesses a healthier financial standing. What this necessarily means is that investors gain less value from considering the ESG when managing risk. This makes the investors invest in projects that improve a firm's ESG profile, which will get the firm better ESG rankings. As a

result, it is easier to select equity assets that will make shareholders richer if they have a higher ESG score (Almeyda & Darmansya, 2019). This simplifies it for companies and investors to understand how to decide what ESG considerations to focus on or what score is actually more important. Recent research shows that firms following ESG methodologies seem to perform better than those that are not.

More and more investors take ESG issues into consideration in their investment decisions because they give a fuller picture of how well a company will perform in the future and how risky it is (Sultana et al., 2018). When investors evaluate the operational sustainability of a company and the probability of its exposure to environmental and regulatory risks, they evaluate such factors as how resource-intensive it is, how climate-resilient it is, and how carbon-intensive it is. Social factors affect a company's reputation and stability, which are important for sustaining market trust and assuring that operations remain uninterrupted (Vyas et al., 2022). Governance includes areas like open leadership, ethical behavior, and shareholders' rights. These areas assurance that people are held to account and are given direction, which encourages investor confidence. The ESG dimensions together make up a complete framework that helps investors figure out how much money they can make and how ethical and strong their investments are. Progressive investors think that companies that use ESG principles well are more likely to be able to handle new risks, make the most of opportunities, and provide long-term value.

1.1 Problem Statement

Environmental, Social, and Governance (ESG) factors have emerged as critical elements in contemporary investment decision-making (Ziolo et al., 2019). In contrast to conventional methods that prioritise financial metrics, ESG frameworks highlight the importance of sustainability, stakeholder involvement, and ethical governance practices. Investors are increasingly recognising ESG factors as indicators of long-term stability and risk reduction, especially in sectors with considerable environmental impacts (Aich et al., 2021). The cement manufacturing industry, characterised by its high resource consumption, is increasingly being examined regarding its emissions, energy consumption, labour practices, and governance accountability. Although ESG is widely acknowledged as a factor that adds value, there are still enquiries regarding how thoroughly these considerations are integrated into corporate investment decisions.

Cement manufacturing in Kenya plays a crucial role in infrastructure development; however, it is linked to environmental degradation, significant energy consumption, and challenges related to regulatory compliance (Mbole et al., 2021). The sector faces growing demands from regulators, financiers, and communities to ensure that investment strategies are consistent with sustainable practices. Initiatives like the climate risk guidelines from the Central Bank of Kenya and the sustainability reporting framework established by the Nairobi Securities Exchange demonstrate an increasing commitment at the national level to enhance the integration of environmental, social, and governance factors. Nonetheless, numerous firms continue to face challenges related to inadequate enforcement mechanisms, limitations in data, and inconsistent implementation of ESG standards. The challenges presented prompt an examination of the impact of ESG factors on the investment priorities of cement companies, which are essential to the industrial growth of Kenya (Chari Njore & Muzaffar, 2024).

1.2 Research Objectives

1. To evaluate the influence of environmental factors on investment decision-making of cement manufacturing companies in Kenya.
2. To assess the influence of social factors on investment decision-making of cement manufacturing companies in Kenya.
3. To evaluate the effect of governance factors on investment decision-making of cement manufacturing companies in Kenya.

2. Literature Review

2.1 Theoretical Review

The organizational learning theory, the social constructivism theory, and the goal theory are three theories that this study uses. The theoretical framework gives theories and models that help understand the variables in the study and make sense of the results obtained from them.

2.1.1 Organizational Learning Theory

Chris Argyris and Donald Schön created the fundamental ideas of "Organisational Learning Theory." Their early work in the 1970s and 1980s laid the groundwork for examining how organisations learn and adapt to new situations. Organisational learning theory is an area of organisational research that investigates the way organisations learn and apply knowledge to make their operations more efficient (Basten & Haamann, 2018). The topic refers to the determinants of organisational learning, for example, the mechanisms, processes, and factors that do so. It delivers a set of concepts and models that allow us to explain and predict how organisational learning will impact various outcomes, including but not limited to innovation, flexibility, competitiveness, and sustainability. The organisational learning theory is based on insights from a wide range of domains such as economics, politics, sociology, anthropology, and psychology (Crossan et al., 1995). Organisational Learning Theory argues that the organisational case of learning is actually a process, which constantly changes and develops.

Organizational Learning Theory is highly relevant to this study. The theory will help figure out how companies learn from their past governance practices, use what they have learnt to make decisions, and change their governance structures to make them more sustainable. This means knowing how feedback from past ESG initiatives related to governance affects future decisions, how companies use this feedback to make governance better, and how they use past experiences with governance failures or successes to make strategies better. In the end, the theory will help understand how Kenyan cement companies take governance issues into account when making investment decisions. This will help them keep getting better at governance and being more sustainable overall.

