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# Analysis of environmental, social and governance integration and sustainable lending practices by commercial banks in Kenya.

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**ANALYSIS OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE  
INTEGRATION AND SUSTAINABLE LENDING PRACTICES BY  
COMMERCIAL BANKS IN KENYA**



**Stella Jumapili Lengewa**

**ADMISSION NO. 147701**

**A RESEARCH THESIS SUBMITTED TO THE STRATHMORE  
UNIVERSITY BUSINESS SCHOOL IN THE PARTIAL FULFILLMENT  
FOR THE DEGREE OF MSC IN DEVELOPMENT FINANCE AT  
STRATHMORE UNIVERSITY**

**MAY 2024**

## DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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## ABSTRACT

The global call for sustainable development has prompted businesses and financial institutions to adopt responsible practices that balance economic growth with environmental and social concerns. In Kenya, a rapidly developing nation facing significant environmental and social challenges, the role of commercial banks in promoting sustainability has gained increasing importance. Despite its proven benefits in other parts of the globe, commercial banks in Kenya are yet to fully integrate ESG in their lending practice, begging the question why? This study sought to determine the effect of environmental integration, social integration, and governance integration on sustainable lending practices of commercial banks in Kenya. The research methodology anchored on the positivist research philosophy and employed a descriptive research design where the study used questionnaires to collect data from employees from sustainability and credit departments of the 39 commercial banks that operate in Kenya. The stakeholder theory, legitimacy theory and stewardship theory guided the study and informed the research objectives, variables, and conceptual framework. Using ordinal regression analysis, the study regressed the predictors on the outcome variable. It was established that environmental integration, social integration and governance integration had a positive significant effect on the sustainable lending practices of commercial banks in Kenya. The study concludes that there exist a significant positive relationship between environmental, social and governance integration (ESG) and sustainability lending practices of commercial banks in Kenya. It is recommended that policy makers should proactively formulate robust policies mandating commercial banks to fully integrate ESG principles into their lending practices to promote sustainability. And that bank management should enhance their ESG disclosure procedures by incorporating critical and relevant ESG components that directly impact stakeholders' interests and overall bank operations.

**Keywords:** Environmental integration, Social integration, Governance integration, commercial Banks and sustainable lending practices

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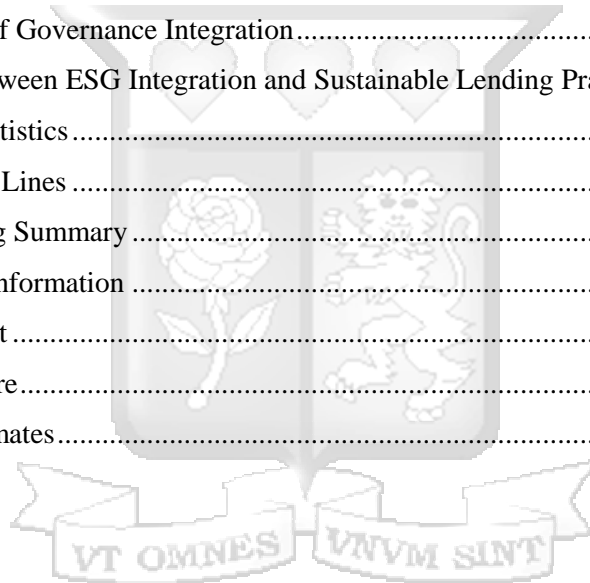
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## LIST OF ABBREVIATIONS

<b>CBK</b>	Central Bank of Kenya
<b>CFP</b>	Certified Financial Planner
<b>CSR</b>	Corporate Social Responsibility
<b>E&amp;S</b>	Environmental and Social
<b>EFA</b>	Exploratory Factor Analysis
<b>ESG</b>	Environmental, Social, and Governance
<b>EPS</b>	Earnings per Share
<b>GHG</b>	Greenhouse Gas
<b>GRI</b>	Global Reporting Initiative
<b>KBA</b>	Kenya Bankers Association
<b>KPIs</b>	Key Performance Indicators
<b>MENA</b>	Middle Eastern and North African
<b>MMR</b>	Mixed Methods Research
<b>NSE</b>	Nairobi Securities Exchange
<b>PRI</b>	Principles for Responsible Investment
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equity
<b>ROI</b>	Return on Investment
<b>SDGs</b>	Sustainable Development Goals
<b>SFI</b>	Sustainable Finance Initiative
<b>TBL</b>	Triple Bottom Line
<b>UN</b>	United Nations



## DEFINITION OF TERMS

Serial no.	Term
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- |    |   |
|----|---|
| 1. | <b>Environmental, Social, and Governance (ESG)</b> describes a company's financial interests that are primarily focused on ethical and sustainable effects (Gartner, 2023).   |
| 2. | <b>ESG integration entails</b> incorporating these criteria into investment and business decision-making processes to better understand and manage the possible effects on financial performance and corporate sustainability (Sahoo & Kumar, 2022).  |
| 3. | <b>Environmental integration</b> includes efforts to conserve resources and actions taken to reduce and protect environmental risks (Angela & Sari, 2023).  |
| 4. | <b>Governance</b> refers to organization's profile, ethics and integrity, strategy, reporting procedures, and stakeholder engagement methods and that the higher the governance disclosure the better the governance of a firm (Angela & Sari, 2023).   |
| 5. | <b>Social Factors are</b> the positive effects and opportunities that a business may bring to society, including workers, clients, the neighborhood, the supply chain, and business associates as well as the management of any social risks, are all included in the social scope of ESG investment (Nemoto & Morgan, 2020). |
| 6. | <b>Sustainability</b> refers to meeting the needs of today's generation without compromising the ability of future generations to meet theirs (Calderon & Chong, 2014).   |



## DEDICATION

My Family: For being my support system and bearing when had to work longer night hours to deliver on tight timelines.

Strathmore MDF lectures: Their unwavering support, encouragement, and belief in my abilities, which has been instrumental in my academic journey and pursuit of this research Thesis.



## ACKNOWLEDGEMENTS

We would like to express our sincere gratitude to Dr. Maria Mumbi for her guidance which has been instrumental in shaping the direction and scope of this study.

MDF Cohort 5, they have been a family and a source of encouragement.



## CHAPTER ONE: INTRODUCTION

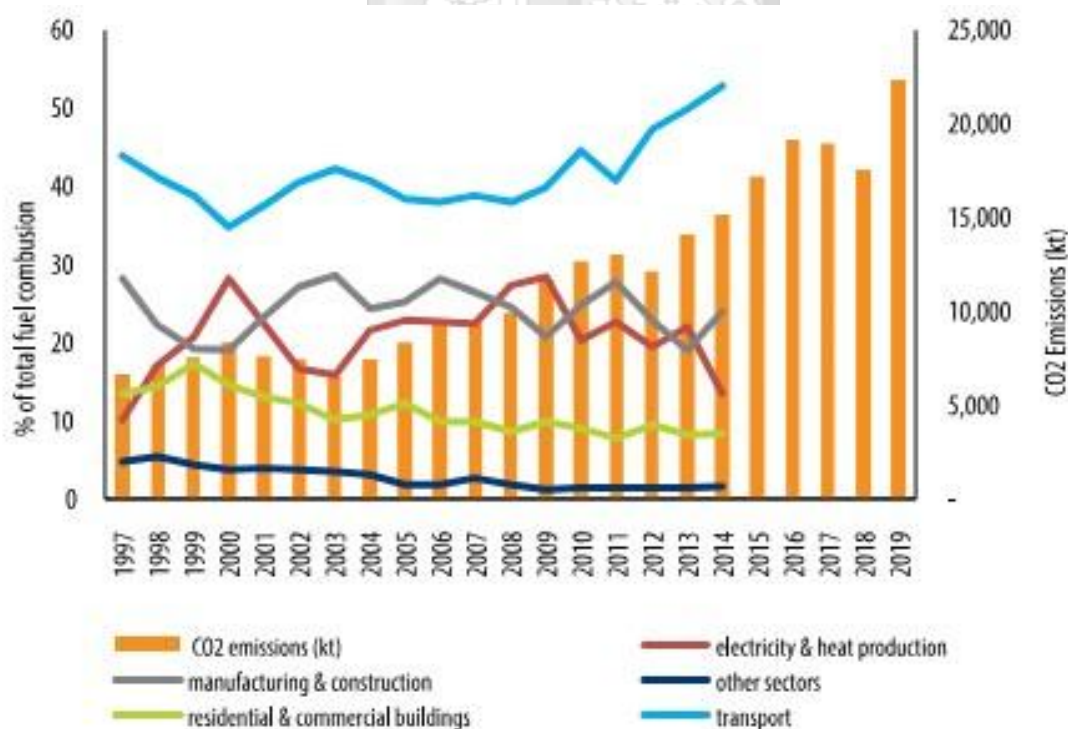
### 1.1 Background to the Study

Debate on Environmental, Social, and Governance (ESG), traces back to mid-1990s, when banks began integrating borrower environmental risk assessments into their lending standards as a safeguard against potential remediation liabilities and collateral value impairment losses. Banks' initial motivation to enhance policies and procedures in response to evolving lending conditions came from lender liability, potential losses in asset recovery, and reputational concerns. In the recent years, discussion on the nexus between ESG and corporate sustainability has gained momentum. This is largely due to the changing expectations of society regarding new models of consumption and production (Nishitani et al., 2021). According to Clarkson (1995), up until the mid-1990s, a company's success was largely determined by its ability to maximize the profit motive of a single stakeholder: the shareholder. However, as time went on and the landscape changed, companies find themselves under pressure from other stakeholders, which has caused them to incorporate corporate sustainability into their strategic management plans and integrate ESG in their practice (Wang et al., 2018). Environmental, social, and governance integration is defined by Sherwood and Pollard (2018) as the practice of incorporating ESG information into investment decisions to help enhance risk-adjusted returns. Eurosif (2014, pg. 3) defines ESG integration as "... the explicit inclusion by asset managers of ESG risks and opportunities into traditional financial analysis and investment decisions based on a systematic process and appropriate research sources..."

A growing body of literature on banking business models is increasingly focusing on ESG issues as a promising new paradigm of corporate governance (Singh, Zhang, & Anu, 2023). Consideration of ESG issues in bank decision-making processes is due to increasing pressure from shareholders and various stakeholders (Houston & Shan, 2022). Today's stakeholders have different information expectations, and non-financial information is more important than ever. Şeker and Şengur (2021) posit that companies now release information that is both financial and non-financial (ESG) to satisfy the information requirements of their stakeholders. Shareholders are interested in ESG practices that can increase their financial wealth, while consumers, investors, companies, employees and governments have varying interest on ESG issues. For example, politicians and international institutions involved in promoting sustainable economic growth rely on the important role of banks in country development due to their role as investment project selectors and risk managers (La Torre,

Leo, & Panetta, 2021). The underlying assumption is that sustainable growth can be realized if banks are willing to change their investment strategies to include ESG factors (Ahmend, Ahmed, & Hasan, 2018).

Policymakers, regulators and investors around the world are increasingly demanding that banks consider ESG integration in their financial decisions. The financial industry is particularly vulnerable to ESG risks, which are an increasingly important element of strategic planning, decision-making and risk management. Integrating ESG factors into credit risk assessment is a recent challenge for the financial industry (Brogi, 2020), but at the same time it is also an opportunity to target loans to sustainable borrowers and create sustainable loans. In so doing, sustainable lending contributes to achieving strong, sustainable, balanced and inclusive growth by directly and indirectly supporting the Sustainable Development Goals (SDGs) framework. In Kenya, while the levels of greenhouse gas emission have been low as shown in Figure 1.1, efforts by the government are geared toward its eradication in the long run (GOK, 2021).



Source: World Bank Database

Figure 1.1: Greenhouse Gas Emission by Sector in Kenya

In Asia, awareness of ESG issues in green investment decision making is increasing (Nemoto & Morgan, 2020), supported by the Principles for Responsible Investment (PRI) as doctined

by the United Nations (UN). However, investors and policymakers do not yet fully understand the importance of ESG in making investment decisions (Korwatanasakul, 2020). Demand for ESG investment is increasing due to its promising benefits and demand for its implementation, especially in the renewable energy sector in Southeast Asia. Environmental, social, and governance factors help companies make socially responsible and sustainable investment decisions, thereby achieving better financial results and better risk management, resulting in better efficiency and production. Research conducted by Nemoto and Morgan (2020) found that ESG investments have enormous potential to achieve the UN's Sustainable Development Goals, which are related to good business investment decisions, financial returns and risk management. In Kenya, a needs Assessment report by Kenya Bankers Association (2014) identifies several drivers of banks to adopt sustainable finance practices as shown in Figure 1.2. The report notes that banks that are compliant with the sustainability framework are able to access more funding from their lenders at a reduced interest rate.



Source: KBA SFI Needs Assessment Report, 2014.

\*The survey assessed 12 Commercial Banks, ranging from large multinationals to a local microfinance.

**Figure 1.2: Drivers of Banks to Adopt Sustainable Finance Practices**

In China, commercial banks are the most significant practitioners in the ESG-oriented investment system and play an important role in the country's overall financial system, accounting for more than 90% of business scale and scope (Shen et al., 2022). Green credit and ESG-focused asset management are the two main investment concepts for ESG products practiced by Chinese commercial banks. Commercial banks increased their investment, especially in green loans, and by the end of 2021, the national green loan balance reached

15.9 trillion yuan, mainly targeting initiatives that directly and indirectly reduce carbon emissions (Zhou et al., 2022). ESG integration therefore, has become an important approach to sustainable development that influences overall company performance. To improve operational efficiency and pursue sustainable development, banks need to carefully manage their ESG investments, which can support high-quality socio-economic development.

La Torre, Leo and Panetta (2021) examined the relationship between ESG factors and financial benchmarks to test whether banks can find enough incentives (higher Certified Financial Planner (CFP)) in market reactions to spontaneously adopt ESG behavior. Using a panel methodology to assess European banks listed on the STOXX Europe 600 between 2008 and 2019, the results of this study supports the current approach of banking regulators, which focus more on ESG risks in the banking sector rather than ESG opportunities to help banks to introduce new ESG criteria business models in the initial phase of this sustainability transition.

Incorporating ESG factors into credit risk assessments represents a new frontier in credit risk management, as regulators and investors increasingly require banks to target lending to “sustainable” borrowers and ultimately drive sustainable growth. A study conducted by Brogi, Lagasio and Porretta (2022) found that higher ESG awareness was strongly associated with better creditworthiness. This study confirms the benefits of incorporating ESG awareness parameters into the assessment of borrower creditworthiness. However, having creditworthiness as the outcome variable presents a conceptual gap.

Mohammad and Wasiuzzaman (2021) examined the impact of corporate ESG disclosure on corporate performance, with a focus on companies in Malaysia. The results show that ESG disclosure improves company performance. The conclusion of this research is the need to reconsider the level of ESG disclosure and financial incentives for companies with high ESG disclosure scores, because high ESG scores are associated with improved performance. Inadequate disclosure of ESG activities can cause inconsistencies in ESG disclosure results because researchers only rely on very limited information (Atan et al., 2018).

Maama (2021) examines the influence of the institutional environment on the environmental, social and governance (ESG) accounting practices of banks in West Africa. Evidence shows that GDP has a positive and insignificant relationship with ESG reporting, thus indicating that the size of an economy does not matter in ESG accounting. Furthermore, the study found that the corruption perception index had a positive and significant relationship with ESG

accounting. These results indicate that the political environment in a country is suitable for ESG accounting. Company-specific factors such as company size, value, and age are positively and significantly related to ESG accounting, while net profit margin and leverage are negatively related to ESG accounting. This study concludes that a country's institutional environment influences its companies' ESG accounting practices. However, the study having been undertaken in West Africa, posits a contextual gap.

South African banks have not yet fully integrated ESG into corporate strategy and decision-making processes because the practice is not yet mandatory. Xulu (2022) assesses the performance of South African banks in integrating environmental, social and governance (ESG) considerations into their corporate strategies and decision-making processes. The results demonstrate the growing need to make ESG reporting mandatory in South Africa. ESG results should also be made public to promote transparency within banks that practice ESG reporting. The role of sustainable finance in capital markets can be seen from changes in company success. The conclusion is that companies that practice ESG integration achieve better financial results. While this outcome is true of South African banks, its contextual mapping in Kenya is imperative.

Awuor (2023) examines the impact of ESG adoption and bank characteristics on financial performance in Uganda. There is evidence that enforcement of ESG criteria by regulators would be the most effective way to ensure that banks in Uganda adopt sustainable practices. Josephine (2022) analyzes the application of environmental, social and governance regulations to corporate governance in Zambia. This study finds that ESG can be applied to corporate governance laws in Zambia. Additionally, compliance with ESG principles exists even in the absence of a framework. However, on a small scale. However, this is still achievable, as evidenced by several major corporate players. The fact of voluntary implementation should be a motivation for countries to create a regulatory framework. It concluded that an ESU regulatory framework should be provided in Zambia that should include: The policy should include a new corporate governance code-involving private and public companies. These studies provide evidence that are country specific in Africa, testing of the same in the Kenyan context is necessary.

In Kenya, Mwanu (2021) undertook a study of how banking regulations, green banking policies, and incentives of banking institutions influence the development of green finance initiatives. Analysis shows that commercial banks are seeing an increase in green loans, green

mortgages, green bank assurance products, and green project financing. Banking regulations and environmental policies have a positive impact on the development of environmentally friendly finance, while bank incentives only slightly increase the development of environmentally friendly finance. In conclusion, although green banking policies and banking regulations have a significant positive impact on the development of green finance, banking incentives do not have a large positive impact. The focus of Mwanu on green banking policies pays attention to only one element of ESG integration, giving rise to a conceptual gap.

