

**AN EVALUATION OF THE PRIORITIZATION OF SUSTAINABLE FINANCE  
PROJECTS BY COMMERCIAL BANKS IN KENYA**



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## DECLARATION

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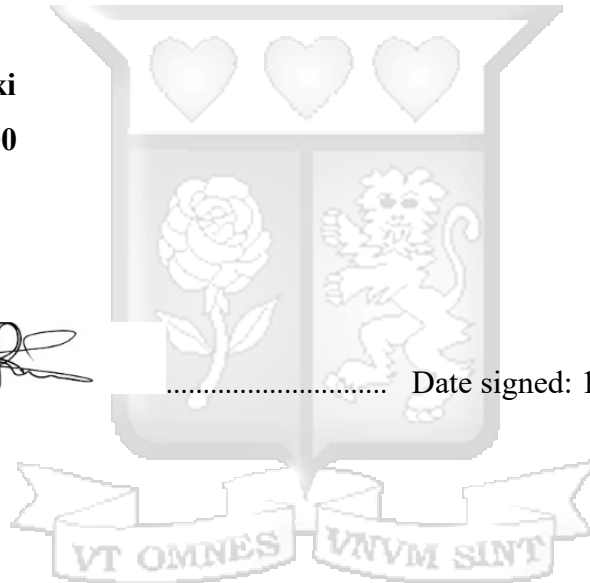
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## DEDICATION

This research proposal is a tribute to my family especially my daughter Jasmine Imani, whose unwavering inspiration and encouragement have been instrumental in fueling my commitment to pursuing this course. Throughout this journey, they have endured my absence from home, particularly during times when their need for my presence was most crucial. I am profoundly grateful for the sacrifices they have made, demonstrating a profound level of support that underscores their belief in my pursuit of this master's degree.



## ABSTRACT

Commercial banks in Kenya are increasingly turning their attention to sustainable financing, influenced by global trends in sustainable finance and increasing focus on environmental, social, and governance (ESG) factors. While this shift indicates a positive direction towards sustainable financing and resource availability to meet the country's sustainable development goals, it remains unclear whether banks have prioritized financing for renewable energy, green infrastructure, social impact projects and other sustainable endeavors. Therefore, this study aimed to achieve the following specific objectives: to determine the prioritization of sustainable finance projects by commercial banks in Kenya; to establish the effect of bank characteristics on prioritization of sustainable finance projects by commercial banks in Kenya and to examine the effect of managers' perspectives on prioritization of sustainable finance projects by commercial banks in Kenya. The target population comprises 38 business development managers from commercial banks, as they play a direct role in implementing sustainable finance practices within commercial banks in Kenya. The collection of primary data was facilitated through semi-structured questionnaires, whereas secondary data was primarily sourced from the annual supervisory reports and audited financial statements of commercial banks for the year 2022. Descriptive and multi-linear regression statistical analyses used to analyze the collected data. The peer emulation theory of sustainable finance and the system disruption theory of sustainable finance provided anchorage to the study. The study is significant for policy managers in the financial sector, both at the commercial bank and government levels, and for scholars, the study contributes to a deeper insight on priority areas for sustainable project finance and factors influencing managers' perceptions of green financing beyond profitability considerations. The study established that commercial banks prioritized education, health and enterprise projects while bank characteristics and managers' perception were all found to have significant effect on periodization of sustainable finance projects. It was recommended that commercial banks need to identify the various challenges in adaptation of sustainable finance to ensure that all drawbacks are addressed and that the Commercial Banks establish priority areas and projects for sustainable finance.

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## DEFINITION OF TERMS

**The Sustainable Development Goals (SDGs)** This is a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity.

United Nations. (2015).

**Sustainable finance** The integration of environmental, social, and governance (ESG) criteria into financial decision-making processes to support long-term sustainable development goals (European Commission, 2020).