2.1.2 Social Constructivism Theory

Lev Vygotsky's work in the early 1900s laid the groundwork for social constructivism. The theory stresses that learning is more than just getting information; it also means joining knowledge communities. This point of view says that learning builds on what you already know, with new information being added to and expanding what you already know. Each student builds their own worldview by using their own knowledge and understanding to make sense of their experiences. This personal interpretation means that learning outcomes are always subjective, since everyone processes new information through their own unique

cognitive lens. Social constructivism is a useful way to look at how companies create and use knowledge about ESG factors in their investment strategies in organisational settings. It shows that learning and making decisions in organisations are naturally collaborative.

This theory helped figure out how social factors affect the decisions that cement manufacturing companies in Kenya make about investments. According to this theory, social interactions, cultural contexts, and shared experiences all affect what people know and how they make decisions. When it comes to cement companies, social factors like getting involved in the community, how they treat their workers, and their social responsibility programs affect both internal and external stakeholders. Companies can shape their social identity and reputation by promoting a socially responsible corporate culture and working with local communities. This can then affect their investment choices. The theory says that the company's and society's socially constructed norms and values affect how investments are made, making sure that they lead to outcomes that are good for the environment and society.

2.1.3 Goal Theory

Locke and Latham (2015) came up with goal theory, which explains how goals affect behaviour and performance in four ways: 1) focusing on what's important, 2) increasing effort, 3) encouraging the use of relevant knowledge and skills, and 4) setting more difficult goals leads to the use of more skills. This supports the application of goal-setting in performance management. Pintrich (2000) emphasized that goals establish a target performance level for individuals to strive for and assess their actions in relation to it, while performance feedback facilitates the monitoring of progress towards the goal, enabling adjustments in effort and strategies. Goal theory elucidates how various characteristics of goals, such as difficulty and specificity, along with factors like commitment levels, importance, self-efficacy beliefs, feedback, and task complexity, affect the relationship between goals and behavior. Interventions that emphasize goal-setting can assist in managing these factors to enhance the likelihood of success.

Goal Theory is particularly relevant for assessing the impact of environmental factors on investment decision-making within Kenya's cement manufacturing sector. Companies can focus their strategies and resources on investments that are good for the environment by setting specific and realistic goals, like lowering carbon emissions or using energy-efficient technologies. The goal-setting theory says that setting these specific environmental goals would encourage workers to come up with new ideas and solve problems, as well as make sure their actions are in line with the company's sustainability goals. Also, getting stakeholders involved in the process of setting goals can make people more committed to these goals, which can affect investment choices that put long-term environmental sustainability first.

2.2 Empirical Review

In their 2022 study, Afeef and Kakakhel looked at how ESG variables affected Pakistani individual investors' choices. G*Power analysis was used to establish the sample size, and 300 participants trading on the Pakistan Stock Exchange (PSX) were surveyed using a snowball non-probability sampling approach. Investors definitely take ESG concerns into account when making investment choices, according to Structural Equation Modelling (SEM) findings. Collectively, the study's findings on the three ESG aspects' statistically significant links point to their importance for investors' decisions. Investment decisions were most impacted by governance considerations, next by social considerations, and finally by environmental

concerns to a lesser extent. Results showed that results are affected by how investors feel about ESG factors. This study addresses the gap by focusing on corporate-level investment decisions within the cement industry in Kenya, an emerging market with unique ESG dynamics that differ from individual investor behavior in Pakistan.

To uncover how ESG disclosure affected the bottom lines of Indian companies, Sharma et al. (2020) studied the problem. The research took into account numerous factors, such as the following: market and financial performance, leverage, firm size, industry, foreign institutional ownership, and an environmental, social, and governance (ESG) disclosure index on the basis of the GRI framework. We also discussed the relevant material and Clause 49 of the listing agreement in our study. Ordinary Least Squares (OLS) regression was used in the study to determine the relationship between ESG disclosure and the provided factors. This was achieved through analysis of the sustainability and annual reports of firms listed on the Bombay Stock Exchange between the years 2013-2016. Financial and market success were positively related to ESG disclosure, as the results showed. On the other hand, ESG disclosure was negatively and significantly related to leverage and also to the availability of country-not-domiciled institutional investors. Although stakeholder pressure has contributed to modest improvements in ESG reporting, the study noted that voluntary ESG disclosure in India remains limited. This study addresses the gap by focusing on how ESG factors influence investment decision-making — beyond disclosure — within a high-impact, environmentally sensitive industry in Kenya, where ESG reporting remains underdeveloped.

In their study of the Vietnamese stock markets, Dung et al. (2024) looked at how ESG data affected the choices made by individual investors. Governance, social, and environmental (ESG) considerations were among the ESG elements studied in relation to investment decisions. A total of 232 individual investors were surveyed as part of the study approach. The results demonstrated that ESG data had a substantial impact on stock selection, with investors giving more weight to governance (G) data than social (S) or environmental (E) data. This study fills the gap by shifting the focus from individual investor decisions to corporate-level investment decision-making, specifically within Kenya's cement manufacturing sector, where ESG priorities may differ.