### **1.1.1 Environmental, Social, and Governance Integration**

The term "environmental, social, and governance" describes a company's financial interests that are primarily focused on ethical and sustainable effects (Gartner, 2023). According to Engle et al., (2021), ESG is a new strategic perspective, a new business approach that is certainly virtuous and has the potential to be profitable in the long run while posing less risk configuration. Atan et al (2018) argue that the capital markets use the term "ESG factors," which stands for environmental, social, and governance factors, to describe a company's non-financial performance. ESG integration entails incorporating these criteria into investment and business decision-making processes to better understand and manage the possible effects on financial performance and corporate sustainability (Sahoo and Kumar, 2022).

Environmental, social, and governance integration is a concept tracing its roots to the practice of Corporate Social Responsibility (CSR), which many argue was the beginning of business accountability for its impact on society (Ngulube, 2022). Since Milton Friedman's seminal essay from 1970, "The social responsibility of business is to increase its profits," the significant role that business plays in society has been the focus of much discussion over the past 50 years. However, the concepts of CSR and ESG are entirely distinct from one another and are not easily interchanged. ESG standards make CSR efforts quantifiable. Since CSR initiatives differ greatly amongst companies and sectors, comparable metrics are hard to come by. However, ESG activity can usually be measured to a much higher extent. Many businesses see CSR as an afterthought to their main goals and objectives, something they do for PR purposes only once a year as a half-day project or as a footnote in their annual report. The power of ESG, on the other hand, comes from criteria-led policies that must be ingrained in a company's overall strategy. Deliberate and intentional actions toward positive impact or consideration are required by ESG, which also calls for increased accountability and

transparency. Under ESG integration, work is measurable and quantifiable in ways other than just money.

Key clients in the banking business include shareholders and customers. In the spirit of Know Your Client (KYPs), Ngulube (2022) observes that banks have notably become more transparent about their ESG background to attract investment, as prospective shareholders have shown a growing interest in ESG issues as a way to guarantee long-term financial performance. Equally, nowadays, customers favor companies that have positive ESG policies when making purchases. Purchase decisions are influenced by social issues just as much as quality and price, so businesses must establish sustainable, socially and environmentally conscious business practices in addition to maintaining a high standard of quality and cost for their goods and services in order to stay competitive and attract and keep customers. In the end, ESG activity is taking the place of CSR since it has a noticeable, quantifiable, and beneficial impact.

Battilana et al. (2022) argues that in the past, shareholders were only concerned with institutions' goals of maximizing profits. Businesses' main responsibility was to maximize short-term profits for shareholders, regardless of the effects on society and the environment. Nonetheless, client demand and the desire to have an impact are major factors driving the global adoption of ESG (Singhania & Saini, 2021). According to a Capital Group survey conducted in 2022 among 1,130 investors worldwide in 19 regions, institutional and wholesale investors are adopting ESG at a rate of 89%, up from 84% in 2021 (Capital Growth, 2022). Because of its established regulatory framework and mature market, Europe continues to have the highest rate of ESG adoption (Dicuonzo et al., 2022).

Environmental, social, and governance criteria are typically qualitative, nonfinancial, or nonmaterial, and frequently challenging to quantify. ESG criteria offers data and metrics that can be used to assess a company's sustainability and ethical performance (Sahoo and Kumar, 2022). They typically have a medium-to-long-term outlook and are impacted by shifting laws and rules. Depending on the industry, the range of ESG considerations can differ significantly. When analyzing investments or valuing businesses, environmental, social, and governance (ESG) criteria are taken into account along with conditions that are pertinent to traditional financial metrics (Madden, 2020). Metrics like water use, carbon emissions, labor practices, employee diversity, board diversity, executive pay, etc. can be included in these requirements. Therefore, ESG criteria offer both quantitative and qualitative data regarding a

business's sustainability initiatives and the possible effects they may have on different stakeholders (Uyar et al., 2023).

### **1.1.2 Sustainable Lending Practices**

Sustainable lending refers to the process of considering ESG considerations when making investment decisions in the financial sector, leading to more long-term investments in sustainable economic activities and projects (Fatoki, 2021). Citing Giuseppe (2001, pg.101), Calderon and Chong (2014) defined sustainability as “meeting the needs of today’s generation without compromising the ability of future generations to meet theirs”. Anchoring on this definition, the authors then explained that sustainable banking refers to decisions made by banks to offer goods and services to clients who have considered the effects that their actions will have on the environment and society. In essence, sustainable lending is a component of sustainable banking. Thus, sustainable lending refers to a decision made by banks to limit their lending to corporate borrowers who consider the social and environmental effects of their operations (Calderon & Chong, 2014).

The idea of integrating environmental stewardship in business operations traces its origins to the works of Hart's (1995) theory on the natural-resource-based view of the firm. In addition to internal resources and capabilities, Hart Midway essentially expanded on Barney's (1991) resource-based view of the firm by recognizing the importance of the natural environment in gaining a competitive advantage. According to Walls, Berrone, and Phan (2012), a number of researchers view Hart's theory as the prevalent paradigm when examining how environmental protection increases a firm's value.

The company's environmental consciousness ushered in a trend in which it came to be associated with sustainable development and corporate sustainability. Government legislation holding banks accountable for environmental harm caused by their clients brought the banking sector into the environmental protection fold in the mid-1990s. A bank was liable for clean-up damages because of its "ability to influence" the management of the client company due to its close supervision and monitoring of the client's operations (Boyer and Laffont, 1997). Thompson (1998) elucidated that banks have the potential to function as environmental policing agencies, closely monitoring borrowers to guarantee adherence to environmental guidelines and withholding credit from those who do not.

Calderon and Chong (2014) trace the idea of sustainable banking to the works of Jeucken and Bouma (1999) who presents four steps or perspectives that banks are adopting regarding

sustainability. In the first phase, known as defensive banking, a bank essentially does nothing or postpones taking any initiative to support environmental laws. Preventative banking is the second stage, in which a bank applies internal controls like adding environmental due diligence into credit risk analysis. Offering financial products that support the environment is just one example of the internal and external actions a bank takes during the third stage of offensive banking. The bank will not lend to or invest in a borrower whose operations, products may have a negative environmental impact, and this is the fourth and final stage in the process of sustainable banking.

Ager and Kaundu (2023) argue that sustainable lending facilities are currently available as ESG loans, which can be broadly divided into two; green loans and ESG-linked loans. ESG-linked loans are general-purpose loans with terms dependent on the borrower's ESG adherence and performance. Another name for these facilities is sustainability-linked loans. Sustainability-linked loans are more attractive to borrowers because there are less restrictive use of the loan proceeds and the condition in the borrowing agreement that the interest rate be paid only if ESG practices are followed makes them more affordable. Green loans and green bonds on the other hand are financial instruments with the sole purpose of funding or refinancing, fully or partially, environmentally and climatically friendly projects like carbon capture, renewable energy, sustainable water management, biodiversity conservation, and wastewater treatment.

Ager and Kaundu (2023) further note that ESG-linked loans are specifically based on Key Performance Indicators ("KPIs") that include sustainability objectives. These KPIs are organized as either a specific measure, like greenhouse gas (or "GHG") emissions or employee health and safety performance, or as an ESG score that is assigned to the borrower by outside rating agencies. A lender's interest rate on a facility is frequently determined by looking at the ESG score that was assigned. For example, a higher borrower's ESG rating may result in a lower interest rate.

### **1.1.3 The Banking Industry in Kenya**

A company that conducts or wishes to conduct banking operations in Kenya is considered a commercial bank by the Central Bank of Kenya (CBK, 2021). The commercial banking industry provides a range of financial services including receiving deposits, making loans, disbursing funds, and more. Due to its significant emphasis on saving money and lending to the economy, this sector is crucial to the financial sector (Kori et al., 2021).

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the CBK. The CBK is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. According to the Central Bank of Kenya, Financial Access report (Obote, 2023) there were 39 commercial banks, 1 mortgage finance company, 14 microfinance banks, 10 foreign bank representative offices, 72 foreign exchange bureaus, 19 money remittance companies, and 3 credit reference bureaus. The banking sector in Kenya is essentially dominated by Tier 1 commercial banks. In addition, smaller banks have emerged and experienced tremendous growth in recent years.

In order to advance best practices in sustainable finance, the Kenya Bankers Association (KBA), which serves as the industry's umbrella organization, introduced the Sustainable Finance Initiative (SFI) in 2013, a training module geared at enabling financiers appreciate the importance of ESG disclosure (Lin et al. 2015). Similarly, Nairobi Securities Exchange (NSE) released the Environmental, Social, and Governance (ESG) Disclosures Guidance Manual in November 2021. The Manual offers guidance on several issues, including how to quantify the materiality of an ESG problem, identify relevant ESG topics, incorporate ESG into strategy, and report on ESG performance. Agutu and Githira (2023) reported that The Board of Kenya's listed firms is required to establish explicit strategies to promote sustainability, with an emphasis on ESG components of the business, under the Code of Corporate Governance Practices for Issuers of Securities to the Public, 2015. A year following the publication of these manual, listed firms must incorporate sustainability/ESG disclosures, or at the very least, mandated ESG disclosures, into their yearly-integrated reports.

A further step toward greening the financial industry and addressing climate change risks was taken when the CBK released Guidelines on Climate-Related Risk Management for banks and mortgage finance businesses NSE (2021). To ensure consistency, this guideline suggests that listed companies in Kenya should adopt the Global Reporting Initiative (GRI) Standards as the common framework for ESG reporting in order to help reduce uncertainties regarding which framework or standards to apply (Global Reporting Initiative Standards, 2021). According to the standards, organizations must create disclosure strategies for climate-related risks, integrate them into current risk management procedures, and integrate climate-related financial risks into their governance structures. Ager and Kaundu (2023) identify KCB Group as a prime example of a financial company in Kenya providing green loans. The United

Nations Green Climate Fund granted the KCB Group accreditation in 2020 for its commitment to financing environmentally friendly projects and investments.

## **1.2 Statement of the Problem**

Integration of ESG in banking is a contemporary business strategy that seeks to maximize shareholders wealth, while concurrently meeting the need of other stakeholders including; consumers, investors, employees and the governments. Despite its proven benefits, commercial banks in Kenya are yet to fully integrate ESG in their lending practice (Ahmend et al., 2018). Despite the mandatory requirement from the regulator-CBK, banks in Kenya continue to operate oblivious of the potent consequences of failing to integrate the ESG criteria. Integrating ESG factors into credit risk assessment is a recent challenge for the financial industry, but at the same time, it is also an opportunity to target loans to sustainable borrowers and create sustainable loans (Brogi, 2020). The Kenyan banking sector has recently witnessed dynamic changes characterized by: quick development of the mobile banking platform, advancement of the internet technology, emergence of agency banking, and tighter CBK regulations. As a result, numerous banks have failed in the country between 2013 and 2017 including; Chase Bank, Imperial Bank, and Dubai Bank (Gathaiya, 2017). While Agutu and Githira (2023) attribute the bank failures to their inability to integrate ESG components into their business models in good time, Korwatanasakul (2020) associate it with inability of investors, bank management and policymakers to fully understand the influence of ESG on sustainability of banks.

In a study by Xulu (2022), it was observed that South African banks have not yet fully integrated ESG into corporate strategy and decision-making processes because the practice is not yet mandatory. A narrative that applies to the Kenyan banking sector as well and hence an explication of the limited adoption of ESG integration in the sector. Mohammad and Wasiuzzaman (2021) examined the impact of corporate ESG disclosure on corporate performance in Malaysia, and found that ESG disclosure improves company performance. The predictor variable in the study was corporate performance and not sustainable lending.

A review of studies in Kenya show dearth in literature on the nexus between ESG integration and sustainable lending. Mangwa and Jagongo (2022) investigated the effect of green finance on Kenya's listed commercial banks' financial performance and green finance. In a study of family-owned businesses in Nairobi County Kenya, Munyoki (2021) examined the effect of corporate governance structures on firm performance. Kimilu (2021) focused on the effect of

environmental, social and governance disclosures on firm value of firms listed on the Nairobi Securities Exchange. While Wanjau (2019) examined the effect of corporate disclosure on the financial performance of businesses listed on East African stock exchanges. The dominance of firm performance over sustainable lending in all the studies mentioned provides a conceptual gap. A few of the studies were done in context other than commercial banking resulting in contextual gaps. The aforementioned studies therefor yielded a knowledge gap on the link between ESG integration and sustainable lending practices. In this regards, the current study sought to address these gaps by analysing the effect of ESG integration on sustainable lending practices of commercial banks in Kenya.

### **1.3 Research Objectives**

#### **1.3.1 General Objective**

The general objective of this study was to analyse the effect of environmental, social, and governance integration on sustainable lending practices of commercial banks in Kenya.

#### **1.3.2 Specific Objectives**

The specific objective of this study were;

- i. To determine the effect of environmental integration on sustainable lending practices of commercial banks in Kenya
- ii. To find out the effect of social integration on sustainable lending practices of commercial banks in Kenya
- iii. To assess the effect of governance integration on sustainable lending practices of commercial banks in Kenya

### **1.4 Research Questions**

The study sought to answer the following research questions:

- i. What is the effect of environmental integration on sustainable lending practices of commercial banks in Kenya?
- ii. What is the effect of social integration on sustainable lending practices of commercial banks in Kenya?
- iii. What is the effect of governance integration on sustainable lending practices of commercial banks in Kenya?

## **1.5 Significance of the Study**

### **1.5.1 Policy Makers**

The findings from this study are useful to policy makers. It can inform policy makers on effect of ESG integration on sustainable lending practices and help policy makers formulate effective policies that will help financial institution embrace ESG integration for sustainable lending practices.

### **1.5.2 Commercial Banks**

Commercial banks may also benefit from this study. It gives commercial banks management insight of how they can achieve sustainable lending practices through ESG integration. The study also provides banks management the chance to express the challenges they face in ESG integration. Consequently, appropriate decision concerning ESG integration can be made for sustainable lending practices

### **1.5.3 Researchers and Academicians**

There exist few studies on ESG integration and sustainable lending practices. Therefore, findings and recommendations of this study can be resourceful material for researchers and academicians that would wish to conduct more studies on this area.

## **1.6 Scope of the Study**

This study sought to examine the effect of ESG integration on sustainable lending practices focusing on Commercial Banks in Kenya. The key predictor variables under ESG included environmental, social, and governance integration. The predicted variable was sustainable lending practices. The study adopted a descriptive research design with employees of the 39 commercial banks in Kenya comprising the target population. The target respondents were the management staff in the sustainability and credit departments. Data was collected using questionnaires and analyzed using descriptive and inferential statistics. The study was conducted between January 2024 and June 2024.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

In this chapter, section 2.1 contains the introduction, 2.2 contains the theoretical framework and 2.3 empirical review while 2.3 presents the research gap. In addition, section 2.5 presents the conceptual framework, 2.6 presented the operationalization variables while 2.7 presents the chapter summary.

### 2.2 Theoretical Framework

The study was anchored on three theories: the Legitimacy theory, Stakeholder theory and The Stewardship theory. An attempt was made to explicate the linkage between the theories and the variables under study.

#### 2.2.1 The Legitimacy Theory

Dowling and Pfeffer developed the legitimacy theory in 1975. From this theory, firms must safeguard their socially acceptable status, and this can be explained through the legitimacy theory. Organization legitimacy theory can be defined as a condition or status that exists when the value system of an entity is aligned with the values of the social system of which the entity is part of (Dowling & Pfeffer, 1975). Dowling and Pfeffer (1975) observed a contrast between actual and perceived value systems that cause threats to an entity's legitimacy. Thus, legitimacy theory can be applied to explain why companies adopt sustainable reporting practices like ESG in response to the global demand for sustainable reporting practices. This implies that companies may adopt sustainability practices to address perceived discrepancies between their value systems and that of key stakeholders (Gibson, 2023).

According to the legitimacy theory, an entity has to continuously demonstrate that its actions are legitimate, and that society perceives it as operating within acceptable norms and bounds (Şeker & Şengür, 2021). The homogenization of the relations between the external social responsibility of the firm and its internal social responsibility makes the legitimacy theory stand for the business ethics fundamentals (Şeker & Şengür, 2021). Legitimacy theory explains the behavior of a company in developing and implementing voluntary environmental, social, and governance information disclosure (Baldini et al., 2018). The goal is to fulfil the social contract that exists between the organization and the society that allows the recognition of the former's objectives and for survival in the unpredictable and turbulent operating environment (Burlea & Popa, 2013).

In this regard, the legitimacy theory has been adopted by multiple scholars as a theoretical construct to explain the disclosure of ESG information by organizations and make viable predictions in empirical inquiries (Burlea & Popa, 2013). The pressure from internal and external actors and the firm's need to protect its reputation motivates the adoption of ESG practices and their disclosure in annual reports or through the media. Legitimacy provides a firm with the right to conduct its operations in line with the stakeholder's interests. While the theory previously faced criticism for only being seen as a convincing exploitation of managerial motivations while failing to indicate how adoption and disclosure by management may or may not promote accountability and transparency (Mahmud, 2020; Deegan, 2019), its rich disciplinary background qualifies it as an ideal theory to anchor this study (Meutia et al., 2022). The disciplinary background culminates from institutional, management, and stakeholder theories (Deegan, 2019).