**Prioritization of Sustainable Project Financing** Giving priority to Sustainable Project Financing



## LIST OF ABBREVIATION

<b>AIB</b>	Africa Investment Bank
<b>CBK</b>	Central Bank of Kenya
<b>ESG</b>	Environmental, Social, And Governance
<b>ESM</b>	Environmental and Social Management
<b>NACOSTI</b>	National Commission for Science, Technology, and Innovation
<b>SSF</b>	Swiss Sustainable Finance
<b>SDGs</b>	Sustainable Development Goals
<b>UNCTAD</b>	United Nations Conference on Trade and Development



## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Study

The Sustainable Development Goals (SDGs) were unanimously embraced by all United Nations Member States in 2015, signifying a shared pledge to eliminate poverty, preserve the planet, and promote global peace and prosperity by 2030. At the core of this global initiative is the imperative to stimulate socio-economic development worldwide (Wentworth & Makokera, 2015). Sustainable development projects play a pivotal role in assisting governments in realizing their SDGs and national development objectives, particularly in the developing countries (Bhutta, Tariq, Farrukh, Raza & Iqbal, 2022).

The funding of these initiatives is pivotal for governments worldwide to reach their sustainable development objectives. Consequently, financial institutions play a vital role in facilitating the sustainable funding of projects that align with the SDGs. (African Development Bank Group [AfDB], 2018). Therefore, these financial institutions are urged to channel funds into projects within key SDG thematic sectors, including health, education, and green energy projects. However, the prevailing global financial architecture often falls short of ensuring sustainable project financing, particularly as commercial banks are not inherently designed to integrate sustainable financing into traditionally non-commercial projects (Urban & Wójcik, 2019).

Sustainable finance has emerged as a critical strategy for promoting economic growth while addressing environmental and social challenges (UNEP, 2020). In Kenya, finance institutions play a significant role in financing sustainable development initiatives, ranging from renewable energy projects to green infrastructure and sustainable agriculture (African Development Bank Group [AfDB], 2018). However, there is a need for comprehensive evaluation and assessment of these priority sustainable finance projects to ensure their effectiveness and alignment with sustainable development goals.

Similar to numerous developing nations, Kenya grapples with urgent environmental and social challenges, such as climate change, diminishing biodiversity, and inequality. (World-Bank, 2021). Sustainable finance projects offer a pathway to address these

challenges by mobilizing private capital towards environmentally friendly and socially inclusive investments (UNEP, 2020). Commercial banks in Kenya have recognized the importance of incorporating sustainable principles into their lending practices, driven by both regulatory requirements and market demand for responsible investment options (AfDB, 2018).

Despite the increasing focus on sustainable finance, there is limited research specifically evaluating the impact and effectiveness of priority sustainable finance projects by commercial banks in Kenya. Existing studies often focus on broader trends in sustainable finance or examine specific sectors in isolation (Mungai & Ombuki, 2019) including green financing (Mangwa & Jagongo, 2022 & Mulandi & Mwanja, 2022) as well as climate change (Odongo, Misati, Kageha & Wamalwa, 2023). Therefore, there is a gap in understanding the overall contribution of Kenyan commercial banks to sustainable development and the factors influencing the success of priority sustainable finance projects.

Globally, extensive campaigns have been undertaken to promote sustainable initiative finance within this challenging framework. Andersen, Becker-Birck and Shyduroff (2020) acknowledged the development of effective financing structures, robust risk assessment and management mechanisms, outcome-driven performance verification, and a commitment to robust stakeholder engagement as key factors facilitating sustainable project financing worldwide. Notably, the Japanese G20 emphasized three measures at their meeting: catalyzing and mobilizing sustainable financing to support the SDGs, enhancing the allocation of development finance, and fostering commitment to funding sustainable initiatives worldwide (Zadek & Homi, 2018).