Parikh et al. (2023) wanted to identify what parameters should be used in investment selection on the basis of the relationship between ESG ratings and shareholder wealth. Using a linear regression model, the research analyzed the correlation of the stock returns of 225 Indian companies with the three dimensions of ESG: governance, social, and environmental. The results showed that the governance (G) dimension had a positive effect on equity returns, the environmental (E) dimension had a negative effect, and the social (S) dimension had no effect at all. The study found that good governance is necessary to increase shareholder value and that financial incentives can lead people to act in ways that are good for the environment and society. Using these as a foundation, this study aims to fill a research gap by investigating the impact of ESG considerations on investment decision-making in Kenya's cement manufacturing industry, which is both economically and environmentally prominent.

2.3 Conceptual Framework

The conceptual framework below offers a visual representation of the relationships between the study's variables. The framework matches study variables with the most suitable indicators

that are observable and measurable. These indicators are designed to explicitly explore the variables in the context of the research study’s aim and objectives.

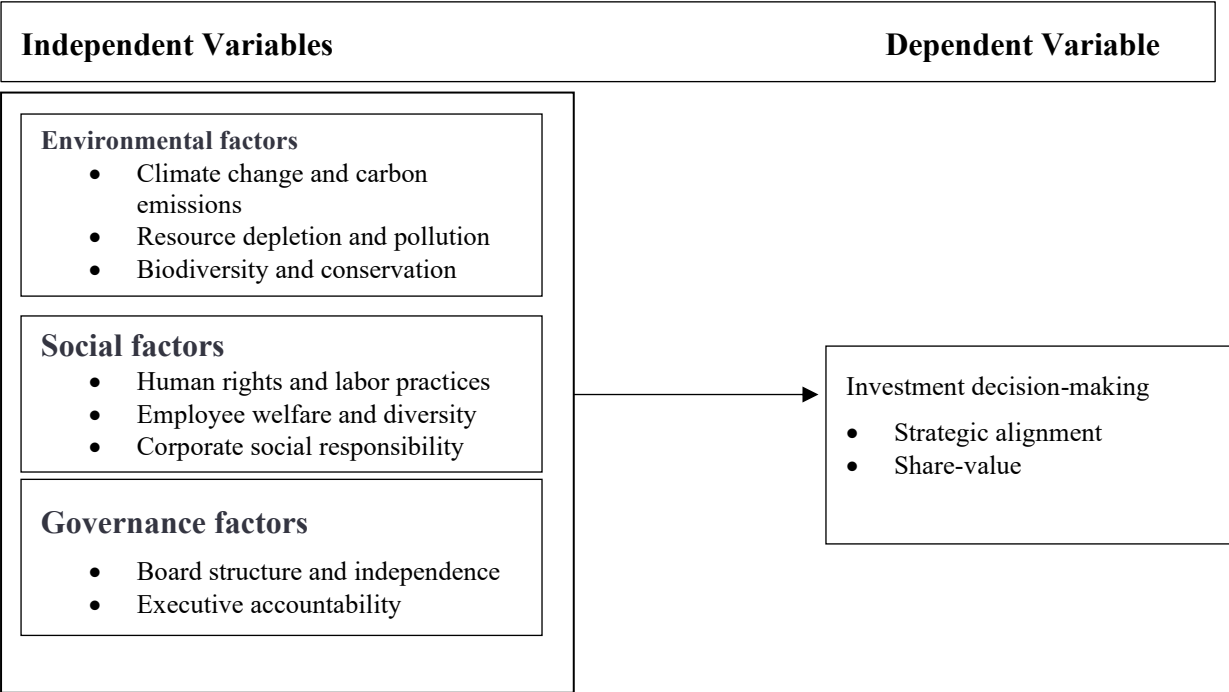


Figure 1: Conceptual Framework

3. Methodology

This research utilised a mixed-methods design, integrating quantitative and qualitative approaches to investigate the impact of Environmental, Social, and Governance (ESG) factors (independent variables) on investment decision-making (dependent variable) in the cement manufacturing industry in Kenya. The quantitative aspect employed a descriptive research design to statistically examine the strength and direction of relationships between ESG factors and investment decisions in their natural context. The integration of both approaches in the mixed design improved the validity of the findings and provided a comprehensive understanding of the role of ESG in investment decision-making within the Kenyan cement industry. The target population comprised eight cement manufacturing firms in Kenya, which comprised 159 respondents. The study identified all firms according to their significance and role in the cement manufacturing sector in Kenya. Data was collected from the Top Management, Mid Management, and Low Management levels of each company.

This study collected information from all eligible entities within a defined group, specifically all cement manufacturing companies. The study made use of primary data, which was obtained from the population. For data collection, the study mainly used a well-designed combined closed and open-ended questionnaire to solicit the needed data from its respondents. The opinions of respondents were obtained through the questionnaires sent through email, which employees were able to fill in remotely at their own convenience. To fully address the study goals, both qualitative and quantitative data was were gathered and examined. To gain a better understanding of participants' viewpoints, qualitative data were obtained from the

questionnaire's open-ended questions. These responses complemented the quantitative Likert-scale questions by providing additional information and deeper insights into ESG considerations and their influence on investment decision-making. SPSS was used to produce quantitative data for analysis and evaluate its dependability. The associations between the independent variables (environmental factors) and the dependent variable (investment decision-making) were next assessed using regression analysis.