This theory therefore informs this study. It explains why legitimacy has emerged among the conditions that should exist for a company's actions to be accepted by stakeholders (Mahmud, 2020; Martin-de Castro, 2021). The final reason for anchoring this study on the legitimacy theory was the presence of overwhelming evidence that suggests that bank executives adopt and disclose ESG performance survival reasons instead of objectively declaring their proper social, environmental, and governance responsibility (Martin-de Castro, 2021). In reference to research objective three, such an argument provided a strong basis to be skeptical on the reason banks in Kenya adopt ESG practices and test if the adoption is related to meeting management objectives rather than for the pursuit of sustainability lending practices.

### **2.2.2 Stakeholder Theory**

Stakeholder theory was first presented in 1963 by Stanford Research Institute (SRI). The protagonist of the Stakeholder theory was Edward Freeman. According to SRI, stakeholders are those who can lend support to an organization's continued existence. Groups that have the power to affect or be affected by the process of accomplishing organizational goals are known as stakeholders (Freeman, 1984). Corporate responsibility has changed, giving stakeholders more consideration for social factors rather than just economic indicators as seen in financial statements. In his 1984, book *Strategic Management: A Stakeholder Approach*, Freeman created a theoretical exposition of stakeholders. Businesses have a greater chance of successfully addressing all three ESG issues when they use the relationships between people, groups, and businesses that can influence or be influenced by them as a unit of analysis.

Stakeholder theory explains the connection between ESG integration and sustainable lending. Stakeholders need corporate responsibility and sustainability disclosures to comprehend the business's operations. For instance, when a company meets its stakeholder-accountable environmental, social, or governance obligations, its financial performance and sustainability issues are raised. By giving stakeholders access to ESG data, companies can enhance their sustainability practices and gain a competitive edge. As a result, and in reference to objective two, stakeholders believe that businesses with stronger ESG criteria will also be able to perform better when they compete in the market. Stakeholders reward these businesses with increased employee productivity, consumer spending, and investor investment, all of which will increase firm value (Ammer et al., 2020).

### **2.2.3 Stewardship Theory**

Davis, Schoorman, and Donaldson developed the stewardship theory of corporate governance and organizational management (1997), as an alternative to the agency theory, which they believed made unfavorable assumptions about managers (Contrafatto, 2014). The central notion of the theory is that agents do not always act against the principals' best interests. According to this theory, it is possible to align the interests of the principals and the agents. This suggests that executives in an organization would still successfully fulfill the role of stewards if left on their own and that managers are therefore stewards (Donaldson & Davis, 1991). Elevated expectations and managerial responsibilities motivate and guide staff to operate in accordance with the stewardship theory. This point of view holds that managers are self-motivated, goal-oriented individuals who experience restraint when directors attempt to impose control over them. According to stewardship theory, managers should behave sensibly in order to maximize shareholder returns. As envisioned under objective one, environmental management programs including recycling, efficient resource use, conservation, restoration, and regeneration are all part of sustainability stewardship.

Since managers or staff members tasked with stewardship are also expected to perform their jobs with diligence and efficiency, stewardship theory is pertinent to this study. In order to fulfill societal expectations, the organization must create a favorable work environment and make sure that employees are utilized to their full potential (Keay, 2017). Sustainable resource use and complete disclosure are essential components of good stewardship, and this holds true for every ESG factor examined in this research. Since those in charge of listed firms' governance are expected to manage resources with appropriate consideration for the next generation, sustainability is really about good stewardship. Businesses that meet

sustainability standards are expected to be well managed, and their managers are expected to be good stewards of the company.

This theory was applied in this research to clarify why aspects of corporate governance that are dependent on the board of directors might not have an impact on sustainable lending practices of commercial banks in Kenya. This is due to the fact that managers will act as responsible stewards and represent the interests of the company's shareholders whether the corporate board is present or not. In this situation, the boards' primary responsibility is not to police the management but to strategically direct management in a way that will maximize the company's performance. According to the theory, the inclusion of board committees and a diverse range of skills, experiences, and technical abilities will improve the board's ability to provide direction, which will positively influence sustainable lending practices of commercial banks in Kenya.

### **2.3 Empirical Review**

This section presents a review of studies on the relationship between ESG integration and sustainable lending practices by other scholars. The review covered studies done globally, in Africa, regionally in East Africa, as well as locally in Kenya. In line with the research objectives, the section focuses on the effect of environmental, social, and governance integration on sustainable lending practices.

#### **2.3.1 Environmental Integration and Sustainable Lending Practices**

Nemoto and Morgan (2020) identified environmental elements of ESG to encompass; ability of a company to negatively affect ecosystems, the climate, and human health through their production and output activities, which can lead to pollution and the depletion of natural resources. Based on the thirty-two items that make up GRI Standard 300, the environmental component, Angela and Sari (2023), observed that the environmental factors relating to biodiversity include, air, water, and land. Environmental factors include efforts to conserve resources and actions taken to reduce and protect environmental risks. Corporate performance metrics benefit from green investment practices. Angela and Sari (2023) note that a company's environmental performance, including resource emissions, use, and innovation, is reflected in its environmental scorecard.

Wang (2023) focused on transmission effects of ESG disclosure regulations through bank lending networks. This study examined how ESG disclosure regulations imposed on banks generate transmission effects along the lending channel. The study established that borrowers

of affected banks improve their Environmental and Social (E&S) performance following the disclosure mandate. Consistent with banks enhancing both their engagement and selection activities, affected banks impose more environmental action covenants in loan contracts, and they are more likely to terminate a borrower with bad E&S records following the regulation. Further evidence showed that the transmission effects are stronger when a disclosure regulation is well enforced (as indicated by a greater increase in banks' disclosure) and among borrowers with greater switching costs. The study was done in China thus showing a contextual gap.

A study by Cheng and Hasan (2023) focused on firm ESG practices and the terms of bank lending in China. The study also discussed how banks could affect borrowers' ESG policies and investment via lending relationships. Using a desktop research design, the study found out that ESG practices had significant effect on terms of bank lending. However, the use of desktop research design depicts a methodological gap. Similarly, a study by Onuselogu and Shahzad (2023) found that companies with higher earnings per share are more likely to be in industries with stricter environmental regulations. Mangwa and Jagongo (2022) investigated the nexus between Kenya's listed commercial banks' financial performance and green finance. The research employed an empirical methodology, utilizing secondary data to derive conclusions. The variables that were examined were carbon asset finance, emission allowances, environmental credits, and Return on Investment (ROI) as independent variables and Return on Earnings (ROE), Return on Assets (ROA), and ROI as dependent variables. By analyzing the body of existing literature, the study found gaps in the context, concepts, and population and argued that there was need for more research on the subject.

In a quest to determine if carbon trade improved green production performance in China, Yang et al. (2021) discovered by that a temperature rise caused the production performance in biofilms to increase. It was concluded that adoption of green production led to firm sustainability. In a related study, Chen et al. (2019) demonstrated that environmental bacteria produced more Earnings per Share (EPS) when heavy metals especially copper were present. These results demonstrate how important environmental elements like temperature and heavy metal pollution are to the development of EPS. According to Chen et al. (2019), companies that perform better environmentally are typically likely to be more sustainable. The idea that environmental factors have a positive correlation with sustainable lending is reinforced by these results.

In a study on the effect of environmental, social, governance, and controversies on firms' value in Asia, Melinda and Wardhani (2020) established that the greater a company's environmental performance is reported the more valuable the company becomes. The dataset used by the authors comprised of 1,356 companies spanning 22 Asian countries, and it represented the Asian market from 2014 to 2018. This study demonstrates that the controversy score and ESG index score have a statistically significant impact on the firms' value as determined by Tobin's Q. The study's individual tests show that the three factors—ESG governance, ESG social, and ESG environmental, have an impact on a firm's value. Investors receive positive signals from environmental performance, which enhances the company's corporate image, boosts revenue, lowers expenses, and exhibits positive abnormal stock returns. A contextual gap is evident though, given the current study focuses on banks only.

Miroshnychenko, Barontini, and Testa (2017) gathered data on pollution prevention, green supply management, and green product development indices for every company in a panel of 3,490 publicly traded companies from 58 countries over a 13-year period in order to investigate the effects of corporations' green practices on their financial performance. The results demonstrated that internal green practices, such as pollution prevention and green supply chain management, are the primary predictors of financial performance, with external green practices, such as green product development, serving as secondary determinants.

Lucato, Costa, and de Oliveira Neto (2017) looked into the connection between the financial performance of SMEs engaged in textile manufacturing and environmental performance as measured by eco efficiency. The results did not show that there was a statistically significant correlation between the surveyed companies' financial performance and their environmental performance. This contrasts with the results of DiSegni, Huly, and Akron (2015), who discovered that businesses consistently report significantly higher profits when they take social responsibility and environmental sustainability initiatives.

Song, Zhao, and Zeng (2017) investigated the connection between listed Chinese companies' financial performance and corporate environmental management between 2007 and 2011. The results demonstrated that environmental management had a long-term, positive, and significant impact on financial performance. In order to make sense of the contradictory empirical results regarding the connection between corporate financial performance and corporate environmental performance, Endrikat, Guenther, and Hoppe (2014) carried out a

study. They carried out their analysis by meta-analytically combining the results of 149 studies, paying particular attention to the focal constructs of multidimensionality and the direction of causality. Corporate financial performance and corporate environmental performance had a positive and partially bidirectional relationship, according to the meta-analytic review's findings. In reference to foregoing discussion on integration of environmental factors in banking practice, the study hypothesized that;

H<sub>01</sub>: Environmental integration has no significant effect on sustainable lending practices.

### **2.3.2 Social Integration and Sustainable Lending Practices**

In terms of social factors, the positive effects and opportunities that a business may bring to society, including workers, clients, the neighborhood, the supply chain, and business associates as well as the management of any social risks, are all included in the social scope of ESG investment. Nemoto and Morgan (2020) posit that these elements have an impact on how businesses use their corporate influence to better society and how society perceives the business and its reputation. They also have a general impact on society. Angela and Sari (2023) note that the social component is evident in GRI Standard 400, which has 40 items that deal with employment. The social elements may also have an impact on company values when they pertain more directly to social aspects of a business, such as the organization's approach to hiring, recruiting, retaining, and related practices, as well as the working conditions it provides.

In a study by Angela and Sari (2023), a company's social performance was construed to include several factors like labor, human rights, product responsibility, and society, is reflected in the Social Score. Driven by the desire to gain a deeper understanding of companies' financial performance and corporate social responsibilities, Coelho, Jayantilal, and Ferreira (2023) conducted a comprehensive review and content analysis of 53 articles found in the convergence of financial performance and CSR from 1984 to 2021. Among other things, this analysis included companies from the biggest stock market indices in the world, sustainable portfolios, regions, mutual funds, and developed and developing nations. The results showed that a company's financial performance is directly impacted by corporate social sustainability. As the scores for governance, social, and environmental issues rose, so did the impact. Similar conclusions were drawn from a 2019 study by Erhinyoja and Marcella that looked at the connection between the oil and gas sector in Nigeria's financial performance and corporate social sustainability reporting.

Using secondary data, Onuselogu and Shahzad (2023) undertook a study on the impact of sustainable investment on the financial performance of banks in Pakistani and the results indicates that companies that place a high priority on social responsibility and the environment are more likely to perform well financially, especially in terms of earnings per share. While rising costs because of corporate social responsibility activities may act as a deterrent, Liang and Renneboog (2020) evaluated the relationship between corporate social performance disclosure and financial performance with the expectation that profitable firms are incentivized to disclose information on their social performance to enhance their publicity. To find the relationship, a structured content analysis was conducted using 75 sample companies' Global Reporting Initiative (GRI) reports. The GRI guidelines' indicators of fair work and labor practices, society and product responsibility, and human rights were used to gauge corporate social performance. Sales growth, the cash flow/sales ratio, and return on equity were used to evaluate financial performance. The statistical analysis revealed a positive and significant correlation between ROE and the categories of human rights, society, and product responsibility. This also applied to other CSR metrics. Consequently, Bhimani and Saradva (2023) deduced that businesses that emphasize social issues like consumer perception, corporate social responsibility, and employee satisfaction typically perform better financially. According to Yang et al. (2021), social factors and environmental performance have a positive correlation with a company's financial performance.

Melinda and Wardhani (2020) established that a company's performance in the social field is positively correlated with its social performance score. Businesses behave as decent citizens in addition to being commercial entities that strive for financial success. According to this theory, businesses need to take on greater social and environmental responsibilities. Businesses have duties, rights, and responsibilities to both the public and society. Sroufe and Gopalakrishna-Remani (2019) conducted an evaluation of how innovative firms integrate sustainability into their business models, driven by the mounting evidence of a positive relationship between social sustainability and financial performance. A sample of Fortune 500 companies that are concurrently included in the 100 Best Corporate Citizens, Corporate Knights Global 100, and Newsweek Green Rankings were used in the study. The analysis of the purposive sample indicated a positive relationship between financial performance and the management of social sustainability practices.

Arshad and Ahmad's (2017) research indicates a positive correlation between firm performance measured using ROE and social capital. The study found that businesses with

higher levels of social capital typically outperform their competitors financially. Gupta et al. (2017) have linked strong social capital to improved financial performance in businesses. This finding are consistent with a study by Li et al. (2018) that discovered a relationship between return on investment and social factors. In a study entitled "Why Social Sustainability Counts," Schoenmaker (2017) investigated the relationship between corporate social sustainability culture and financial success. The study's goal was to determine whether there is a relationship between financial success and CSR culture through corporate values and practices. The corporate social sustainability elements of sustainability strategy and leadership, communication and learning, social care, work–life balance, and loyalty were predictors of a company's financial success, according to a multiple regression analysis of corporate social sustainability and financial outcomes.

Park's (2017) study of 175 emerging Korean companies shows that social disclosure has a positive impact on company performance in the long term and provides direct and indirect value to the company through positive reputation feedback. Similarly, Gupta et al. (2017) noted that a company's social factors and environmental performance are positively correlated with its financial performance. Furthermore, Uyar and Kilic (2015) showed that companies with happier workforces typically have better ROE. It is therefore evident that social factors are crucial to a business's ability to make money. A study by Arce et al. (2017) found that companies in the energy sector that showed higher levels of community involvement, as demonstrated by their volunteer hours and charitable contributions registered higher ROA. In a similar vein, Bhimani and Saradva (2023) found that employee happiness and firm performance were positively correlated, especially for businesses in the service sector. Following the aforementioned review on integration of social factors, it is hypothesized that;

H<sub>02</sub>: Social criteria has no significant effect on sustainable lending practices.

### **2.3.3 Governance Integration and Sustainable Lending Practices**

Elements of governance are perceived by Nemoto and Morgan (2020) as a dedication to ethical business practices and proper business conduct and are related to the organizational structure and management techniques of businesses. Based on GRI Standard 102, which consists of 22 items used to report contextual information about an organization and its sustainability report practices, the governance component can be understood. Angela and Sari (2023) posit that governance include; the organization's profile, ethics and integrity, strategy,

reporting procedures, and stakeholder engagement methods and that the higher the governance disclosure the better the governance of a firm.

In examining the effect of ESG disclosure on company's profitability and value in the Sri-Lanka, Toti and Johan (2022) reported that firm value was significantly positively impacted by the governance score of nonfinancial companies listed on the SRIKEHATI index. Stakeholders support transparent business ethics practices, which also send a positive signal to investors. This was attributed to the fact that investors expect less cash flow to be diverted and that the majority of the company's profits will be returned as interest or dividends, and thus good corporate governance can cause stock prices to double. They deduced that investors might receive a signal about the state of the business from sustainability reports that demonstrate strong corporate governance.

A key element of governance is ownership structure. According to Ali et al. (2018), the ownership structure is an important factor in deciding how shareholders' interests are shielded from the different kinds of exploitation that managers may engage. The percentage of a company's shares held by the greatest number of shareholders is referred to as the ownership structure (Fatma & Chouaibi, 2021). A study by Ali et al., (2018) demonstrated that large shareholders are better able to control managers' actions than majority shareholders are and that ownership structure can help reduce agency problems between managers and shareholders.

Awuor (2023) did a study on the effect of environmental social and governance adoption and bank characteristics on the financial performance of commercial banks in Uganda. By employing a multivariate regression analysis, the study established that ESG has a slightly positive effect on ROE and a slightly negative effort on ROA. However, both relationships are not statistically significant. Therefore, this study has not approved or disapproved of any of the theoretical expectations of the two hypotheses that ESG positively or negatively affects financial performance. The relationship with bank characteristics has also shown that profitability positively and significantly affects ROE and ROA. Finally, the findings indicate that having ESG adoption enforced by regulatory bodies (both financial sector regulators and accounting bodies) would be the most effective way to ensure that banks in Uganda observe sustainable practices. The study was done in Uganda thus showing a contextual gap.

In Zambia, Josephine (2022) focused on critical analysis of the applicability of environmental, social and governance (ESG) regulation to corporate governance laws in

Zambia. The study intended to critically analyze of the applicability of environmental social and governance regulation to corporate governance in Zambia. The study also aimed to compare the framework obtaining in Zambia with that of Kenya. Further, the study sought to achieve this systematically in accordance with the three specific objectives; to analyze whether ESG Laws are applicable in Zambia; to establish the extent of compliance with ESG principles, despite the lack of a comprehensive framework in Zambia; to compare the adopted legal framework that addresses ESG in Zambia with that of Kenya. Although, primarily qualitative, the study employed mixed methods, specifically; qualitative and quantitative methodology. The study discovered that ESG is applicable to the Zambian Corporate Governance Laws. Further, compliance with ESG principles despite the lack of a framework has been on going. However, to a low extent. Still, it is achievable as evidenced by some key corporate players. The mere fact of voluntary compliance should serve as a motivation to the state make provision for a regulatory framework. The study also found that the Zambian adopted framework for some few companies measured up to that of Kenya. It was concluded an ESG regulatory framework should be provided for in Zambia. The study however left out the aspect of sustainable lending practices thus showing a conceptual gap.