Boosting the financial system's capability and preparedness to address climate change and other sustainable development priorities is crucial. This requires fostering innovation across various financial domains such as banking, insurance, investments, and securities (El-Khatib, Alabdooli, Al-Kaabi & Al-Harmoodi, 2020). In the context of India, meeting evolving financial needs in areas like sustainable financing requires a boost in skill levels within the financial sector to effectively support sustainable finance (Durrani, Rosmin,

M., & Volz, 2020). Concerns have been raised regarding the current commercial and technological environment, it tends to make lenders cautious about taking risks in sustainable financing, hindering rapid credit expansion necessary for sustainable development (Indian Chambers of Commerce and Industry Federation, 2022).

While commercial banks remain the primary financiers for businesses and individuals across Africa, their pivotal role in steering the transition towards sustainable finance is yet to be fully realized (Ziolo, Bak & Cheba, 2021). Despite their substantial influence on the economy, many commercial banks in Africa have not prioritized sustainable finance across various sectors. Addressing this gap requires proactive policy interventions by central banks, leveraging multiple tools and initiatives to encourage commercial banks to embrace sustainable finance (Lala & Stone, 2023).

In Nigeria, research indicates that sustainable finance has predominantly focused on environmental considerations, with a growing interest in social aspects encompassing renewable energy, energy efficiency, agriculture, and water management, among other sectors (Agbaje et al., 2023). Conversely, Ghana aligns sustainable financing objectives with individual and collective business goals of commercial banks, highlighting its potential to stimulate economic growth, foster innovation, and enhance competitiveness through sustainable project finance (Awoyungbo, 2018).

As nations aspire to secure sustainable financing for their projects, the World Bank Group (2018) emphasizes the critical role of public finance, both international and domestic, in strategically catalyzing other sources of finance and ensuring the sustainability of targeted projects. However, in Uganda, despite efforts to promote sustainable development, challenges persist in the implementation of sustainable financing across various sectors (Nakyejwe, Kasimu & Sabi, 2021). Commercial banks express apprehension about potential increased expenses and lower returns on investment compared to traditional commercial sectors, hindering the widespread adoption of sustainable financing practices (Kerre, 2018).

At the local level in Kenya, there has been a historical disconnect between banks' operations and alignment with the Sustainable Development Goals (SDGs) and national sustainable development objectives (Kariuki, 2020). Recent developments, however, signify a shift in banking practices with the emergence of a new concept known as sustainable finance among commercial banks. This transformative approach promotes environmentally friendly practices, emphasizing the reduction of carbon footprints resulting from banking activities. Notably, banks are now adopting strategic measures that include funding projects upholding sustainable practices across diverse sectors, encompassing businesses, agriculture, society, environment, and social development initiatives (Okumu, 2019).

### **1.1.1 Sustainable Finance**

Sustainable financing refers to activities supporting initiatives falling under the umbrella of sustainable development (Kumar, Sharma, Rao, Lim & Mangla, 2022). Notable examples encompass sustainable funds, green bonds, impact investing, microfinance, active ownership, credits tailored for sustainable projects, and the holistic advancement of the financial system (Cunha, Meira & Orsato, 2021). This can also be characterized as any financial service that incorporates environmental, social, and governance (ESG) criteria into business or investment decisions, aimed at fostering enduring benefits for both clients and society as a whole (Swiss Sustainable Finance, 2021).

In the financial sector, sustainable finance entails taking into account environmental, social, and governance (ESG) considerations when determining investment choices. This methodology results in directing funds towards enduring investments in sustainable economic endeavors and initiatives (Migliorelli, 2021). Supporting sustainable projects transcends particular sectors and encompasses various areas such as businesses, agriculture, societal endeavors, environmental initiatives, social development projects, and even personal life choices (FICCI, 2022). Moreover, it emphasizes the funding of projects managed in a manner that ensures benefits for current and subsequent generations.

The United Nations Conference on Trade and Development (UNCTAD) emphasizes the urgent need for a substantial increase in annual investments in sustainable finance. Developing countries face a significant gap of up to 41.6% in sectors related to the Sustainable Development Goals (SDGs) (World Bank, 2022). While the current flows of sustainable finance in Nigeria are deemed insufficient, leading economies in Africa, including Nigeria, South Africa, and Kenya, are actively exploring diverse sustainable investment opportunities. These endeavors aim to foster the seamless integration of sustainable finance into all facets of their financial ecosystems (Shobanjo, 2022).