4. Results and Discussion

4.1 Impact of Environmental, Social, and Governance (ESG) Factors on Investment Decision-making

4.1.1 Influence of Environmental Factors

The respondents were asked to indicate the extent to which they agree with the statements on the Influence of environmental factors on investment decision-making. The findings are shown in Table 1.

Table 1: Influence of Environmental Factors

Influence of environmental factors		StronglyDisagree	Neutral	Agree	Strongly	Mean	Std
		disagree		agree	agree		dev
Environmental regulations significantly impact our company's investment decisions.	0.0	12.6%	33.6%	18.2%	35.7%	3.77	1.0727
Climate change and carbon emissions significantly influence our company's investment decisions.	0.0	13.3%	28.7%	20.3%	37.8%	3.83	1.0833
Investments in pollution control and mitigation technologies are central to our business planning.	0.0	0.0	17.5%	54.5%	28.0%	4.10	.6683
Regulatory requirements related to environmental sustainability shape our investment choices.	0.0	8.4%	7.0%	30.8%	53.8%	4.30	.9272
Stakeholder concerns regarding environmental impact influence our company's investment decisions.	0.0	17.5%	25.2%	30.1%	27.3%	3.67	1.0600
Government incentives for green investments motivate our company to adopt sustainable practices.	0.0	17.5%	35.0%	24.5%	23.1%	3.53	1.0333

The findings show that environmental regulations and sustainability requirements significantly impact company investment decisions. A notable 84.6% of respondents indicated agreement or strong agreement that regulatory requirements influence their investment decisions, establishing this as the most significant factor evaluated (Mean=4.30, SD=0.9272). In a similar vein, 82.5% of respondents indicated that investments in pollution control and mitigation technologies are integral to their business planning, demonstrating a significant internal commitment to environmental responsibility and compliance (Mean=4.10, SD=0.6683).

Participants indicated that climate change and carbon emissions are significant factors, with 58.1% agreeing or strongly agreeing that these elements affect their investment choices (Mean=3.83, SD=1.08330). This indicates that while a majority is aware, 28.7% of respondents remained neutral, and 13.3% expressed disagreement. This suggests that some companies may not have fully incorporated climate-related considerations into their investment frameworks.

A total of 53.9% of respondents confirmed the impact of environmental regulations, whereas 33.6% expressed a neutral stance. This suggests that although more than half recognise the influence of regulations, a significant number are either uncertain about its effects or consider it to be negligible. Stakeholder concerns about environmental impact received 57.4% agreement, while 25.2% remained neutral and 17.5% disagreed (Mean=3.67, SD=1.06). This indicates a range of perspectives on the influence of external pressure in promoting sustainability-related investments. Ultimately, government incentives for green investments seem to be the least impactful factor. Only 47.6% of respondents indicated agreement or strong agreement that these incentives encourage them to adopt sustainable practices. Furthermore, this item exhibited the highest neutrality rate at 35.0%, while 17.5% expressed disagreement (Mean=3.53, SD=1.0333). This indicates that the incentives may be inadequate, ambiguous, or not broadly available or trusted by organisations.

4.1.2 Influence of Social Factors

The respondents were asked to indicate the extent to which they agree with the statements on the Influence of social factors. The findings are shown in Table 2.

Table 2: Influence of Social Factors

Influence of social factors	strongly disagree	disagree	neutral	agree	strongly agree	Mean	Std dev
Respect for human rights and fair labor practices significantly influences our investment decisions.	0.0	.7%	26.6%	39.9%	32.9%	4.05	.7902
Investment projects are evaluated for their impact on employee welfare and working conditions.	.7%	5.6%	23.8%	18.2%	51.7%	4.15	1.0137
The diversity and inclusion practices within our workforce are key considerations in investment decision-making.	4.2%	6.3%	26.6%	20.3%	42.7%	3.91	1.1501
Community needs and expectations shape the corporate social responsibility (CSR) initiatives tied to our investments.	0.0	11.9%	26.6%	39.9%	21.7%	3.71	.9392
Compliance with local and international labor standards impacts our investment strategies.	0.0	0.0	4.2%	57.3%	38.5%	4.28	.6436
Investments are prioritized based on their potential to positively impact societal well-being.	1.4%	9.1%	32.2%	19.6%	37.8%	3.83	1.0811

The findings suggest that social factors significantly influence investment decisions, though the extent of this influence differs among various indicators. The greatest level of consensus was observed regarding adherence to local and international labour standards, with 95.8% of participants indicating agreement (57.3%) or strong agreement (38.5%) that such adherence influences their investment strategies. The high level of agreement is demonstrated by a mean score of 4.28 and a standard deviation of 0.64, suggesting strong consensus with minimal variability in the responses. Investment projects assessed for their effects on employee welfare and working conditions received considerable support, with 69.9% of respondents either agreeing (18.2%) or strongly agreeing (51.7%). A mere 6.3% expressed disagreement or strong disagreement, whereas 23.8% maintained a neutral stance. This indicates a widespread acknowledgement of employee well-being as an essential factor in investment assessment, evidenced by a high mean score of 4.15.