El-Chaarani, Abraham, and Skaf (2022) studied the outcomes of a COVID-19 bank immunity test in order to determine the effect of corporate governance on the financial performance of the banking industry in the Middle Eastern and North African (MENA) region. The need to measure the impact of both external and internal corporate governance initiatives on the financial performance of banks in the understudied MENA region served as the study's main motivation. Financial and non-financial data were gathered for the study using banks' annual reports, and the data was regressed. The results showed that financial success was positively correlated with sound corporate governance practices, such as having independent directors, a high ownership concentration, no political influence on the board, and robust legal protection. Corporate governance principles including gender diversity on the board of directors, performance-based compensation, a manageable board size, and anti-takeover clauses had little to no impact on financial performance during the crisis. The study concludes that stronger corporate governance procedures, both internal and external, may lead to better financial performance.

Kahloul, Sbai, and Grira (2022) used a panel dataset of French companies listed on the Société des Bourses Françaises (SBF) 120 Index from 2008 to 2015 to investigate the moderating role that gender and diversity of board members had on the relationship between

CSR reporting and financial performance. The results of the study demonstrated a positive relationship between financial success and CSR reporting, with board gender diversity acting as a mediating factor.

In a study of the effect of corporate governance structures on firm performance among family-owned businesses in Nairobi County Kenya, Munyoki (2021) discovered that, in family-owned businesses, ownership structure and firm performance had a significant and favorable relationship. The study also found that, although women on boards, board composition, and board committees did not significantly affect the performance of family-owned businesses, there was a positive significant relationship with CEO-duality. The study also discovered that distinct CEO and chairperson positions improved a company's reputation, which in turn affected the performance of the firm in family-owned enterprises. It was found that there was a positive correlation between management structure findings and firm performance. The ownership structure had the biggest impact on the performance of the company out of the three.

Kimilu (2021) focused on the effect of environmental, social and governance disclosures on firm value of firms listed on the NSE. The empirical analysis looked at the association between ESG practices and ROA and ROE using the stakeholder theory and the ESG conceptual framework. The study used mixed methods research (MMR). The influence of ESG disclosures on business value was investigated using random effect panel regression analysis. The data showed a substantial link between regulatory agencies and stakeholder pressure, as well as the amount and reasons for ESG disclosures among NSE-listed companies. The study found that NSE-listed companies should deliberate steps directed toward strategic governance, as well as internal and organizational cultures geared toward information disclosure, in order to reduce the cost of getting essential information. The study focused on firms listed on the NSE, thus showing a contextual gap.

According to Tang, Yang, and Yang (2020) study, firm performance in Chinese publicly traded companies is greatly and favorably impacted by corporate governance. They underlined that the CEO succession plan, the board, and the audit committee's efficient oversight are essential governance mechanisms that improve the performance of the company. Similar to this, Yahya and Ismail (2019) looked into the connection between Malaysian companies' financial performance and their governance practices. These outcomes are in line with those of Zhang and Yang (2020), who examined 657 Chinese publicly listed

businesses and concluded that pay, board independence, and size are important variables that raise ROA.

Wanjau (2019) examined the effect of corporate disclosure on the financial performance of businesses listed on East African stock exchanges. The study's objective was to determine whether corporate disclosure could help stop the downward trend in company and financial performance. A sample of 51 publicly traded companies from the Nairobi Securities Exchange, 11 from the Uganda Securities Exchange, 3 from the Rwanda Stock Exchange, and 15 from the Dar es Salaam Stock Exchange were selected with purpose using a descriptive study methodology. Document check indexes that were acquired from audited statements were used to retrieve secondary data. Regression and panel data diagnostic tests were performed along with a correlation analysis to show how strongly the dependent and independent variables were correlated. The financial performance of listed companies in East Africa was found to have a significant positive correlation with the disclosure of financial information, governance information, risk information, and social information. The report recommended listed businesses to disclose information at a higher level in order to improve performance and decrease agency and monitoring issues. Emphasis on financial performance in this study is poignant to conceptual gaps in the study reported, while reliance on secondary data points at a methodological gap.

Another study in the banking industry in Nepal was carried out by Shrestha (2018), who discovered a positive correlation between ROE and governance factors. Arjoon and Gyanendra (2017) found that corporate governance had a major effect on Trinidad and Tobago banks' ROE. Alam (2016) examined how the board structure affected the pharmaceutical company's performance in Bangladesh and discovered a significant positive correlation between board meetings and firm performance. These studies collectively reveal contextual gaps having been undertaken in other locations.

Che and Langli (2015) studied private limited liability companies in Norway over an 11-year period to investigate the relationship between firm performance and governance structure in private family businesses. The findings indicated that strong family power, small boards, high percentage of family members on the board, and high ownership of the second largest owner were all linked to high firm performance. Furthermore, a stronger correlation was observed when the second largest owner was not related to the controlling family, despite the fact that ownership of the second largest owner was positively correlated with firm performance even

in this scenario. The ownership structure was found by the authors to have a stronger correlation with firm performance than the board structure.

A study by Shahrier, Jessica, and Gaur (2015) sought to determine the connection between board composition and the performance of the company. The listed companies on the New Zealand Stock Exchange between 2004 and 2007 comprised the study's sample. The results showed that better firm performance was associated with the presence of professional directors. However, in businesses with a high ownership concentration, the beneficial impact of board independence on firm performance diminished. Additionally, the benefits of board competence and size were diminished by a high ownership concentration. Motivated by the alarming rate of corporate scandals and failures as well as the growing demand from stakeholders for information access, accountability, and transparency, Tarus and Omandi (2013) carried out a study from a Kenyan perspective. Their goal was to determine how risk, social, financial, and governance transparency affected the performance of the organization. Forty-two companies that were listed on the NSE between 2005 and 2010 made up the sample. Using a fixed effects regression model, the study discovered a strong and favorable relationship between corporate disclosure and firm performance.

Adeusi, Akeke, Aribaba, and Adebisi (2013) used a sample of ten Nigerian banks to establish a relationship between board size and financial performance. Ownership and board composition were the factors that were taken into account. The econometric model's findings demonstrated that when the proportion of external board members increases, bank performance decreases. The study determined that in order to enhance bank performance, there should be a higher proportion of outside directors on the board and a less diverse composition overall. In an investigation into the potential relationships between corporate governance standards and reporting quality and firm value for Indonesian public companies, Siagian, Siregar, and Rahadian (2013) determined that strong governance boosts investor confidence, which raises firm value. These results imply that companies that practice better corporate governance implement higher values. In reference to the foregoing review on governance criteria, it is hypothesized as follows;

H<sub>03</sub>: Governance criteria has no significant effect on sustainable lending practices.

## 2.4 Research Gaps

The empirical review presents related studies, whose closer examination points at the presence of knowledge gaps encompassing methodological, conceptual and contextual gaps as summarized in Table 2.1.

**Table 2.1: Summary of Literature Review and Research Gaps**

Author/s	Research Topic	Research Finding	Research Gap	Focus of Current Study
Wang (2023)	Transmission effects of ESG disclosure regulations through bank lending networks.	Transmission effects are stronger when a disclosure regulation is well enforced (as indicated by a greater increase in banks' disclosure) and among borrowers with greater switching costs.	The study was done in China thus showing a contextual gap.	The current study will be done in Kenya
Cheng and Hasan (2023)	Firm ESG practices and the terms of bank lending	The study found that ESG practices had significant effect on terms of bank lending.	The study adopted a desktop research design thus showing a methodological gap	The current study will adopt an explanatory research design
Mangwa and Jagongo (2022)	Green financing and financial performance of listed commercial banks in Kenya	The study found gaps in the context, concepts, and population and argued that there was need for more research on the subject.	The research employed an empirical methodology, utilizing secondary data to derive conclusions	The current study will adopt an explanatory research design
Yang et al.	Did carbon	It was concluded that	Focus was on	The current

(2021)	trade improve green production performance? Evidence from China.	carbon trade which led to adoption of green production resulted in firm sustainability	green production	study pays attention to ESG criteria
Chen et al. (2019)	CEO tenure and corporate social responsibility performance.	Companies that perform better environmentally are typically likely to be more sustainable.	The study linked CSR to firm performance, resulting in a conceptual gap.	The current study is links ESG to sustainability lending
Melinda and Wardhani (2020)	The effect of environmental, social, governance, and controversies on firms' value: evidence from Asia	A company's performance in the social field is positively correlated with its social performance score.	The dependent variable was social performance score, implying a conceptual gap	In the current study the dependent variable is sustainability lending
Sroufe, and Gopalakrishna	Management, social sustainability, reputation, and financial performance relationships	The analysis of the purposive sample indicated a positive relationship between financial performance and the management of social sustainability practices.	The use of purposive sampling indicates the existence of a methodological gap	The current study will use a probability-based sampling approach
Miroshnychenko, Barontini, and Testa (2017)	Green practices and financial performance: A global outlook.	Internal green practices, such as pollution prevention and green supply chain management, are the primary predictors of financial performance.	The green practices affected firm financial performance	ESG criteria is linked to sustainable lending practices
Coelho, Jayantilal, and Ferreira (2023)	The impact of social responsibility on corporate financial performance: A systematic literature review. Corporate Social	A company's financial performance is directly impacted by corporate social sustainability. As the scores for governance, social, and environmental issues rose, so did the impact.	Focus was on the link between CSR and firm performance resulting in a conceptual gap	ESG criteria is linked to sustainable lending practices

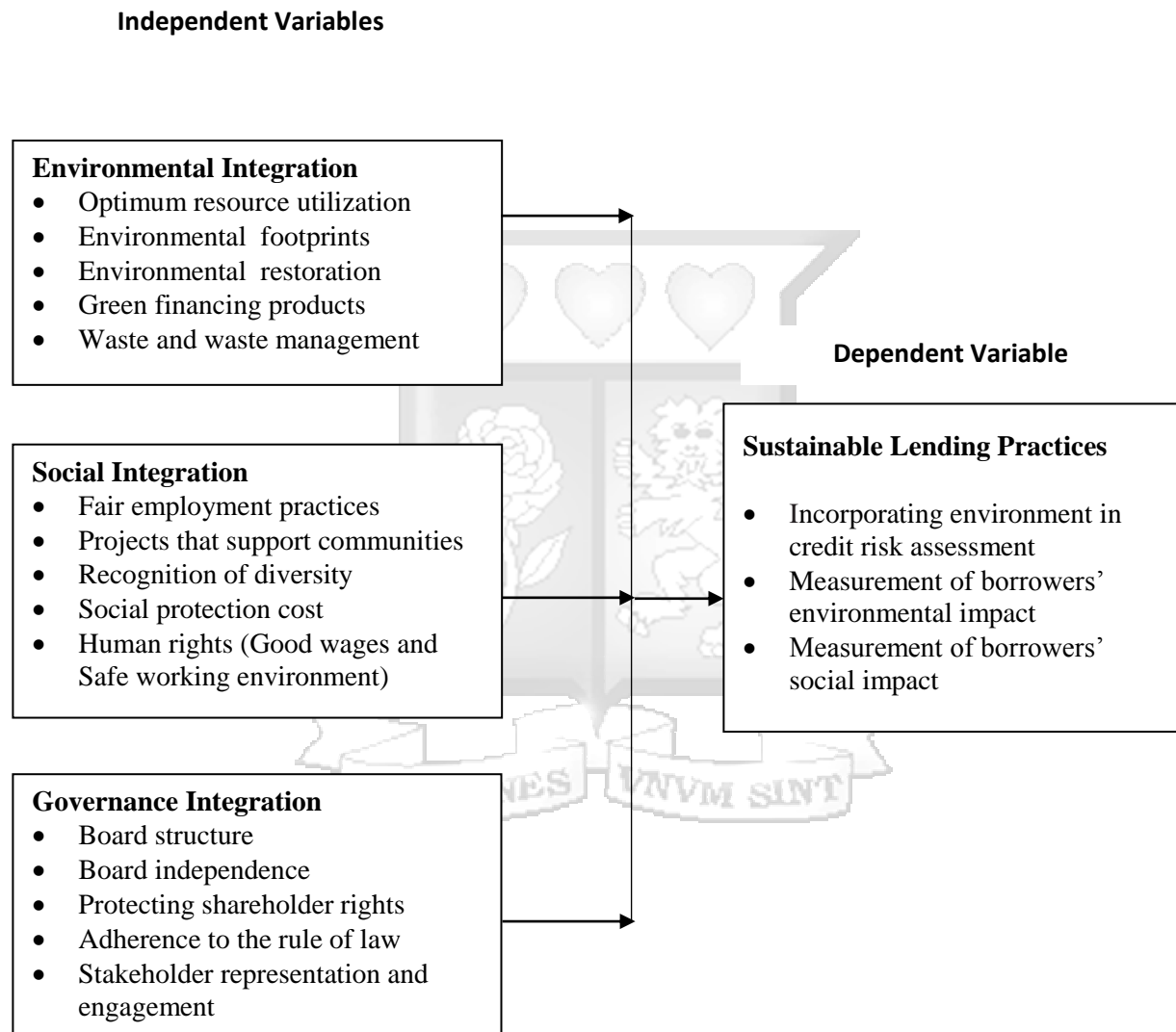
	Responsibility and Environmental Management			
Onuselogu and Shahzad (2023)	Impact of sustainable investment on the financial performance.	Companies with higher earnings per share are more likely to be in industries with stricter environmental regulations	Adoption of secondary data in the study points at existence of methodological gap	The study will collect primary data
Liang and Renneboog (2020)	Corporate social responsibility and sustainable finance: A review of the literature.	Profitable firms are incentivized to disclose information on their social performance to enhance their publicity	The use of literature review points at an exploratory study approach meaning a methodological gap	The current study use adopts an explanatory research design
Schoenmaker (2017)	From risk to opportunity: A framework for sustainable finance.	The corporate social sustainability elements of sustainability strategy and leadership, communication and learning, social care, work-life balance, and loyalty were predictors of a company's financial success,	The link of CSR to corporate success indicates the existence of conceptual gaps	ESG criteria is linked to sustainable lending practices
Toti and Johan (2022)	The Effect of Environmental, Social, Governance (ESG) Disclosure on Company's Profitability & Value in The Sri-Kehati Index 2015-2020	Firm value was significantly positively impacted by the governance score of nonfinancial listed companies	The study was undertaken in Sri-Lanka stock market	The study will be undertaken in amongst Commercial Banks in Kenya
Awuor (2023)	Effect of environmental social and governance adoption and bank	The relationship with bank characteristics has also shown that profitability positively and significantly affects ROE and ROA	The study was done in Uganda thus showing a contextual gap.	The current study will be done in Kenya

	characteristics on the financial performance of commercial banks in Uganda.			
Josephine (2022)	Critical analysis of the applicability of environmental, social and governance (ESG) regulation to corporate governance laws in Zambia	The study discovered that ESG is applicable to the Zambian Corporate Governance Laws.	The study however left out the aspect of sustainable lending practices thus showing a conceptual gap	The current study will focus on ESG disclosure and sustainable lending practices
El-Chaarani, Abraham, and Skaf (2022)	The impact of corporate governance on the financial performance of the banking sector in the MENA (Middle Eastern and North African) region	Financial success was positively correlated with sound corporate governance practices, such as having independent directors, a high ownership concentration, no political influence on the board, and robust legal protection	Governance was mapped on financial success, resulting in a conceptual gap	The dependent variable is sustainable lending practices.
Kahloul, Sbai, and Grira (2022)	Does corporate social responsibility reporting improve financial performance? The moderating role of board diversity and gender composition.	A positive relationship between financial success and CSR reporting, with board gender diversity acting as a mediating factor.	The study used secondary data to map CSR to financial success leading to methodological and conceptual gaps	Primary data will be used to link ESG to sustainable lending practices.
Munyoki (2021)	The Effect of corporate governance structures on firm performance among family-owned businesses in Nairobi County	A positive significant relationship exists between CEO-duality and firm performance and that distinct CEO and chairman positions improved a company's reputation, which in turn affected the performance of	The study context was family-owned businesses in Nairobi County Kenya	Focus will be on commercial banks in Kenya

	Kenya	the firm		
Kimilu (2021)	Effect of environmental, social and governance disclosures on firm value of firms listed on the Nairobi Securities Exchange.	The data showed a substantial link between regulatory agencies and stakeholder pressure	The study focused on firms listed on the Nairobi Securities Exchange thus showing a contextual gap.	The current study will focus on commercial banks in Kenya
Tang, Yang, and Yang (2020)	How to design corporate governance structures to enhance corporate social responsibility in China's mining state-owned enterprises?	The CEO succession plan, the board, and the audit committee's efficient oversight are essential governance mechanisms that improve the performance of the company	The linkage of corporate governance to CSR posits a conceptual gap	The study will link governance criteria to sustainable lending practices
Wanjau (2019)	Influence of corporate disclosures on financial performance of companies listed in securities exchanges in East Africa	The financial performance of listed companies in East Africa was found to have a significant positive correlation with the disclosure of financial information, governance information, risk information, and social information.	Corporate disclosure was mapped to financial performance resulting in conceptual gap	Governance criteria will be regressed against sustainable lending practices

## 2.5 Conceptual Framework

A conceptual framework graphically exhibits a relationship that exists between the independent variable and the dependent variable (Ngulube et al., 2015). Figure 2.1 illustrates that the independent variable in this study was ESG disclosure, which was conceptualized to encompass; environmental integration, social integration and governance integration. The dependent variable was sustainable lending practices.