### **1.1.2 Prioritization of Sustainable Project Financing**

Increasing financing options availability stands out as a crucial policy measure to address the risks associated with sustainable project finance. Unfortunately, project prioritization hinges on strategic significance, economic feasibility, and alignment with national development goals (Dai & Solangi, 2023). Another factor influencing the prioritization of sustainable finance is the establishment of standardized technical guidelines, regulatory and legal framework. This consideration ranks second after national development priorities, with governmental and institutional policies being the third in line (Dai & Solangi, 2023).

Globally, there is a positive trend in sustainable project finance, with countries setting goals to increase funding for projects focused on environmental protection and green energy, among other areas (Barthet, 2021). Notably, many of these projects, as highlighted by Shobanjo (2022), aim to enhance the quality of water and reduce single-use plastics usage. Sustainable financing for projects aligned with the Sustainable Development Goals (SDGs) is essential for achieving national development objectives. While less attention has been given to sustainable projects in sectors such as education and health, several countries have invested heavily in renewable energy, particularly in wind and solar power. Notably, countries like China have emerged as global leaders in these fields (Lamond & Everett, 2019).

The evaluation and risk and strategic goals ranking in sustainable finance remain key concerns for financial institutions contemplating investments in sustainable project

finance. Policymakers and investors, including banks, carefully assess portfolio risks before venturing into sustainable financing. Although sustainable financing is relatively unexplored by commercial banks, concerns are already surfacing about the high investment compared to the expected returns in sustainable finance (Mngumi, Shaorong, Shair & Waqas, 2022).

### **1.1.3 Bank Characteristics, Managers' Perspectives and Prioritization of Sustainable Project Financing**

Bank characteristics exist in various continuums and they include corporate governance and financial attributes. In an empirical study that was done in Indonesia by Endiana and Suryandari (2021), it was shown that the amount of profits generated by the bank informs the amount of sustainable loans that the bank can offer. Abuatwan, (2023) in Palestine was able to identify that green finance is a significant predictor and enabler of sustainable performance of banks in the country. There is also other body of literature providing an indication that corporate governance can determine the sustainable financing endeavors of the bank. In a study by Cakti and Aryan (2021), it was shown that the size of the board and the presence of foreign directors on the board are critical in determining sustainable finance arrangements at the bank level.

Moufty, Clark, and Al-Najjar (2021) unveiled a notable positive correlation between the size of banks and sustainable financing. Fernandes, Gwebu, Johansson, and Meattle (2023) unveiled that banks' funding choices for different sustainable projects are influenced by factors such as project type, scale, and expenses. Lala and Stone (2023) established that banks in Tier one would support sustainable financing compared to the lower tier. A study by the Indian Chambers of Commerce and Industry Federation (2022) identified a need for a strategic shift and addressed perceived negativity by managers regarding green financing's perceived low return on investment. Procopio, Trotta, Strano and Iannuzzi (2020) established that while there is a growing number of banks going green in Italy just like other parts of the world, the priority areas for sustainable finance are still determined by the common business drivers such as profitability. In the present study, bank characteristics were broadly classified into corporate governance, financial characteristics and firm level factors.

#### **1.1.4 Commercial Bank in Kenya**

The banking sector in Kenya is characterized by a mix of foreign and locally-owned banks, with 13 banks under foreign ownership and 31 under local ownership among the current 44 existing banks. These financial institutions are pivotal in providing secure locations for deposits, facilitating transfers, offering investment services to customers, assisting traders in international business, and providing lending services—a primary focus of this study (Onyango & Olando, 2020).

The lending sector in 2017 witnessed a significant decline in credit growth, primarily attributed to the capping of interest rates, the 2016/2017 famine, and increased political tensions surrounding the general election. The industry experienced a notable 13% decline, equivalent to Ksh 175 billion, in interest income. Tier 1 banks saw a 9.7% decline, tier 2 experienced an 18% decrease, and tier 3 faced an 18% decline as well. The overall sector witnessed a 15% reduction in earnings due to decreased interest income (CBK, 2018).