Respect for human rights and equitable labour practices received a high level of support, with 72.8% of respondents expressing agreement (39.9% agreeing and 32.9% strongly agreeing). Nevertheless, 26.6% expressed neutrality, and 0.7% indicated disagreement, implying that although the majority endorses this principle, a significant minority may not view it as directly pertinent or may be uncertain about its impact. Diversity and inclusion practices elicited a range of opinions. A total of 63% of respondents either agreed (20.3%) or strongly agreed (42.7%) that these practices have an impact on investment decisions. Conversely, 10.5% disagreed or strongly disagreed, while 26.6% remained neutral. The higher standard deviation of 1.15 indicates greater variability in the prioritisation of diversity and inclusion within organisational decision-making processes.

Acknowledgement of community needs and expectations, which inform CSR initiatives related to investments, was reported by 61.6% of respondents (39.9% agree, 21.7% strongly agree). Nonetheless, 26.6% expressed neutrality and 11.9% disagreed, suggesting a moderate level of support accompanied by some uncertainty or dissent regarding the significance of community feedback in investment processes. In conclusion, when respondents were asked if investments are prioritised according to their potential to enhance societal well-being, 57.4% either agreed (19.6%) or strongly agreed (37.8%). Meanwhile, 32.2% expressed neutrality, and 10.5% disagreed or strongly disagreed. This outcome, along with a mean of 3.83, indicates a moderate level of support, while also suggesting varying interpretations of what defines societal impact or its importance in investment choices.

4.1.3 Influence of Governance Factors

The respondents were asked to indicate the extent to which they agree with the statements on the Influence of governance factors. The findings are shown in Table 3.

Table 31: Influence of Governance Factors

Influence of Governance Factors	strongly disagreeneutralagree strongly					Mean	Std dev
	disagree				agree		
The independence of our board members enhances the objectivity of investment decision-making.	0.0	9.1%	20.3%	26.6%	44.1%	4.06	1.0055
A well-structured board significantly influences the quality of our investment decisions.	3.5%	9.8%	22.4%	21.7%	42.7%	3.90	1.1647
Executive accountability is a critical factor in ensuring responsible investment decisions.	4.9%	11.2%	30.8%	18.2%	35.0%	3.67	1.2031
Transparent decision-making processes within the company improve shareholder confidence in investments.	0.0	2.1%	18.9%	39.9%	39.2%	4.16	.8019
Compliance with governance standards and practices is a key determinant in our investment decisions.	4.9%	8.4%	30.8%	19.6%	36.4%	3.74	1.1791

The findings indicate that governance factors significantly influence investment decisions, though the degree of their impact differs among specific elements. One of the most significant indicators was the assertion that transparent decision-making processes enhance shareholder confidence, with a total of 79.1% of respondents either agreeing (39.9%) or strongly agreeing (39.2%). Only 2.1% expressed disagreement, while 18.9% remained neutral. The significant level of agreement is demonstrated by a mean score of 4.16 and a standard deviation of 0.80, suggesting a consensus and minimal variation in opinions.

Similarly, the independence of board members was perceived as advantageous, with 70.7% of respondents either agreeing (26.6%) or strongly agreeing (44.1%) that it improves objectivity in investment decisions. 20.3% expressed neutrality, whereas only 9.1% indicated disagreement. The findings are evidenced by a mean score of 4.06, suggesting that board independence is regarded as an important governance factor in investment discussions. A well-structured board was identified as a significant factor in governance, with 64.4% of respondents either agreeing (21.7%) or strongly agreeing (42.7%) with the statement. Nonetheless, a marginally greater percentage (22.4%) expressed neutrality, while 13.3% disagreed or strongly disagreed. This led to a mean score of 3.90 and a standard deviation of 1.16, indicating a broader spectrum of opinions.

In contrast, opinions on executive accountability were more varied. Of the respondents, 53.2% either agreed (18.2%) or strongly agreed (35.0%) that responsible investment decisions are critical. In contrast, a notable 30.8% remained neutral, while 16.1% disagreed or strongly disagreed. The average score of 3.67, along with the highest standard deviation of 1.20 among

all governance items, indicates significant variations in the perception of this aspect across different firms.

Finally, 56% of respondents either agreed or strongly agreed with compliance to with governance standards (19.6% agreed, 36.4% strongly agreed), while 30.8% remained neutral and 13.3% disagreed or strongly disagreed. The mean of 3.74 indicates moderate support, accompanied by a considerable variation in responses, as evidenced by a standard deviation of 1.18.

4.1.4 Investment Decision Making

The respondents were asked to indicate the extent to which they agree with the statements on Investment decision-making. The findings are shown in Table 4.