**Figure 2.1: Conceptual Framework**

## 2.6 Operationalization of Variables

Sustainable lending practices was the dependent variable while the independent variable were environmental integration, social integration and governance integration. Table 2.2 presents the measures of each of the independent variables and the dependent variable in the study.

**Table 2.2: Operationalization of Variables**

Variables	Variable Definition	Supporting Theories	Measures	Likert Scale	Author
<b>Environmental Integration</b> (Independent Variable)	Environmental integration includes efforts to conserve resources and actions taken to reduce and protect environmental risks	Stakeholder theory	Environmental footprints Environmental restoration Green financing products Waste and waste management Managing environmental risks	5- point Likert scale  5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree	Wang (2023) Kimilu (2021) Zhou et al., (2022). Ager and Kaundu (2023) Awuor (2023) Angela and Sari (2023)
<b>Social Integration</b> (Independent Variable)	Social Factors integration is the inclusion of the positive effects and opportunities that a business may bring to society, including workers, clients, the neighborhood, the supply chain, and business associates as well as the management of any social risks, are all	Legitimacy theory	Employment practices Community Projects Diversity in employment Social protection cost Good wages Safe working environment	5- point Likert scale  5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree	Nemoto and Morgan (2020) Arce et al. (2017) Madden (2020) Kimilu (2021) Angela and Sari (2023) Liang and Renneboog (2020) Nemoto and Morgan, (2020)

	included in the social scope of ESG investment				
<b>Governance Integration</b> (Independent Variable)	Governance refers to organization's profile, ethics and integrity, strategy, reporting procedures, and stakeholder engagement methods and that the higher the governance disclosure the better the governance of a firm	Stewardship theory	Board structure Board independence Protecting shareholder rights Banking Regulations Stakeholder representation and engagement Risk management framework	5- point Likert scale  5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree	Alam (2016)  Zhang and Yang (2020)  Gathaiya (2017)  Josephine (2022)  Nderitu (2022)  Angela and Sari (2023)
<b>Sustainable lending practices</b> (Dependent Variable)	Sustainable lending refers to the process of considering ESG considerations when making investment decisions in the financial sector, leading to more long-term investments in sustainable economic activities and projects		Credit risk assessment Asses environmental impact Social impact assessment	5- point Likert scale  5 = Strongly agree 4 = Agree 3 = Neutral 2 = Disagree 1 = Strongly disagree	Brogi (2020)  Calderon and Chong (2014) Hörnlein (2015) Fatoki (2021)

## 2.7 Chapter Summary

This chapter highlighted a theoretical review and an empirical review of the topic at hand. The theoretical underpinning focused on stakeholder theory, sustainability theory and legitimacy theory. The empirical review focused on environmental integration, social integration and governance integration studies that shows the link between the ESG integration and sustainable lending practices. The chapter has also outlined the research gaps from the past studies, which includes methodological, conceptual and contextual gap. Finally, the chapter winds up by depicting the study variables in a conceptual framework as well as the operationalization of the study variables.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter presents the methodology that was applied in the study. It explicates the research philosophy applied, it elaborates on the research design that was used, it presents the population of interest and the sampling design that was adopted, describes the data collection tool, method, and procedure, as well as the data analysis and presentation strategies that were put to use. The ethical guidelines that the researcher followed are exemplified.

### **3.2 Research Philosophy**

Empirical studies are underpinned by philosophical biases. Research philosophy refers to thought patterns that adhere to established norms that have been chronologically established based on a particular design or system (Adams et al., 2015). According to Owino (2013), a research philosophy refers the fundamental assumptions and conceptual framework that guide research in a field of study. Liu, Lu, and Wang (2020) asserted that the research paradigm has a significant impact on how people consume and interpret knowledge. Sobh and Perry (2006) add that a researcher's paradigm choice influences the research methodology they choose as well as the questions they should ask.

A "paradigm" is defined by Crosswell and Clark (2011) as a fundamental set of beliefs held by scientists regarding how issues should be understood, and how we interpret the world in order to conduct research. Guba and Lincoln (1994) add that a research paradigm is the basic belief system or worldview that guides the investigator and serves as an overarching conceptual framework for research. Guba and Lincoln (1994) identify three pillars of research paradigm as encompassing; ontology, epistemology, and methodology. In essence, ontology is reality, epistemology is the connection between the researcher and that reality, and methodology is the technique the researcher employs to find that reality. Epistemology originates from the Greek word 'episteme', which means knowledge. Based on the three pillars of research paradigm, four philosophical presuppositions of a study are derived; positivism, constructivism, realism and critical theory (Crossan, 2003).

The current study anchored on the positivist research philosophy. The positivist philosophy with an epistemological component enabled the reporting of the observed effect of ESG integration on sustainable lending practices. The positivist philosophy was preferred for its emphasis on empiricism, or the notion that measurement and observation are the fundamental components of scientific inquiry. The study adopted a methodology comprising of

quantitative data collection, surveys and hypothesis testing, approaches that synchronized well with positivism (Saunders, Lewis & Thorn hill, 2009).

### **3.3 Research Design**

A research design is defined by Plonsky (2017) as a comprehensive plan, strategy, or structure used by researchers to gather data, analyze data and provide answers to research questions. The research design aids in directing the methodologies used in the analysis process as well as the ways in which the conceptualized study variables will be measured (Bloomfield & Fisher, 2019).

This study employed the use of a descriptive research design. Cooper and Schindler (2018) define descriptive research as one that pinpoints a phenomenon's location as well as its specifics, like what, when, and how it happens. This design was preferred because it allowed for use of quantitative methods to describe the relationship between the ESG integration and sustainable lending practices by commercial banks in Kenya (Kothari, 2017). In concurrence with Awino (2011), this design was ideal because it gave great weight to finding connections between and among variables. Accurate population parameter estimation and subsequent generalization were also made possible by this design. The present study employed the use of questionnaires and the adaptability of this design to such a tool, the admissibility of survey approach and its capacity to gather data from a large number of respondents in a short amount of time, further contributed to the appropriateness of the design.

### **3.4 Target Population**

A population, according to Blumberg, Cooper, and Schindler (2014), is a collection of people, things, or occasions that a researcher wishes to look into and draw conclusions from. The target population is described with respect to time, space, components, and research goals. Target population is defined by Kothari (2017) as a collection of individuals or things that share a common characteristic or set of traits. Most people in the population share this characteristic.

In this study, the population was management employees from the 39 commercial banks that operate in Kenya. The sampling frame was drawn from the website of the CBK, enlisting all the licensed banks in the country as at the time the study is undertaken. The target population comprised of all management employees in the Sustainability Department and Credit Departments of the commercial bank Headquarters in Kenya as enlisted by the CBK (2023) report. These group of employees also comprised the unit of analysis in the study because;

they were involved in processing applications for loans under sustainable lending, they are in the frontline of implementation of governance decisions and are involved ESG integration in their respective banks.

### **3.5 Sampling Design**

The sampling design entails the framework and specific procedures for choosing a sample from a population. The study used a stratified random sampling procedure. The non-availability of a sample frame led to the choice of a non-probability sampling method. In particular, the study used quota-sampling design where; bank employees were grouped into departments and using purposive sampling approach employees from the sustainability department and credit department were selected as suiting the purpose of the proposed study. This method enhanced the representativeness of outcome and allowed for generalization of the outcome.

#### **3.5.1 Sample Size**

The process of selecting specific individuals or items from a larger population is referred to as sampling. The sampling technique is the method used to select the sample (Kothari, 2017). The unit of observation were employees working in Sustainability Department and Credit Department. Using purposive sampling approach, the study targeted two respondents from each department, implying four respondents per bank, resulting in a final sample size of 156 respondents from the commercial banks in Kenya as summarized in Appendix V below.

### **3.6 Data Collection Instrument**

Data collection is a systematic process of obtaining and examining information pertaining to specific variables of interest in order to address research questions, test hypotheses, and assess results, (Burns & Burns, 2018). The type of research instrument to be used depends on the type of information to be obtained. A structured research questionnaire was created in accordance with the study objectives and used to gather primary research data. This instrument was deemed appropriate for the study because; it was inexpensive, reliable, minimized response error and was a quick way of collecting data from a vast population. Most of the questions in the instrument were closed-ended questions which minimized variations in response and enhanced the collection of specific answers that could address the research questions. The tool had five parts, as follows; Part I gathered background data, Part II comprised of questions on environmental integration, Part III contained questions on of

social integration, Part IV had questions on governance integration and Part V had questions on the dependent variable - sustainable lending practices. The research tool adopted a five-point Likert scale where; 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree.

### **3.6.1 Data Collection Procedure**

The process of gathering empirical data to answer the research questions and gain novel insights into a situation is referred to as data collection (Khan, 2018). A cover letter was prepared and issued to the appropriate authorities for approval before the data collection process commenced. The study collected primary data using questionnaires. The questionnaires was electronically distributed to the resource persons (credit managers and staff in sustainability department) because they were presumed to have knowledge relevant to the study. Google forms in particular were used to administer the survey, to enhance the response rate and assure of confidentiality.

### **3.7 Data Analysis and Presentation**

Data analysis is the process of analyzing gathered data to extract the essential information needed to draw relevant conclusions from the research that was done. After gathering the data and making necessary adjustments to eliminate ambiguous answers, it was coded, categorized, and then keyed into the Statistical Package for Social Sciences (SPSS) version 23 for analysis. The study used descriptive statistics in terms of; mean score analysis, percentages, frequencies, correlation analysis, and chi-square testing.

The effect of environmental, social and governance integration on sustainable lending practices of commercial banks in Kenya was ascertained using inferential statistics. In particular ordinal regression analysis was used to determine the strength and significance of the relationship between the effect of environmental, social, and governance integration on sustainable lending practices of commercial banks in Kenya (Field, 2013). After which, the findings were presented in prose, using pie charts, tables and graphs.

### **3.8 Analytical Model**

The study used ordinal regression analysis in examining the nexus between ESG integration and sustainable lending practices and in determining the magnitude of the relationship and the predictive power of the antecedent variables. In particular, the study used cumulative odds ordinal logistic regression with proportional odds, in embracing the cumulative categories. The study variables were categorized into three: (1) the independent variable, with

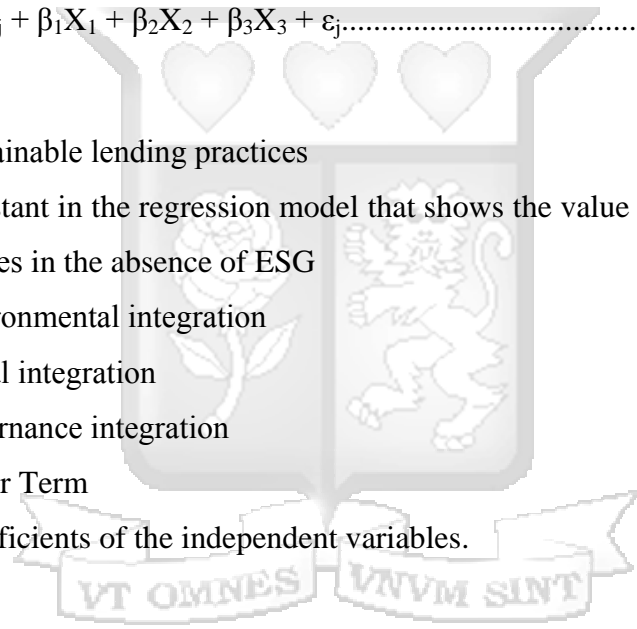
two categories: "Yes" and "No"; (2) the independent variables (environmental integration, social integration and governance integration), with five ordered categories: 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree; and (3) the dependent variable, Sustainable lending practices, with five categories: 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree.

The cumulative logit model, was conceptualized in terms of the threshold model with an underlying  $Y^*$  latent (or unobserved) falling under a continuous distribution. Instead of two observed categories and only a single threshold, it was assumed that there are  $J-1$  thresholds for  $J$  ordinal observed values. The estimated ordinal regression model took the form of the analytical model in Equation 1:

$$\text{Logit } [P(Y \leq j | X)] = \alpha_j + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_j \dots \dots \dots \text{Equation (1)}$$

Where

- Y = Sustainable lending practices
- $\alpha_j$  = Constant in the regression model that shows the value of sustainable lending practices in the absence of ESG
- $X_1$  = environmental integration
- $X_2$  = social integration
- $X_3$  = governance integration
- $\epsilon$  = Error Term
- $\beta_{1-3}$  = Coefficients of the independent variables.



The log of the probability that  $Y$  had a value greater than the lower values given  $X$  was modeled. It was assumed that the same effect occurred for each level comparison of the ordered responses so that the increase or decrease in odds for each unit increased in  $X$  was the same for the increment from  $\ln[P(Y \leq 1)]$  to  $\ln[P(Y \leq 2)]$  as from  $\ln[P(Y \leq 2)]$  to  $\ln[P(Y \leq 3)]$ .

### 3.9 Pre-Estimation Test

Pre-estimation tests were performed to ensure that there were no infractions on the principles of the classical linear regression model before moving on to the computation of the equations. Skewed and inefficient model parameters arise when the rules of a classical regression model are broken. Therefore, to ensure that the conventions of regression analysis are not broken, the following five pre-estimation tests were performed; that the dependent variable was

ordinal, the independent variables were categorical, no multicollinearity and proportional odds.

### **3.9.1 Dependent Variable is Ordinal**

The dependent variable took the form of an ordinal scale. An ordinal scale represents “order” (Field, 2013). It reports the ordering and ranking of data without establishing the degree of variation between them. The dependent variable - Sustainable lending practices took the form of five categories: The research tool was a five-point Likert scale, where; 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree.

### **3.9.2 Independent variables are categorical**

The ordinal independent variables in the study were treated as being either continuous or categorical. The variable was continuous when it took the form of fractions and decimals and was considered categorical when it was a limited number of distinct values which cannot be divided into fractions. The independent variables (environmental integration, social integration and governance integration) were checked against these criteria.

### **3.9.3 Multicollinearity Test**

Multicollinearity is a diagnostic test that establishes whether there is a strong linear relationship between two or more predictor variables, according to Lincoln, Lynham, and Guba (2018). The multicollinearity assessment was conducted using the Variance Inflation Factor (VIF). A test's critical value of  $VIF = 5$  was used in the study. When a VIF value was less than 5, it indicated that multicollinearity was not present in the data set; when the VIF value was greater than 5, it indicated that multicollinearity was present (Shrestha, 2020). To cure multicollinearity problem, one predictor variable would be dropped.

### **3.9.5 Proportional Odds**

The proportional odds assumption ensures that every independent variable has the same effect at every cumulative split of the ordinal dependent variable. The study adopted the full likelihood ratio test in comparing the fitted location model to a model with different location parameters under the SPSS Statistics.

### **3.10 Research Quality**

The validity and reliability of the research instrument was covered in this section. The research quality addresses the application of the scientific process and details the study design. It has to do with determining how well the procedures and questions match, choosing

the participants, measuring the results, and guarding against threats to internal and external validity that may emanate from the instrument (Lindgreen et al., 2021).

### **3.10.1 Validity of Instrument**

Instrumental validity is determined by how well it measures a given concept (Cooper & Schindler, 2018). The study examined three sets of validity of the instrument; content validity, face validity, and internal validity. To determine whether the content of the research instrument matches the conceptualization used in the study, content validity tests were conducted as part of the validity testing methodology. The research supervisor was requested to validate the questions in the instrument for their completeness and accuracy in capturing the intended knowledge domain as part of the content validity assessment.

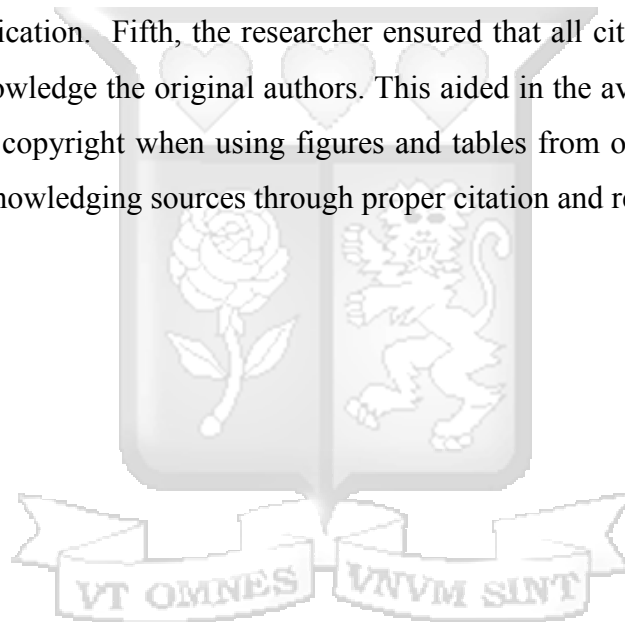
Face validity addresses the question, does the instrument measure what it is intended to measure. In an attempt to check for face validity, the instrument was administered to five experts from the banking industry who were randomly selected for the pre-test and excluded in the final survey. Feedback from the five was used to improve on the questions, remove double-barreled questions and omit ambiguous questions, ultimately improving the instrumental validity of the tool.