Efforts to mitigate costs included operational and fund-related strategies. However, the cost of funds decreased by 14% despite an 8.3% growth in industry deposits in response to interest rate capping. Term deposit and savings accounts, mandated by the banking act to attract a minimum pay of 7%, were strategically utilized, and banks employed transactional accounts that paid no interest to shift client accounts. Banks, aiming to control expenditure, experienced a growth of 2.4% in operations costs (excluding provisions). To counteract these challenges, the sector explored additional income avenues, resulting in an 11% growth in non-interest income, fueled by increased service charges, mobile banking, bank assurance, investment banking, corporate leasing, trade financing, and merchant banking service (CBK, 2017; Cytonn Investment, 2017).

Asset finance interest rates varied across commercial banks, with Guaranty Trust Bank and K-Rep banks offering the highest rates of around 25.7% and identified as relatively more expensive, while housing finance and family bank were identified as relatively less expensive, with the lowest rates at 22.45% (CBK, 2017). This study aimed to examine

how the financial performance of Kenyan commercial banks is influenced by financial systems, process innovation, and product innovation.

## **1.2 Problem Statement**

Commercial banks in Kenya are increasingly turning their attention to sustainable financing, influenced by global trends in sustainable finance and a growing emphasis on environmental, social, and governance (ESG) considerations. Sustainable finance initiatives encompass a broad spectrum of projects, ranging from renewable energy and green infrastructure to social impact initiatives, all aimed at promoting ESG principles. While this shift indicates a positive direction towards sustainable financing and resource availability to meet the country's sustainable development goals, banks are yet to prioritize financing for renewable energy, green infrastructure, social impact projects, and other sustainable endeavors.

A number of existing empirical studies like Mangwa and Jagongo (2022) majorly focused on listed banks in Kenya which are only 12 in total. It also conceptual create a gap by incorporating aspects of financial performance and not prioritization of sustainable financing as the dependent. The study by the Kenya Banking Association (2020) was limited to social an environment aspects of project financing limiting its generalization to the entire concept of sustainability as a whole that also covers the economic aspect.

Commercial banks play a significant role in ensuring funds are available to finance projects aligned with the SDGs and national sustainable development goals in Kenya. However, existing studies worldwide and within Kenya lack a specific focus on the prioritization of sustainable project financing by commercial banks, leading to both content and contextual gaps. Moreover, these studies lack generalizability to the broader context of the country and do not thoroughly explore the factors influencing the prioritization of funding for various projects by commercial banks in Kenya. The characteristics of banks, such as size, age, profitability, and ownership, which influence project choices, have not been adequately covered. Additionally, the study overlooks the influence of managers' perceptions of corporate social responsibility and philanthropic

strategies on sustainable project finance by commercial banks and how these factors contribute to the banks' prioritization of funding for specific sustainable projects.

### **1.3 Objective of the Study**

The study sought to evaluate priority sustainable finance projects by commercial banks in Kenya. The specific objectives of the study sought to:

1. To determine the prioritization of sustainable finance projects by commercial banks in Kenya.
2. To establish the effect of bank characteristics on prioritization of sustainable finance projects by commercial banks in Kenya
3. To examine the effect of managers' perspectives on prioritization of sustainable finance projects by commercial banks in Kenya

The study sought to answer the following research questions;

1. What specific projects are prioritized for sustainable finance by commercial banks in Kenya?
2. How do bank characteristics affect prioritization of sustainable finance projects by commercial banks in Kenya?
3. What is the effect of managers' perspectives on prioritization of sustainable finance projects by commercial banks in Kenya?

### **1.4 Significance of the Study**

#### **1.4.1 Commercial Banks**

The research aims to provide commercial banks with insights into the factors influencing the prioritization of sustainable project funding, highlighting specific sectors favored for financing in Kenya. Management within commercial banks may benefit from understanding the considerations shaping the prioritization of sustainable financing across diverse sectors.