Table 42: Investment Decision Making

Investment decision making	strongly disagree	disagree	neutral	agree	strongly agree	Mean	Std dev
Investment decisions in our company are aligned with long-term strategic goals.	0.0	13.3%	12.6%	49.7%	24.5%	3.85	.9417
Environmental sustainability is a key criterion for aligning investment decisions with corporate strategy.	1.4%	4.9%	18.9%	24.5%	50.3%	4.17	.9952
Our company considers the expectations of shareholders when prioritizing investment opportunities.	0.0	4.2%	33.6%	16.8%	45.5%	4.04	.9816
Risk assessment of investments includes the potential impact on the share price	0.0	0.0	21.7%	40.6%	37.8%	4.16	.7567
Our company uses historical ROI performance to guide future investment decisions.	0.0	6.3%	37.1%	11.2%	45.5%	3.96	1.0406
Risk-adjusted return measures are used in investment evaluation	0.0	3.5%	29.4%	37.8%	29.4%	3.93	.8529
The company employs multiple financial metrics (NPV, IRR, payback period) to evaluate investments	0.0	4.2%	31.5%	26.6%	37.8%	3.98	.9304

The results indicate that the investment decision-making processes in the companies surveyed are primarily influenced by factors such as strategic alignment, sustainability, shareholder expectations, and financial evaluation frameworks. A significant agreement was observed regarding environmental sustainability as an important criterion, with 74.8% of respondents either agreeing (24.5%) or strongly agreeing (50.3%) that sustainability is crucial for aligning investment decisions with corporate strategy. A mere 6.3% expressed disagreement or strong disagreement, while 18.9% remained neutral. This led to a mean score of 4.17, indicating an increasing incorporation of environmental factors in corporate investment strategies. A comparable level of consensus (78.4%) was observed regarding the inclusion of potential share

price impact in risk assessment, with 40.6% agreement and 37.8% indicating strong agreement. All respondents agreed, with 21.7% remaining neutral, resulting in a mean score of 4.16 and the lowest standard deviation of 0.76. This indicates a strong consensus regarding the inclusion of market impact in risk analysis.

The results revealed that 74.2% of participants agreed or strongly agreed that investment decisions are in accordance with long-term strategic goals, whereas 13.3% disagreed and 12.6% expressed a neutral stance. The robust consensus resulted in a mean score of 3.85, suggesting that strategic alignment is a commonly adopted practice, although there is somewhat greater variation in perspectives compared to environmental or market risk factors. A total of 62.3% of shareholders agreed or strongly agreed that their expectations are taken into account when prioritising investments, while a significant 33.6% expressed a neutral stance. The mean of 4.04 indicates moderate to strong agreement; however, the elevated neutrality rate may imply differing levels of shareholder engagement or influence in decision-making. The response to the use of historical ROI performance was more varied. A total of 56.7% expressed agreement or strong agreement, while a significant 37.1% remained neutral, and 6.3% expressed disagreement. This indicates that while historical performance is a frequently utilised tool, its applicability may vary based on the context or type of investment. A comparable trend was noted with risk-adjusted return measures, as 67.2% expressed agreement or strong agreement, while 29.4% remained neutral, suggesting a broad yet not universal application.

In conclusion, the utilisation of various financial metrics, such as NPV, IRR, and payback period, received affirmation from 64.4% of respondents, while 31.5% remained neutral and merely 4.2% expressed disagreement. This indicates a general dependence on conventional financial assessment methods, although the significant neutral segment implies differing degrees of sophistication or uniformity in the application of these techniques among firms.

4.2 Diagnostic Tests

A regression analysis was conducted to investigate the relationship between Environmental, Social, and Governance (ESG) factors and investment decision-making. Regression analysis requires testing the assumptions to ensure their validity before conducting the analysis. These tests encompass heteroscedasticity, multicollinearity, and normality.

4.2.1 Heteroscedasticity Test

The chi-square statistic for the test is 0.8362, with 1 degree of freedom, and the associated probability (Prob > chi2) is 0.6192. A high p-value (greater than 0.05) suggests that there is inadequate evidence to confirm the existence of heteroscedasticity in the data. The results are shown in Table 5.

Table 5: Heteroscedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity		
chi2(1)	=	0.8362
Prob > chi2	=	0.6192

The test results indicate that the variability of the residuals in the regression model is approximately constant, and there is no strong evidence of heteroscedasticity.

4.2.2 Multicollinearity Test

The variance inflation factor (VIF) is used to check for multicollinearity in this study. Results are shown in the table below.

Table 6: Multicollinearity Test

Variables	Tolerance	VIF
X1 = Environmental factors	.462	2.166
X2 = Social factors	.374	2.677
X3 = Governance factors	.368	2.720

The VIF values of all the independent variables are less than 10, indicating that there is no issue of multicollinearity among them.

4.2.3 Normality Test

A commonly used approach for conducting a normality test is by employing the Shapiro-Wilk test.

Table 7: Normality Test

	Shapiro-Wilk	P-value
Investment decision-making	0.823	0.161
Environmental factors	0.869	0.188
Social factors	0.874	0.181
Governance factors	0.892	0.211

The P value of each variable is greater than 0.05, which means that the null hypothesis cannot be rejected and suggests that the data follows a normal distribution.

4.3 Inferential Analysis

This section provides findings on the relationship between Environmental, Social, and Governance (ESG) factors and investment decision-making in terms of correlation and regression analysis.

4.3.1 Correlation Analysis

The table below presents a correlation matrix, which shows the Pearson correlation coefficients between the various variables.