### **3.10.2 Reliability of Instrument**

According to Cooper and Schindler (2018), reliability is a metric used to characterize an instrument's general consistency. When a measure is applied in the same conditions and consistently yields similar results, it is said to have high reliability. By demonstrating the accuracy of the internal data collection tool, Cronbach alpha analysis was applied in assessing the reliability of the research instrument. The reliability metric Cronbach's Alpha shows a true "base" score (Khan, 2018). The rule of thumb provided by Field (2013) was applied, where Cronbach's Alpha values of 0.9 and above were considered as "excellent," 0.8 were "good," 0.7 were "acceptable," 0.6 were "questionable," 0.5 were "poor," and less than 0.5 were deemed "unacceptable". The study employed this threshold in order to guarantee that the primary survey only accounted for concepts within the research instrument that satisfied the internal consistency measure. Concepts or variables that did not meet this threshold were reexamined for completeness. The overall Cronbach alpha for the 30 items in the instrument as a whole was 0.894 (Appendix IV). According to Field's (2013) theory, an instrument's overall alpha of  $\geq 0.7$  indicates that it is reliable; as a result, the study instrument in Appendix III was considered reliable.

### 3.11 Ethical Responsibility

The moral precepts that influence behavior and decision-making are referred to as ethical considerations (Onuselegu & Shahzad, 2023). When analyzing the effect of environmental, social, and governance integration on sustainable lending practices of commercial banks in Kenya, it was crucial to take into account some ethical factors. First, prior to the commencement of fieldwork, an ethical clearance was sought from the Strathmore University's Internal Review Board. Second, the researcher sought to get informed consent from the respondents through their respective Human resources offices or related offices. Third, a cover letter was shared with the respondents for assurance that their response would be treated confidentially and for the research purpose only. Fourth, the investigator guaranteed that the data gathered during collection, reporting, and presentation was free from manipulation or falsification. Fifth, the researcher ensured that all citations were referenced appropriately to acknowledge the original authors. This aided in the avoidance of plagiarism. Last. Concerns about copyright when using figures and tables from other published sources was addressed by acknowledging sources through proper citation and referencing.



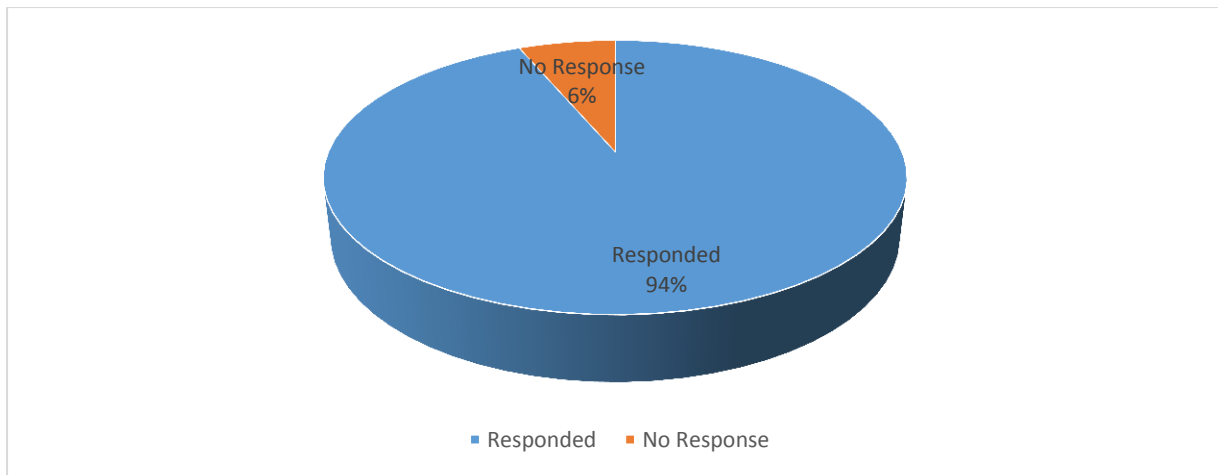
## CHAPTER FOUR: FINDINGS

### 4.0 Introduction

The main objective of this study was to determine the effect of environmental, social, and governance integration on sustainable lending practices of commercial banks in Kenya. The independent variable in this study was ESG disclosure, which was conceptualized to encompass; environmental integration, social integration and governance integration. The dependent variable was sustainable lending practices. The chapter presents the results of the analysis based on the accomplishment of each particular research objective. The study employed descriptive statistical analysis whose outcome was displayed using pie charts, bar graphs and frequency distribution tables. The study then employed inferential analysis in seeking and in particular ordinal regression analysis, in examining the nexial relationship between ESG integration and sustainable lending practices, in determining the magnitude of the relationship and the predictive power of the antecedent variables.

### 4.1 Response Rate

The number of sampled participants who returned their questionnaire was used to measure the response rate in this study. The sample of interest in this study were employees from the Sustainability Department and employees from the Credit Department of each bank. Figure 4.1 shows that out of the 156 questionnaires that were distributed in the survey, 146 were returned resulting in a response rate of 94%. The response rate was considered adequate for the study in reference to Mugenda (2003), who observed that a response rate exceeding 30% to 50% was adequate. The high response rate was attributed to the use of Google forms as data collection methodology which proved convenient and assured of confidentiality of the response.



**Figure 4.1: Response Rate**

#### **4.2 Validity and Reliability of the Instrument**

The questionnaire in Appendix III was tested for validity and reliability. The validity of the instrument refers to the degree to which the research measures what it was designed to measure and the veracity of the research findings (Field, 2013). The study undertook a content validity check, face validity test and internal validity test. To determine whether the content of the research instrument matches the conceptualization used in the study, content validity tests was conducted. The research supervisor who is also an expert in the subject matter was requested to will be requested to validate the questions in the instrument for their completeness and accuracy in capturing the intended knowledge domain as part of the content validity assessment.

The instrument was then subjected to a face validity test. The instrument was administered to five experts from the banking industry who were randomly selected for the pre-test and excluded from the final survey. Feedback from the five was used to remove vague questions, rework challenging questions, clarify double-barreled questions, and enhance the instrument. The final survey instrument in Appendix III was interpreted to meet the validity requirement (Blumberg et al., 2014).

The reliability of the instrument was assessed by applying the Cronbach alpha test, as suggested by Cooper and Schindler (2018). The overall Cronbach alpha for the 30 items in the instrument as a whole was 0.894 (Appendix IV). According to Field's (2013) theory, an instrument's overall alpha of  $\geq 0.7$  indicates that it is reliable; as a result, the study instrument in Appendix III was considered reliable. The four (4) key variables were then tested for

internal consistency (reliability) and the results displayed in Table 4.1. The values of Cronbach's Alpha if the item was deleted were; Environmental Integration (0.797), Social Integration (0.709), Governance Integration (0.792), and Sustainable Lending Practices (0.888). The four met the internal consistency threshold ( $\alpha \geq 0.7$ ) and were considered reliable (Field, 2013).

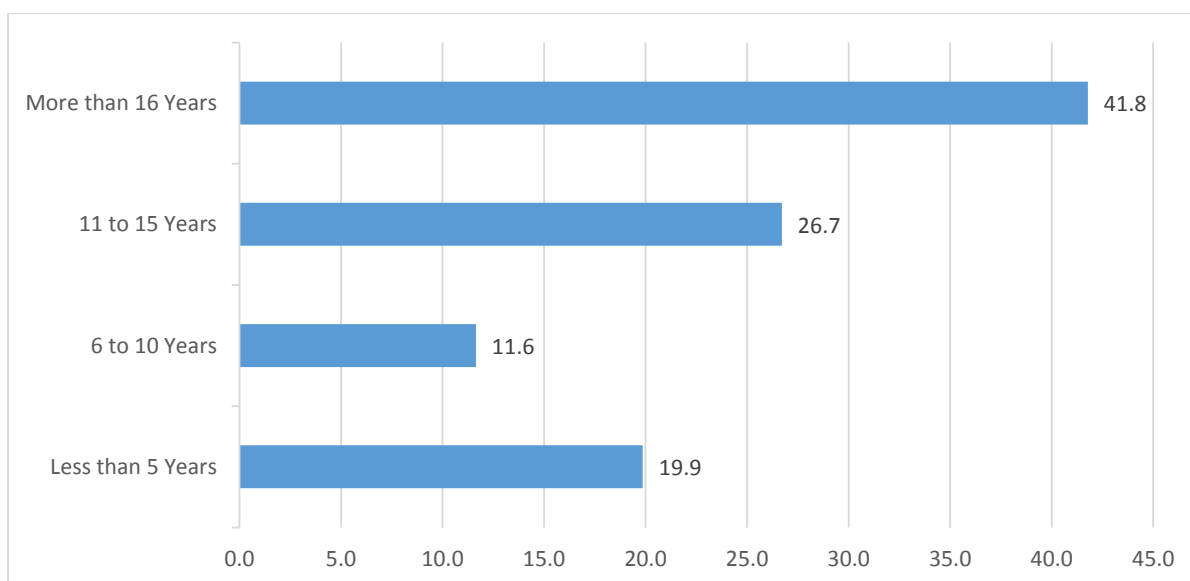
**Table 4.1: Item-Total Statistics**

Construct	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Environmental Integration	9.0609	2.293	0.871	0.797
Social Integration	9.3978	2.626	0.715	0.709
Governance Integration	8.6260	2.402	0.740	0.792
Sustainable Lending Practices	11.9705	5.491	-0.347	0.888

### 4.3 Respondent Profile

The respondents' demographic details are provided in this section. The study focused on the respondents' gender, years the Bank had operated, Number of years the respondent had been with the current Bank, Current Department and Classification of the Bank. Table 4.2 shows that 56.8 of the respondents were of the male gender, while 43.2% were of the female gender. This indicates an almost equal gender parity in employment and prevalence of gender diversity amongst experts in ESG integration in the banking sector with the male gender taking a slight lead. Most of the banks (78.1%) under study had been in operation for more than 16 years, which meant they had a grounded historical profile of the factors that have significantly influenced their sustainable lending practices over the years.

From Figure 4.2, it is evident that most of the respondents (41.8%) had worked with the current bank for more than 16 years, with a further 26.7% indicating they had worked with the current bank for between 11-15 years. This meant the respondents possessed relevant experience that could inform how ESG integration had influenced sustainable lending practices in the banking sector.



**Figure 4.2: Number of Years with Current Bank**

Table 4.2 shows that most of the respondents in the study worked in the Credit Departments (47.9%) or Sustainability Department (41.8%). These respondents were most appropriate in this study because they are involved in processing applications for loans under sustainable lending, they are in the frontline of implementation of governance decisions and are involved ESG integration in their respective banks. They therefore had the type of knowledge relevant to the current study sought. Most of the respondents (93.2%) worked I Tier I banks with 6.8% working in Tier II banks. This meant that the banks involved in the study were stable and capable of employing ESG despite it being a new frontier in the banking sector.

**Table 4.2: Respondent Profile**

Variable	Response	Frequency	Percent
<b>Respondent gender</b>	Male	83	56.8
	Female	63	43.2
<b>How many years has the Bank operated?</b>	6 to 10 Years	10	6.8
	11 to 15 Years	22	15.1
	More than 16 Years	114	78.1
<b>Number of years with current Bank</b>	Less than 5 Years	29	19.9
	6 to 10 Years	17	11.6
	11 to 15 Years	39	26.7
	More than 16 Years	61	41.8
<b>Current Department</b>	Other Departments	15	10.3
	Sustainability Department	61	41.8
	Credit Departments	70	47.9
<b>Classification of the Bank</b>	Tier I	136	93.2
	Tier II	10	6.8

#### 4.4 Environmental Integration

An analysis of the integration of environmental practices in evaluating loan applications by the Bank in Table 4.3, shows that most (96.6%) of the banks under survey have integrated environmental considerations in their lending practices for sustainability.

**Table 4.3: Integration of Environmental Practices in Evaluating Loan Applications**

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	141	96.6	96.6	96.6
No	5	3.4	3.4	100.0
Total	146	100.0	100.0	

From Table 4.4, most respondents agreed (54.1%) and 31.5% strongly agreed that the bank considers the loan applicants' environmental footprints as part of its lending practices. This means that the impact a loan applicant has on the environment is considered for sustainability purposes. It was noted that most of the respondents agreed (42.5%) and 31.5% strongly agreed that an applicant's environmental restoration efforts are considered in credit facility processing. This implies that an applicant's effort to restore an ecosystem that has been destroyed, damaged or degraded is becoming a key lending practice consideration for banks that have adopted ESG. It was apparent from 38.4% of the respondents who agreed and 31.5% who strongly agreed that the waste management practices of a loan applicant were closely considered in the process of adopting sustainable lending practices. Resulting from the analysis in Table 4.4, most of the respondents (50.%) agreed and 31.5% strongly agreed the ability of a loan applicant to manage environmental risks is key consideration for lenders in pursuit of sustainability. Following agreement by 60.3% of the respondents, the study established that the bank evaluates a loan applicant against the ability to engage in optimum resource utilization before lending to them. This meant that the ability of an applicant to demonstrate that they are comparatively better at putting the available resources to use could tilt the gains towards them in credit facility processing. Generally, the ongoing analysis provide empirical evidence that the integration of environmental practices by banks is gaining traction in defining sustainable lending practices amongst commercial banks in Kenya.

**Table 4.4: Environmental Integration and Sustainable Lending Practices**

Variable	Response Category	Frequency	Percent
The bank considers the loan	Strongly Disagree	11	7.5

applicants' environmental footprints	Moderately Agree	10	6.8
	Agree	79	54.1
	Strongly Agree	46	31.5
An applicant's environmental restoration efforts are considered in credit facility processing	Strongly Disagree	5	3.4
	Disagree	11	7.5
	Moderately Agree	23	15.8
The waste management practices of a loan applicant are considered	Agree	62	42.5
	Strongly Agree	45	30.8
	Disagree	27	18.5
The ability of a loan applicant to manage environmental risks is key	Moderately Agree	17	11.6
	Agree	56	38.4
	Strongly Agree	46	31.5
The bank evaluates a loan applicant against the ability to engage in optimum resource utilization.	Strongly Disagree	5	3.4
	Disagree	16	11.0
	Moderately Agree	6	4.1
Total	Agree	73	50.0
	Strongly Agree	46	31.5
	Disagree	11	7.5
Total	Moderately Agree	6	4.1
	Agree	88	60.3
	Strongly Agree	41	28.1
Total		146	100

#### 4.4.1 Mean Analysis of Environmental Integration

Using mean score analysis, the study sought to rank the variables on environmental integration and the outcome is displayed in Table 4.5 below. The key environmental integration that Kenyan commercial banks consider include; a loan applicant's ability to engage in optimum resource utilization (mean score = 4.09), the loan applicant's environmental footprints (mean score = 4.02), and the applicant's ability to manage environmental risks (mean score = 3.90). The weighted mean score of environmental integration variables was 3.96, which according to the study measurement scale meant most of the respondents agreed that environmental practices by banks influenced the sustainable lending practices amongst Kenyan banks.

**Table 4.5: Mean Analysis of Environmental Integration**

Variable	Minimum	Maximum	Mean	Std. Deviation
The bank evaluates a loan applicant against the ability to engage in optimum resource utilization.	2	5	4.09	0.787

The bank considers the loan applicants' environmental footprints	1	5	4.02	1.034
The ability of a loan applicant to manage environmental risks is key	1	5	3.95	1.053
An applicant's environmental restoration efforts are considered in credit facility processing	1	5	3.90	1.035
The waste management practices of a loan applicant are considered	2	5	3.83	1.072
Weighted mean score			3.96	

#### 4.5 Social Integration

The components of social integration were subjected to a frequency analysis and the results are displayed in Table 4.6 below. A majority of the respondents conquered (45.9%) or strongly conquered (24.0%) that the bank considers the loan applicants' fair employment practices in determining their eligibility for lending. It was noted that most of the respondents agreed (44.5%) that a loan applicant's consideration of social cost is accounted for when processing an application for sustainable credit facility. This implies that a loan applicant's consideration of their private cost and their external cost matter as an element of sustainable lending practice. It was observed that a majority of the respondents agreed 31.5% that the loan applicants' community projects count in a loan processing and that the ability of the loan applicant to offer a safe working environment was considered by 44.5% of the respondents as a critical consideration. The study observed that most (27.4%) of the respondents strongly agreed that banks considers the competitiveness of the wage rate paid out by the loan applicant. This meant that there is a higher likelihood of an applicant who pays more competitive rate to access a facility. Resulting from the preceding descriptive analysis the study assumed that social integration can inform the sustainable lending practices of banks to a great extent.

**Table 4.6 Social Integration**

Variable	Response Category	Frequency	Percent
The bank considers the loan applicants' fair employment practices	Strongly Disagree	21	14.4
	Moderately Agree	23	15.8
	Agree	67	45.9
	Strongly Agree	35	24.0
The loan applicants' consideration of social cost is accounted for	Strongly Disagree	5	3.4
	Disagree	21	14.4
	Moderately Agree	31	21.2

	Agree	65	44.5
	Strongly Agree	24	16.4
The loan applicants' community projects count in a loan processing	Strongly Disagree	12	8.2
	Disagree	27	18.5
	Moderately Agree	33	22.6
	Agree	46	31.5
	Strongly Agree	28	19.2
The ability of the loan applicant to offer a safe working environment is put into consideration	Disagree	5	3.4
	Moderately Agree	29	19.9
	Agree	65	44.5
	Strongly Agree	47	32.2
The bank considers the competitiveness of the wage rate paid out by the loan applicant	Strongly Disagree	17	11.6
	Disagree	37	25.3
	Moderately Agree	29	19.9
	Agree	23	15.8
	Strongly Agree	40	27.4
	Total	146	100.0

#### 4.5.1 Mean Analysis of Social Integration

Using the mean score analysis, the study examines the components of social integration and the outcome is displayed in Table 4.7. From the analysis, social integration comprised of six variables out of which the variables with the highest mean were; the ability of the loan applicant to offer a safe working environment is put into consideration (mean score = 4.05), the bank considers the loan applicants' adherence to community health and safety standards (mean score = 3.99) and the bank considers the loan applicants' fair employment practices (mean score = 3.65). The weighted mean score of social integration variables was 3.63, which meant that most the respondents agreed that social integration had a significant role to play in determining the sustainable lending practices of banks.