#### **1.4.2 Policy Managers in the Financial Sector**

The study holds significance for policy managers in the financial sector, both at the commercial bank and government levels. The findings offer guidance on areas deserving increased funding aligned with the Sustainable Development Goals (SDGs). This information can inform strategic decisions on resource allocation by financial institutions, emphasizing sustainable financing for projects spanning education, health, environment, and more.

#### **1.4.3 Governments across the world**

Globally, sustainable finance has gained prominence, and governments seek ways to enhance funding for projects aligned with the SDGs and national development goals. The study's insights may guide the development of policies that prioritize sustainable finance, encouraging commercial banks to fund projects in crucial areas such as health, education, and green energy.

#### **1.4.4 Scholars and Academicians**

For scholars, the research provides deeper insights of priority areas for sustainable project finance and factors influencing managers' perceptions of green financing beyond profitability considerations. The results can serve as a foundation for further research on the prioritization of sustainable finance for projects by commercial banks in Kenya and other developing countries.

#### **1.5 Scope of the Study**

The research was center on the prioritization of sustainable finance projects by commercial banks in Kenya, examining the factors influencing this prioritization, the characteristics of commercial banks that contribute to project financing choices, and the strategies shaping senior management's perspectives on prioritizing sustainable finance projects. With 43 registered commercial banks in Kenya, respondents were selected using the justification method from the targeted banks headquartered in Nairobi. This approach facilitates access to senior managers, ensuring the retrieval of relevant information. Employing quantitative methods and a cross-sectional descriptive study approach, data was collected through structured questionnaires distributed to strategic managers, credit

managers, and corporate social responsibility managers in the selected commercial banks. The study is scheduled to take place between March and April 2024.

### **1.6 Chapter Summary**

This section offers a comprehensive overview of the research background, stressing the crucial role of commercial banks in financing Sustainable Development Goals (SDGs) in Kenya. It highlights gaps in existing literature, particularly the lack of focus on sustainable project financing prioritization by banks. The study aims to fill these gaps by evaluating priority sustainable finance projects, determining project prioritization, and examining bank characteristics and corporate governance.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter is structured into relevant theories that were used to underpin the study variables. It also provides empirical review of past studies guided by specific objectives, indicates the summary of the gaps and then covers the conceptual framework.

### **2.2 Theoretical Review**

#### **2.2.1 The peer emulation theory of sustainable finance**

The theory of sustainable finance peer emulation suggests that economic entities tend to mirror the policies, actions and strategies of their peers when striving to achieve sustainable finance objectives. When there's a lack of standardized guidelines for sustainable finance, these entities are prone to imitate the measures taken by their influential counterparts (Schoenmaker & Schramade, 2018). This implies that economic actors are more inclined to pursue particular sustainable financing objectives simply because their respected peers have already adopted them or have a history of doing so. Additionally, this behavior underscores the significance of peer influence in shaping sustainable finance practices within the economic landscape (Cowett, 2008).

In the context of this research, commercial entities that share common ideals regarding climate change are more likely to adopt analogous measures and guidelines on sustainable finance and collectively working toward individual sustainable finance goals. Consequently, if one commercial bank implements sustainable project funding, others are likely to follow suit, resulting in increased funding for such projects (Fatemi & Fooladi, 2013).

The peer emulation theory of sustainable finance offers several advantages. Firstly, it facilitates alignment with the social, economic, and political ideals of sustainable finance among emulating peers. Secondly, it enables a quicker and more straightforward adoption of sustainable finance policies, requiring only minor adjustments, especially for larger as opposed to smaller banks. Thirdly, it proves cost-effective, as emulating economic agents do not need to allocate substantial resources to formulate a new course of action in entirety. Fourthly, improvements can be made to adopted policies, enhancing their

attractiveness to subsequent adopters. Fifthly, under this theory, the economic agents, do not perceive peers as competitors (Ozili, 2022).