Table 8: Correlation Analysis

		Investment decision- making	Environmental factors	Social factors	Governance factors
Investment decision-making	Pearson Correlation Sig. (2- tailed)	1			
Environmental factors	Pearson Correlation Sig. (2- tailed)	.736*	1		
Social factors	Pearson Correlation Sig. (2- tailed)	.676** .000	.431 .000	1	
Governance factors	Pearson Correlation Sig. (2- tailed)	.854* .000	.534** .000	.877** .000	1

This study presents r values that demonstrate positive relationships between investment decision-making and three factors: environmental ($r = 0.736$), social ($r = 0.676$), and governance ($r = 0.854$). The data indicate that enhancements in environmental, social, and governance (ESG) factors lead to improvements in investment decision-making. The most robust relationship is observed with governance factors ($r = 0.854$), signifying a very strong positive correlation, followed by environmental factors, and subsequently social factors. Given that all r values exceed 0.6 and are statistically significant ($p < 0.05$), the relationships are regarded as strong and meaningful for analysis. Therefore, according to the table presented, all independent variables exhibited a positive correlation with the dependent variable. This indicates that all variables are statistically significant at the 95% confidence level.

4.3.2 Regression Analysis

Results on model summary, ANOVA, and regression coefficients are presented in Tables 9, 10, and 11, respectively.

Table 9: Model Summary

Model	R	R square	Adjusted R Square	Std error of the estimate
1	.868a	.753	.685	.419

a Predictors: (Constant), Environmental factors, social factors, governance factors

Table 9 shows that the value of R is 0.868 and the value of R^2 is 0.753 at a significance level of 0.05. A significant correlation exists between Environmental, Social, and Governance (ESG)

factors and investment decision-making, as shown by a correlation coefficient of $R=0.868$. The findings of the study also revealed that 75.3% of the variability in investment decision-making can be accounted for by the predictors included in the model. Conversely, the remaining 24.7% of the variance is attributed to other variables that are not included in the model.

Table 10: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.190	3	1.718	8.217	.000 ^b
	Residual	3.450	139	.126		
	Total	9.640	142			

Table 10 showed that the F statistic=8.217 was significant at a 95% level of confidence. This postulates that the model was fit to explain the relationship between Environmental, Social, and Governance (ESG) factors and investment decision-making in cement companies in Kenya. Significance explains the usefulness of the regression model at a 95% level of confidence, in which the p-value is less than alpha ($p < 0.05$), hence it was concluded that Environmental, Social, and Governance (ESG) factors are a significant predictor of investment decision-making in Cement companies.

Table 11: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. error	B		
1	Constant	.842	2.262	.292	.213	.000
	Environmental Factors	.498	.178	.465	12.89	.000
	Social Factors	.366	.191	.281	2.417	.000
	Governance Factors	.576	.077	.354	7.796	.000

According to the model, when all factors remain constant, Investment decision-making would be at 0.842 units. Increasing Environmental factors by one unit would result in decision-making increase of 0.498 units. Similarly, a one-unit increase in social factors would lead to an investment decision-making increase of 0.366 units. Governance factors have the highest impact, with a unit change affecting Investment decision-making by 0.576 units. Considering the importance of each independent variable at a 5% level, it was found to be statistically significant with a p-value of less than 0.05.

5. Conclusion

Based on the study findings, it can be concluded that environmental factors are a critical determinant of investment decisions in the cement manufacturing sector in Kenya. Regulatory requirements emerged as the strongest environmental driver, with companies showing significant commitment through investments in pollution control, alternative fuels, and

sustainable technologies. However, the findings also revealed that the integration of climate change concerns, such as global warming and carbon dioxide emissions, remains uneven across firms. Stakeholder concerns and government incentives were found to exert only moderate influence, reflecting uncertainty about their effectiveness. The study, therefore, concludes that while proactive environmental strategies are advancing, there is still scope for stronger and more consistent integration of climate-related considerations into investment frameworks.

The study further concludes that social factors significantly influence investment decision-making, particularly through adherence to labour standards, employee welfare, and respect for human rights. The findings revealed that companies are embedding social responsibility within their strategies by promoting employee well-being, supporting community development, and creating inclusive opportunities. However, differences in commitment to diversity, inclusion, and societal impact suggest that integration of social factors is not yet uniform across the sector. This points to the need for greater emphasis on equitable and inclusive practices to strengthen the role of social drivers in shaping robust investment decisions.

Finally, the study concludes that governance factors also play a vital role in guiding investment decisions in the cement industry. Transparency in decision-making, board independence, and well-structured governance systems were identified as important in enhancing accountability and investor confidence. Nevertheless, mixed views on executive accountability and adherence to governance standards revealed disparities in the level of commitment among firms. The findings, therefore, highlight that strong governance frameworks are essential in promoting ethical behaviour, risk management, and long-term strategic alignment, which are critical for sustainable growth in the sector.