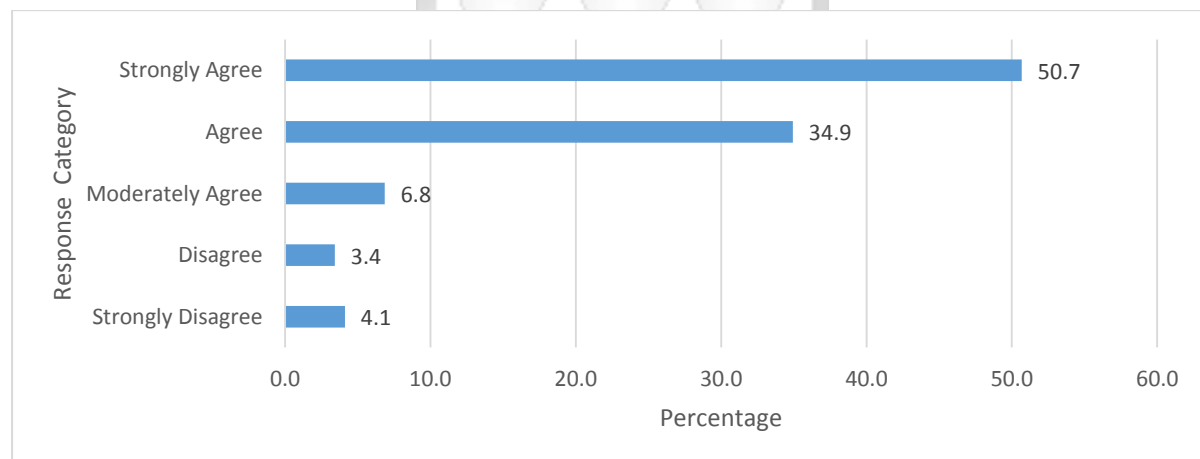
**Table 4.7: Descriptive Statistics**

Variable	Minimum	Maximum	Mean	Std. Deviation
The ability of the loan applicant to offer a safe working environment is put into consideration	2	5	4.05	0.812
The bank considers the loan applicants' adherence to community health and safety standards	2	5	3.99	0.887
The bank considers the loan applicants' fair employment practices	1	5	3.65	1.257

The loan applicants' consideration of social cost is accounted for	1	5	3.56	1.037
The loan applicants' community projects count in a loan processing	1	5	3.28	1.194
The bank considers the competitiveness of the wage rate paid out by the loan applicant	1	5	3.22	1.392
Weighted mean score			3.63	

#### 4.6 Governance Integration

Using descriptive statistics, the study examined the components of governance integration as displayed in Table 4.8. From Figure 4.3, a majority of the respondents agreed (50.7%) that the Banks integrate governance practices when evaluating loan applications as a sustainable lending practice.



**Figure 4.3: Banks integrate governance practices when evaluating loan applications**

From Table 4.8, most of the respondents strongly agreed (59.7%) and 32.9 agreed that banks uphold corporate management principals. It was noted that most of the respondents strongly agreed (62.3%) that the banks' decisions on sustainable lending are made in the best interest of protecting shareholder rights. The respondents further strongly agreed (77.4%) that the banks adhere to banking regulation, with 63% strongly agreeing that the bank ensures that stakeholder representation and engagement is upheld. It was observed that most of the respondents strongly agreed (71.2%) that banks adhere to a risk management framework and 58.2% strongly agreed that banks implement initiatives to fight corruption. This analysis shows that governance integration is pivotal in influencing sustainable lending practices of banks.

**Table 4.8: Governance Integration**

Variable	Response Category	Frequency	Percent
The Bank integrates governance practices when evaluating its loan applications	Strongly Disagree	6	4.1
	Disagree	5	3.4
	Moderately Agree	10	6.8
	Agree	51	34.9
	Strongly Agree	74	50.7
The banks upholds corporate management principals	Disagree	11	7.5
	Agree	48	32.9
	Strongly Agree	87	59.6
The banks' decisions on sustainable lending are made in the best interest of protecting shareholder rights	Strongly Disagree	6	4.1
	Disagree	5	3.4
	Moderately Agree	17	11.6
	Agree	27	18.5
	Strongly Agree	91	62.3
The bank adheres to banking regulation	Strongly Disagree	6	4.1
	Disagree	5	3.4
	Agree	22	15.1
	Strongly Agree	113	77.4
The bank ensures that stakeholder representation and engagement is upheld	Strongly Disagree	6	4.1
	Disagree	5	3.4
	Moderately Agree	11	7.5
	Agree	32	21.9
	Strongly Agree	92	63.0
The bank adheres to a risk management framework	Strongly Disagree	6	4.1
	Disagree	5	3.4
	Agree	31	21.2
	Strongly Agree	104	71.2
The bank implements initiatives to fight corruption	Strongly Disagree	6	4.1
	Moderately Agree	27	18.5
	Agree	28	19.2
	Strongly Agree	85	58.2
	Total		146

#### 4.6.1 Mean Analysis of Governance Integration

Using means score analysis, the study sought to rank the variables that informed governance integration to a large extent and the outcome is displayed in Table 4.9 below. The variables with the highest means score were; The bank adheres to banking regulation (mean score = 4.58), the bank adheres to a risk management framework (mean score = 4.58) and the bank upholds corporate management principles (mean score = 4.58). The resulting weighted mean score of 3.6, meant that most of the respondents agreed that governance integration could explain variations in sustainable lending practices of banks.

**Table 4.9: Mean Analysis of Governance Integration**

Variable	Minimum	Maximum	Mean	Std. Deviation
The bank adheres to banking regulation	1	5	4.58	0.974
The bank adheres to a risk management framework	1	5	4.52	0.977
The bank upholds corporate management principles	2	5	4.45	0.839
The bank ensures that stakeholder representation and engagement is upheld	1	5	4.36	1.043
The banks' decisions on sustainable lending are made in the best interest of protecting shareholder rights	1	5	4.32	1.075
The bank implements initiatives to fight corruption	1	5	4.27	1.034
The Bank integrates governance practices when evaluating its loan applications	1	5	4.25	1.014
Weighted mean score			3.63	

#### 4.7 Correlation Between ESG Integration and Sustainable Lending Practices

The study employed the use of Karl Pearson's coefficient of correlation (r) and probability value (p-value) analysis in examining the correlation between ESG integration and sustainable lending practices as suggested by Cavallo (2020). The findings in Table 4.10 shows that there existed a significant negative correlation ( $r=-0.515$ ,  $p=0.000$ ) between social integration and sustainable lending. The outcome shows the existence of a significant negative correlation ( $r=-0.388$ ,  $p=0.000$ ) between environmental integration and sustainable lending. It was also observed that there was a non-significant negative correlation ( $r=-0.054$ ,  $p=0.517$ ) between governance integration and sustainable lending. These results generally point at the existence of a potent significant correlation between ESG integration and sustainable lending practices.

**Table 4.10: Correlation Between ESG Integration and Sustainable Lending Practices**

Variable		Environmental Integration	Social Integration	Governance Integration	Sustainable Lending
Environmental Integration	Pearson Correlation	1			
	Sig. (2-tailed)				
Social Integration	Pearson Correlation	.818**	1		
	Sig. (2-tailed)	0.000			
Governance Integration	Pearson Correlation	.767**	.597**	1	
	Sig. (2-tailed)	0.000	0.000		
Sustainable Lending	Pearson Correlation	-.388**	-.515**	-0.054	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 4.8 Pre-Estimation Test Outcome

The study employed ordinal regression analysis in undertaking the inferential statistical tests. As a precursor to the regression analysis, pre-estimation tests were performed to ensure that there was no violation of the principles of the classical linear regression model.

The first pre-estimation test was meant to confirm that the dependent variable was ordinal. From the instrument in Appendix III, the dependent variable - sustainable lending practices took the form of an ordinal scale. According to Field (2013) an ordinal scale represents “order”. It reports the ordering and ranking of data without establishing the degree of variation between them. Sustainable lending practices took the form of five categories: where; 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree.

The second assumption in the study was that independent variables are categorical. According to this assumption, the ordinal independent variables in the study were treated as either continuous or categorical. The independent variables (environmental integration, social integration and governance integration) were checked against these criteria and from Appendix III, it was apparent that the independent variables were categorical as they took the form of a number of distinct values which could not be divided into fractions. The independent variables had five categories: where; 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree.

Next, a multicollinearity test was run on the data. Multicollinearity is a diagnostic test that establishes whether there is a strong linear relationship between two or more predictor variables, according to Lincoln, Lynham, and Guba (2018). Tolerance and the Variance Inflation Factor (VIF) were used to evaluate multicollinearity. The study conducted a collinearity test using Multiple Regression Analysis (MRA) with one predictor variable (environmental integration) and the other two variables as predictors (social integration and governance integration). The collinearity statistics in Table 4.11. shows that social integration had a VIF of 1.553 and a tolerance value of 0.644, while the governance integration had a VIF of 1.553 and a tolerance of 0.644. In reference to Senthilnathan et al. (2019), VIF values larger than 10 and Tolerance statistics greater or equal to one indicate the presence of

multicollinearity. The results therefore meant that the data was not multicollinear because both predictors had VIF<10 and Tolerance statistics less than one.

**Table 4.11: Collinearity Statistics**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.090	0.173		0.519	0.605		
	Social Integration	0.569	0.049	0.559	11.702	0.000	0.644	1.553
	Governance Integration	0.411	0.045	0.433	9.070	0.000	0.644	1.553

a. Dependent Variable: Environmental Integration

The study then tested the data set for proportional odds assumption. This is the assumption that every independent variable has the same effect at every cumulative split of the ordinal dependent variable. According Peltier et al. (2021) from the test of parallel lines, if the statistical significance is non-significant (sig>0.05) then the assumption of proportional odds is met and if the statistical significance is significant (sig≤0.05) then the assumption of proportional odds is not met. From Table 4.12, the resulting sig. value = 1.000 which was interpreted to mean that based on the data set, the basic assumptions of proportional odds was met.

**Table 4.12: Test of Parallel Lines**

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	0.000			
General	.000 <sup>b</sup>	0.000	3	1.000

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

a. Link function: Logit.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

#### 4.9 Effect of ESG Integration on Sustainable Lending Practices

The study employed the use of ordinal logistic regression analysis in examining the effect ESG integration on sustainable lending practices. To obtain the odds ratios of the predictor variables, the study employed the use of Generalized linear models. The estimated ordinal regression model took the form of the analytical model in Equation 1:

$$\text{Logit } [P(Y \leq j | X)] = \alpha_j + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_j \dots \dots \dots \text{Equation (1)}$$

Where,  $Y$  = Sustainable lending practices,  $\alpha_j$  = Constant in the regression model that shows the value of sustainable lending practices in the absence of ESG,  $X_1$  = environmental integration,  $X_2$  = social integration,  $X_3$  = governance integration,  $\varepsilon$  = Error Term and  $\beta_{1-3}$  = Coefficients of the independent variables. The effect of ESG integration on sustainable lending practices was examined by testing the following research hypothesis.

$H_{01}$ : Environmental integration has no significant effect on sustainable lending practices of commercial banks in Kenya.

$H_{02}$ : Social criteria has no significant effect on sustainable lending practices of commercial banks in Kenya.

$H_{03}$ : Governance criteria has no significant effect on sustainable lending practices of commercial banks in Kenya.

Ordinal logistic regression analysis was employed and ESG integration elements regressed against sustainable lending practices. The first output was the case processing summary. Table 4.13 shows that cases included in the analysis, and the outcome confirms that 146 respondents were involved in the study with no missing values reported.

**Table 4.13: Case Processing Summary**

	Category	N	Marginal Percentage
Sustainable Lending Practices	1.00	6	4.1%
	2.00	1	0.7%
	3.00	21	14.4%
	4.00	62	42.5%
	5.00	56	38.4%
Valid		146	100.0%
Missing		0	
Total		146	

An interpretation of the model-fitting information was then performed. A Sig. value of less than 0.005 indicates that the model adequately describes the data. From Table 4.13, the Sig. value = 0.000, which meant that the model predicted by environmental integration, social integration and governance integration provided a very good fit.

**Table 4.14: Model Fitting Information**

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	291.060			

Final	154.957	136.103	3	0.000
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Link function: Logit.

A goodness of fit statistics measures how well the observed data corresponds to the fitted (assumed) model. The goodness of fit statistics indicates a poor fit if the significance value is less than 0.05 (Field, 2013). Table 4.14 presents a case of mixed results, where Pearson Test shows Sig. value = 0.000 and the Deviance Text shows the model had a Sig. value = 1.000 and hence the model adequately fits the data.

**Table 4.15: Goodness-of-Fit**

Test	Chi-Square	df	Sig.
Pearson	2371.831	197	0.000
Deviance	130.718	197	1.000

Link function: Logit.

Table 4.16 presents the model summary that gives the pseudo R-Square. A pseudo R-Square value does not technically explain the variations but gives an approximation of the criterion variable. Given that the study employed ordinal regression, outcome of the McFadden Test was considered. In this study the pseudo R-Square = 0.397, which meant that there was a 39.7% chance of improvement in lending practices of a bank if it adopted ESG integration measures as compared to if it did not.

**Table 4.16: Pseudo R-Square**

Test	Score
Cox and Snell	0.606
Nagelkerke	0.670
McFadden	0.397

Link function: Logit.

Resulting from the ordinal logistic regression analysis, were the statistics displayed in Table 4.17. The estimate of environmental integration was significant with a sig-value = 0.000 and therefore the study rejected  $H_{01}$  at 5% level, and the results were interpreted to mean that environmental integration had a significant effect on the sustainable lending practices of commercial banks in Kenya. The estimate of social integration was significant with a sig-value = 0.000 and the study rejected  $H_{02}$  at 5% level, and the results meant that social integration had a significant effect on the sustainable lending practices of commercial banks

in Kenya. The estimate of governance integration was significant with a sig-value = 0.018 and the study rejected  $H_{03}$  at 5% level, and the results meant that governance integration had a significant effect on the sustainable lending practices of commercial banks in Kenya.

Using the parameter estimates in Table 4.17, the likelihood of the dependent variable (sustainable lending) changing as a result of change of the predictors was examined. The estimate column shows the probability of a case falling above or below a given category on the dependent variable. Under location, the estimate of environmental integration = 1.433. The positive indicator of the estimate meant that when a bank increases its environmental integration requirements, there is a 1.433 likelihood that there will be an increase in the banks sustainable lending. The estimate value for social integration = 1.398, meant that banks that increased their requirements on in social integration, there is a 1.398 likelihood that there will be an increase in the banks sustainable lending. Table 4.17 shows that the estimate for governance Integration = 0.959, which meant that when a commercial bank that increases their focus on governance integration, there is a 0.959 likelihood that there will be an increase in the banks sustainable lending.

The Odds Ratio column in Table 4.17 was interpreted to represent the odds of falling into a higher or lower category of the dependent variable following a unit change in the independent variable. Odds Ratio  $\geq 1$  shows an increasing odds of being in a higher category with an increase in the independent variable. Environmental integration had an odds ratio = 4.189 which means that a unit increase in environmental integration would result in a 4.189 increase in sustainable lending. The odds ratio = 4.189 which meant that a unit increase in environmental integration would result in a 4.189 increase in sustainable lending. The odds of social integration are 4.047 times greater for banks that embrace social integration as compared to banks that do not. It is therefore possible that a unit change in social integration can result in a 4.189 increase in sustainable lending. Governance integration had an odds ratio = 2.609 which meant that a unit increase in governance integration would result in a 2.609 increase in sustainable lending.

**Table 4.17: Parameter Estimates**

Variable	Estimate	Odds Ratio = exp(e)	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold [Sustainable Lending = 1.00]	8.940		1.532	34.050	1	0.000	5.937	11.943

	[Sustainable Lending = 2.00]	9.191		1.535	35.866	1	0.000	6.183	12.199
	[Sustainable Lending = 3.00]	12.535		1.705	54.077	1	0.000	9.194	15.876
	[Sustainable Lending = 4.00]	16.364		1.967	69.225	1	0.000	12.509	20.219
Location	Environmental Integration	1.433	4.189	0.367	15.213	1	0.000	0.713	2.152
	Social Integration	1.398	4.047	0.350	15.920	1	0.000	0.711	2.085
	Governance Integration	0.959	2.609	0.406	5.578	1	0.018	0.163	1.755

Link function: Logit.

#### 4.10 Chapter Summary

Resulting from, the data analysis, it is evident that ESG integration has a positive influence on sustainable lending practices of commercial banks in Kenya. Overall, ESG integration explains 39.7% of the variations in a banks sustainable lending, implying they could be other explicators of sustainable lending in banks. The results show that all the three predictors; environmental integration, social integration and governance integration that make up ESG integration had a significant positive influence over sustainable lending, with considerations on environmental integration having the highest likelihood of increasing a banks sustainable lending practice.