6. Recommendations

The findings of this study revealed that environmental factors, particularly regulatory requirements, are the most influential in shaping investment decisions, although their impact is limited by inconsistent enforcement and a lack of clarity. It is therefore recommended that policymakers reinforce environmental regulations by ensuring they are clearly communicated, regularly updated, and uniformly enforced across the cement manufacturing sector. Since the study also established that government incentives currently have little influence on sustainable investment behaviour, policymakers should introduce more targeted and accessible incentives, such as tax reliefs, grants, and affordable green financing, supported by awareness campaigns and simplified procedures. This would encourage firms to adopt cleaner technologies and align their long-term investment strategies with sustainability goals.

The study further concluded that social factors, particularly labour standards, employee welfare, and human rights, strongly influence investment decisions, though diversity, inclusion, and community engagement remain less prioritised. To address this, cement companies should develop formal policies that embed these social considerations into their investment frameworks. This could include structured community engagement programs, explicit diversity and inclusion goals, and social impact assessments for major projects. By doing so, companies will build stronger stakeholder relationships, secure their social license to operate, and promote inclusive growth, which is essential for sustainable investment.

Finally, the study highlighted governance as a critical driver of investment decision-making, with transparency, board independence, and accountability emerging as particularly influential. However, variations in firms' commitment to governance practices were also evident. It is

recommended that cement companies strengthen their internal governance mechanisms by establishing clear accountability structures, ensuring that investment decisions are subject to review by independent and diverse boards, and providing regular training for directors and senior executives on ethical and sustainable governance. These measures would reduce operational risks, foster ethical business conduct, and enhance investor confidence, thereby supporting responsible and value-driven investment strategies.

References

- Afeef, M., & Kakakhel, S. J. (2022). ESG factors and their influence on the investment behavior of individual investors: A case from Pakistan. *International Journal of Business and Management Sciences*, 3(3), 21-45. <https://ijbms.org/index.php/ijbms/article/view/259>
- Aich, S., Thakur, A., Nanda, D., Tripathy, S., & Kim, H. C. (2021). Factors affecting ESG towards impact on investment: A structural approach. *Sustainability*, 13(19), 10868. <https://doi.org/10.3390/su131910868>
- Almeyda, R., & Darmansya, A. (2019). The influence of environmental, social, and governance (ESG) disclosure on firm financial performance. *IPTEK Journal of Proceedings Series*, (5), 278-290. <https://doi.org/10.12962/j23546026.y2019i5.5740>
- Basten, D., & Haamann, T. (2018). Approaches for organizational learning: A literature review. *Sage Open*, 8(3), 2158244018794224. <https://doi.org/10.1177/2158244018794224>
- Crossan, M. M., Lane, H. W., White, R. E., & Djurfeldt, L. (1995). Organizational learning: Dimensions for a theory. *The International Journal of Organizational Analysis*, 3(4), 337-360. <https://doi.org/10.1108/eb028835>
- Dmuchowski, P., Dmuchowski, W., Baczewska-Dąbrowska, A. H., & Gworek, B. (2023). Environmental, social, and governance (ESG) model; impacts and sustainable investment—Global trends and Poland's perspective. *Journal of Environmental Management*, 329, 117023. <https://doi.org/10.1016/j.jenvman.2023.117023>
- Locke, E. A., & Latham, G. P. (2015). Breaking the rules: A historical overview of goal-setting theory. In *Advances in motivation science*, 2, 99-126. <https://doi.org/10.1016/bs.adms.2015.05.001>
- Madaan, G., & Singh, S. (2019). An analysis of behavioral biases in investment decision-making. *International Journal of Financial Research*, 10(4), 55-67. <https://doi.org/10.5430/ijfr.v10n4p55>
- Mbole, U. C., Arasa, R., & Mang'anyi, E. E. (2021). Environmental initiatives and financial performance: a study of cement manufacturing companies in Kenya. *Journal of African Interdisciplinary Studies*, 5(8), 40-58. <http://cedred.org/jais/index.php/issues>
- Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25(1), 92-104. <https://doi.org/10.1006/ceps.1999.1017>
- Rusu, D. I. (2020). The impact of environmental, social, and governance factors on investors' behavior—An experimental study in the realm of sustainable investment. *Journal of Public Administration, Finance and Law*, 17, 301-319. <https://doi.org/10.1234/jpaf.2020.1715>

- Rusu, D. I. (2020). The impact of environmental, social, and governance factors on investors' behavior—An experimental study in the realm of sustainable investment. *Journal of Public Administration, Finance and Law*, 17, 301-319.
<https://doi.org/10.1234/jpafl.2020.1715>
- Sharma, P., Panday, P., & Dangwal, R. C. (2020). Determinants of environmental, social, and corporate governance (ESG) disclosure: A study of Indian companies. *International Journal of Disclosure and Governance*, 17(4), 208-217.
<https://doi.org/10.1057/s41310-020-00088-5>
- Sultana, S., Zainal, D., & Zulkifli, N. (2019). The influence of environmental, social, and governance (ESG) on investment decisions: The Bangladesh perspective. *Pertanika Journal of Social Sciences and Humanities*, 25, 155-173
- Ziolo, M., Filipiak, B. Z., Bąk, I., & Cheba, K. (2019). How to design more sustainable financial systems: The roles of environmental, social, and governance factors in the decision-making process. *Sustainability*, 11(20), 5604.
<https://doi.org/10.3390/su11205604>