## **CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

### **5.0 Introduction**

The main objective of this study was to analyse the influence of environmental, social, and governance integration on sustainable lending practices of Kenyan commercial banks. In line with this objective, this chapter discusses the results, draws a conclusion, and suggests potent areas of further research. The chapter compares the findings with extant literature, to validate the significance of the outcomes.

### **5.1 Effect of Environmental Integration on Sustainable Lending**

The first objective of the study was to determine the effect of environmental integration on sustainable lending practices by commercial banks in Kenya. Using ordinal logistic regression analysis, it was established that environmental integration had a positive significant effect on the sustainable lending practices of commercial banks in Kenya. The positive indicator of the estimate of environmental integration meant that when a bank increases its environmental integration requirements, there is a likelihood that there will be an increase in the banks sustainable lending. The odds ratio analysis shows that a unit increase in environmental integration would result in an increase in sustainable lending. Using mean score analysis, it was determined that the variables that inform social integration for commercial banks to a large extent were a loan applicant's ability to engage in optimum resource utilization, the loan applicant's environmental footprints and an applicant's ability to manage environmental risks.

This finding supports the works of Wang (2023) who established that when banks imposed stringent disclosure mandate requirements, their Environmental and Social (E&S) performance significantly improved. Wang (2023) had observed that banks were enhancing both their engagement and selection activities on environmental action covenants in loan contracts, and that they were more likely to terminate a borrower with bad E&S records. The study outcomes map on the findings by Cheng and Hasan (2023) who deduce that ESG practices had significant effect on terms of bank lending in China. The study explicated how banks could affect borrowers' ESG policies and investment via lending relationships.

The study findings are consistent with outcome of a study by Liang and Renneboog (2020) who evaluated the relationship between corporate social performance disclosure and financial performance and deduce that a positive and significant correlation existed between ROE and

the categories of human rights, society, and product responsibility. Similarly, the results support the findings by Miroshnychenko et al. (2017), who demonstrated that internal green practices, such as pollution prevention and green supply chain management, are the primary predictors of financial performance of firms.

In contrast, a study by Lucato et al (2017) determined that there was no statistically significant correlation between environmental practices and performance of SMEs engaged in textile manufacturing. This variation could be explained by the size of the business and the fact that SME's environmental concerns were not a major antecedent to their performance.

Drawing from the aforementioned review of literature and the study findings, environmental integration has a positive influence on sustainable lending by banks. While studies in the past paid attention to the composite effect of ESG, the present study examines environmental integration as a subset of ESG. Environmental integration may not fully elucidate the reasons for variations in a banks sustainable lending, it plays a significant role in accounting for such variations.

## **5.2 Effect of Social Integration on Sustainable Lending**

Under the second research objective, the study sought to find out the effect of social integration on sustainable lending practices by commercial banks in Kenya. It was determined through the use of ordinal logistic regression analysis that environmental integration significantly improved Kenyan commercial banks' sustainable lending practices. The estimate of social integration had a positive indicator which meant that as banks increased their requirements for social integration, there was a likelihood that there will be an increase in the banks sustainable lending. An odds ratio analysis showed that a unit change in social integration could result in an increase in sustainable lending by commercial banks. More specifically, mean score analysis unveils the key determinants of social integration to comprise; the ability of the loan applicant to offer a safe working environment, loan applicants' adherence to community health and safety standards and a loan applicants' fair employment practices.

This outcome was consistent with the observations made by Angela and Sari (2023) who found out that a company's performance was depend on its social performance, construed to encompass factors like labor, human rights, product responsibility, and society. Similar results were registered by Coelho, Jayantilal, and Ferreira (2023) who established that a

company's financial performance is directly impacted by its corporate social sustainability. Similar conclusions were drawn by Erhinyoja and Marcella (2019) who reported the the existence of a significant relationship between corporate social sustainability reporting and financial performance of oil and gas sector in Nigeria's.

In concurrence with the study outcome, Onuselogu and Shahzad (2023) reported that companies in Pakistan that place a high priority on social responsibility and the environment are more likely to perform well financially, especially in terms of earnings per share. Comparably, Bhimani and Saradva (2023) deduced that businesses that emphasize social issues like consumer perception, corporate social responsibility, and employee satisfaction typically perform better financially.

The study findings are aligned to the position taken by Renneboog (2020) who found a significant relationship between corporate social performance disclosure and financial performance and deduced that profitable firms are incentivized to disclose information on their social performance to enhance their publicity. The study findings also corroborate the study outcome of Melinda and Wardhani (2020) who established that a company's performance in the social field is positively correlated with its social performance score and added that a business's behave as decent citizens and take on greater social responsibilities. Similarly, Yang et al. (2021), contend that social factors had a positive correlation with a company's financial performance.

The significant effect of effect of social integration on sustainable lending practices by commercial banks in Kenya is in tandem with previous studies. While previous studies focused more on the collective effect of CSR, the current study isolates social integration and demonstrates its significant influence on sustainable lending by banks. Equally previous studies tend to lay emphasis on firm performance, while the present study has sustainable lending as its outcome variable.

### **5.3 Effect of Governance Integration on Sustainable Lending**

The third research objective sought to assess the effect of governance integration on sustainable lending practices of commercial banks in Kenya. Employing inferential statistics in the form of ordinal logistic regression analysis, the study established that governance integration had a significant positive effect on the sustainable lending practices of commercial banks in Kenya. Governance integration had a positive indicator which meant

that commercial banks that enhance their governance integration, have a higher likelihood of increasing their sustainable lending. The odds ratio analysis indicates a unit increase in governance integration would increase sustainable lending. Resulting from a mean score analysis, it was noted that the main determinants of governance integration in the banking sector include; bank's adherence to banking regulation, bank's adherence to a risk management framework, and banks that uphold corporate management principles.

The findings are comparable to the observations made by Toti and Johan (2022), who reported that firm value was significantly positively impacted by the governance score of nonfinancial companies listed on the SRIKEHATI index. They added that investors receive signals about the state of the business from sustainability reports that demonstrate strong corporate governance. Related results are posted by El-Chaarani et al. (2022) in a study in the Middle Eastern and North African (MENA) region during COVID-19 period found that corporate governance principles including gender diversity on the board of directors, performance-based compensation, a manageable board size, and anti-takeover clauses had little to no impact on financial performance during the crisis. The study however concludes that stronger corporate governance procedures, both internal and external, may lead to better financial performance.

In contrast to the current findings, Awuor (2023) found a non-significant relationship between environmental social, governance adoption and bank characteristics on the financial performance of commercial banks in Uganda. The study findings are similar to that of Munyoki (2021) who discovered that, in family-owned businesses, ownership structure and firm performance had a significant and favorable relationship and that the ownership structure had the biggest impact on the performance of the company. The study findings also conform to the position of Wanjau (2019) who found out that financial performance of listed companies in East Africa had a significant positive relation with the disclosure of financial information, governance information, risk information, and social information.

Resulting from this discussion, the study findings conform to literature to a large extent and both indicate that governance integration had a significant positive effect on the sustainable lending practices of banks. The discussion presents the construct of governance as a multifaceted construct and with no definite conclusions about it, calling for more studies. The reviewed literature points at financial performance as an outcome variable in most of the studies, with the current study focusing on sustainable lending by commercial banks.

## **5.4 Conclusion**

Extant literature points at convergence in thought that ESG integration significantly influence sustainable lending by institutions. The theoretical underpinning of the study point at reasons why company's actions like adoption of ESG integration can be accepted by stakeholders, why corporate governance practices can have a profound influence on sustainable lending and why stakeholders need corporate responsibility and sustainability disclosures to comprehend the business's operations. The findings of this study converge with the reviewed literature and has led to the conclusion that environmental, social, and governance integration have a significant positive influence on sustainable lending practices of commercial banks in Kenya. The study has supported the theoretical expectations and proven the null research hypothesis to be false.

In addition, the study unveils possible policy implications to the regulator and to players in the banking sector. It is evident that despite the regulators efforts to enforce ESG integration, players in the banking sector are yet to fully harness the full potential of integrating ESG in their lending practices. It is the conclusion of this study that, commercial banks in Kenya, need to fully integrate ESG in their lending practices for sustainability. It has been observed that previous studies focused more on the collective effect of CSR, the current study isolates social integration and demonstrates its significant influence on sustainable lending by banks. The study therefore demonstrates that EGS has evolved from CSR as a major determinant of sustainable lending by institutions.

## **5.5 Recommendations**

Resulting from the evidence of the study that ESG integration had a significant positive influence over sustainable lending, this study draws two recommendations for the policymakers and banking institutions. The study recommends that policy makers should develop robust policies that mandate commercial banks to fully integrate ESG into their lending practices. By doing so, banks can contribute to sustainable development, promote responsible lending, and align their operations with long-term environmental and social goals.

To enhance sustainable lending practices, it is recommended that commercial banks should make bold decisions regarding ESG integration. Bank management must strengthen their ESG disclosure procedures, ensuring they encompass critical and relevant ESG components that directly affect stakeholders' interests and the overall operations of the banks.

This presents a significant opportunity for Kenyan banks to elevate the quality of their ESG disclosure and enhance the accuracy and depth of their ESG data.

### **5.6 Suggested Areas for further Research**

This study focused on cross sectional data and suggests that future studies can consider a longitudinal approach for enhance outcome. It is also suggested that scholars should actively explore additional ESG integration frontiers to inform academicians about factors beyond the traditional components (environmental, social, and governance) that are likely to influence sustainable lending by banks. While the current study focused on these three critical dimensions, there is a need to investigate other relevant factors that may act as control variables, mediating variable or moderating variables and assess their impact on commercial banks' sustainable lending practices. By doing so, scholars can enhance the understanding of the multifaceted dynamics involved in promoting responsible and sustainable financing.

### **5.7 Limitations of the Study**

The study was limited in terms of concept, context and methodology. The focus of the study was on the concept of ESG, which left out other components of sustainability likely to have influence on sustainable financing. This study was limited to the context of the commercial banking sector, excluding other players in the financial sector. In terms of methodology, the study adopted a cross sectional design and left out the longitudinal design that could have given varying results.



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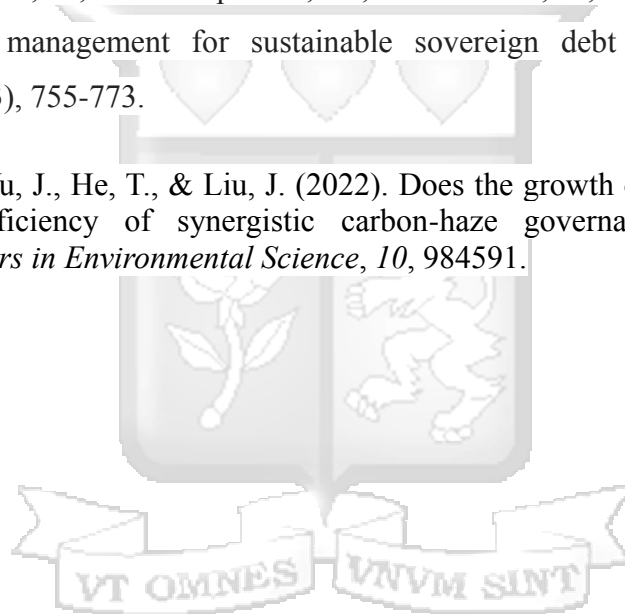
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## APPENDICES

### Appendix I: Ethical Clearance from SBS



22<sup>nd</sup> May 2024

Ms Lengewa Jumapili Stella,  
stella.jumapili@strathmore.edu

Dear Ms Lengewa,

**RE: Environmental, Social and Governance Integration and Sustainable Lending Practices by Commercial Banks in Kenya**

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** proposal. Your application reference number is **SU-ISERC2189/24**. The approval period is from **22<sup>nd</sup> May 2024 to 21<sup>st</sup> May 2025**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
  - ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
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- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
  - iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
  - v. Clearance for the export of biological specimens must be obtained from relevant institutions.
  - vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
  - vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Ambrose Rachier".

**Mr Ambrose Rachier,**  
**Chairperson: SU-ISERC**

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## Appendix II: Cover Letter From NACOSTI

 <b>REPUBLIC OF KENYA</b>	 <b>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY &amp; INNOVATION</b>
Ref No: 637067	Date of Issue: 22/May/2024
<b>RESEARCH LICENSE</b>	
	
<p>This is to Certify that Ms.. Stella jumapili Lengewa of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Environmental, social, and Governance integration and sustainable lending practices by commercial banks in Kenya for the period ending : 22/May/2025.</p>	
License No: NACOSTI/P/24/35508	
Applicant Identification Number 637067	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

### Appendix III: Questionnaire

Dear Participant

The attached questionnaire seeks to collect information from you on the possible *Effect of Environmental, Social, and Governance Integration on Sustainable Lending Practices of Commercial Banks in Kenya*. You have been selected because of your involvement in processing applications for loans under sustainable lending practice. Kindly spare some time and respond to the questions truthfully. Your response will add value to the development of sustainable lending and will be treated confidentially. Thank you for your participation in this research work. Please tick (√) where applicable.

#### Part A: Background Information

1. Respondent gender:

Male [ ]

Female [ ]

2. How many years has the Bank operated?

Less than 5 Years [ ]

6 to 10 Years [ ]

11 to 15 Years [ ]

More than 16 Years [ ]

3. Number of years with current Bank

Less than 5 Years [ ]

6 to 10 Years [ ]

11 to 15 Years [ ]

More than 16 Years [ ]

4. Current Department

Sustainability Department [ ]

Credit Departments [ ]

Planning Department [ ]

Other Departments [ ] \_\_\_\_\_

5. Classification of the Bank

Tier I [ ]

Tier II [ ]

Tier III [ ]

Other Specify [ ] \_\_\_\_\_

**PART B: Environmental Integration and Sustainable Lending Practices**

6. The Bank integrates environmental practices in evaluating its loan applications

Yes [ ] No [ ]

Kindly use the following scale to best indicate your response to the statements on environmental integration below;

*1 = Strongly Disagree, 2 = Disagree, 3 = Moderately Agree, 4 = Agree, 5 = Strongly Agree.*

No.	Statement	1	2	3	4	5
7.	The bank considers the loan applicants' environmental footprints					
8.	An applicant's environmental restoration efforts are considered					
9.	The waste management practices of a loan applicant are measured					
10.	The ability of a loan applicant to manage environmental risks is key					
11.	The bank evaluates a loan applicant against the ability to engage in optimum resource utilization.					

**PART C: Social Integration and Sustainable Lending Practices**

12. The Bank integrates social factors when evaluating its loan applications

Yes [ ] No [ ]

13. The loan applicants' community projects count in a loan processing

Yes [ ] No [ ]

Kindly use the following scale to best indicate your response to the statements on social integration below;

*1 = Strongly Disagree, 2 = Disagree, 3 = Moderately Agree, 4 = Agree, 5 = Strongly Agree.*

No.	Statement	1	2	3	4	5
14.	The bank considers the loan applicants' fair employment practices					
15.	The loan applicants' consideration of social cost is accounted for					

16.	The bank considers the loan applicants' adherence to community health and safety standards.					
17.	The loan applicants' community projects count in a loan processing					
18.	The ability of the loan applicant to offer a safe working environment is put into consideration					
19.	The bank considers the competitiveness of the wage rate paid out by the loan applicant					

#### **PART D: Governance Integration and Sustainable Lending Practices**

20. The Bank integrates governance practices when evaluating its loan applications

Yes [  ]

No [  ]

Kindly use the following scale to best indicate your response to the statements below;

*1 = Strongly Disagree, 2 = Disagree, 3 = Moderately Agree, 4 = Agree, 5 = Strongly Agree.*

No.	Statement	1	2	3	4	5
21.	The bank carries out audits (internal and/or external) of its corporate processes?					
22.	The banks upholds corporate management principals					
23.	The banks' decisions on sustainable lending are made in the best interest of protecting shareholder rights					
24.	The bank adheres to banking regulation					
25.	The bank ensures that stakeholder representation and engagement is upheld					
26.	The bank adheres to a risk management framework					
27.	The bank implements initiatives to fight corruption					

#### **PART E: Sustainable Lending Practices**

Kindly use the following scale to best indicate your response to the statements below on sustainable lending practices;

*1 = Strongly Disagree, 2 = Disagree, 3 = Moderately Agree, 4 = Agree, 5 = Strongly Agree.*

No.	Statement	1	2	3	4	5
1.	The bank undertakes an environmental impact assessment in processing sustainable loan products.					
2.	The bank considers social impact assessment of a loan					

	applicant's business before disbursing a sustainable loan					
3.	The bank ensures adherence to governance principles in processing sustainable loans.					

*In case of any clarification you can contact [stella.jumapili@strathmore.edu](mailto:stella.jumapili@strathmore.edu) or Strathmore University Institutional Ethics Review committee –Tel +254 703034418*

*Thank you for the Time.*



## Appendix IV: Reliability Statistics

### Reliability Statistics

Cronbach's Alpha	Number of Items
0.894	30



## Appendix V: Target Population

	Commercial Banks	Department	Target Population
1	Absa Bank Kenya PLC	Credit	2
		Sustainability	2
2	KCB Bank	Credit	2
		Sustainability	2
3	Equity bank	Credit	2
		Sustainability	2

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34	Cooperative Bank	Credit	2
		Sustainability	2
35	NCBA Bank	Credit	2
		Sustainability	2
36	Standard Chartered Bank	Credit	2
		Sustainability	2
37	Stanbic Bank	Credit	2
		Sustainability	2
38	Diamond Trust Bank (DTB)	Credit	2
		Sustainability	2
39	I&M Holdings	Credit	2
		Sustainability	2
Total			156