However, while the concept of sustainable finance peer emulation offers valuable insights, it is not without its limitations. By solely relying on emulation, there's a risk of overlooking the unique creativity inherent in developing new courses of action, policies, or strategies from the ground up, which can provide valuable insights and innovations. Furthermore, adopting sustainable finance policies and actions mirroring those of peers in different countries might not produce the desired outcomes due to disparities in financial markets, regulatory frameworks, governance structures, and the level of political commitment required to achieve sustainable finance goals. Thus, while peer emulation can offer valuable guidance, it should be complemented with critical analysis and contextual adaptation to ensure effective and tailored sustainable finance initiatives. This theory will help to anchor the variable of bank characteristics with prioritization of sustainable financing projects. Banks with strong corporate governance mechanisms for instance may find it easier to adopt and imitate sustainable financing endeavors from other more developed partners and rivals in other developed countries.

### **2.2.2 The system disruption theory of sustainable finance**

The system disruption theory in sustainable finance suggests that striving for sustainable finance objectives could disturb the existing framework of the traditional financial system, consequently affecting businesses that heavily depend on conventional financing. This disruption, as the transition towards sustainable finance unfolds, might provoke resistance from affected economic entities or encounter a lack of public endorsement for the sustainable finance agenda due to the magnitude of its impact. Additionally, the theory highlights the need for careful consideration of potential resistance and the necessity for strategies to mitigate adverse effects during the transition period.

Applying this theory to the study, the prioritization of sustainable finance and support for sustainable projects by commercial banks across various sectors may indeed disrupt the conventional financial system, which may not directly benefit these banks. By emphasizing sustainable projects, there is a potential disruption to businesses heavily

dependent on traditional or mainstream financing, which may be more lucrative for commercial banks. However, effective communication and increased awareness can facilitate a smoother transition.

Despite its merits, the system disruption theory of sustainable finance is not without drawbacks. It recognizes disruption potential of sustainable finance to the existing traditional or mainstream financial system. Secondly, the theory suggests that full information disclosure about the transition and its effects to economic agents can come in handy to mitigate resistance by enhancing understanding and awareness.

Critics of the system disruption theory highlight a constraint, suggesting that the transition to sustainable finance doesn't require a complete overhaul of the entire traditional or mainstream financial system. Instead, sustainable finance can function alongside the conventional system, possibly as a distinct sub-sector or as an integrated part of a blended financial system. Within this framework, economic actors can opt for financing options that incorporate Environmental, Social, and Governance (ESG) criteria on a voluntary basis, offering a more nuanced and flexible approach to sustainable finance. This perspective underscores the potential for coexistence and collaboration between traditional and sustainable financial practices, providing opportunities for gradual and voluntary adoption of sustainable principles within the financial landscape. (Gutterman, 2020; Krauss, Krüger & Meyer, 2016; Ozili, 2021). The relevance of this theory to the present study is that it directly advocates for commercial banks to invest and adopt sustainable finance. In doing so, it is theorized and expected under this theory that more and more financial institutions would obtain buy-in of funding sustainable projects and this may in turn influence the realization of sustainable development goals.

### **2.3 Empirical Review**

The past empirical studies are reviewed in the subsequent sections as guided by the specific objectives of the study:

### **2.3.1 Prioritization of Sustainable Finance Projects**

Barthet (2021) conducted an assessment of the extent to which commercial banks prioritized Sustainable Development Goals (SDGs) with the greatest financing impact in developing countries. Utilizing a literature review of secondary data, the study gauged the emphasis placed by developing countries on sustainable financing, considering the potential impact of such projects. The findings highlighted the high potential of sustainable-focused products as a source of SDG financing. Moreover, sustainable financing frameworks were identified as facilitating the identification of activities aligning with SDGs and possessing high impact. However, the study also revealed uneven progress in integrating these aspects into banking portfolios due to uncertainty about the impact of SDG interventions.

A study by BFSI (2023) explored the inclination of banks to prioritize the sectoral status for sustainable finance in India. Employing a case study approach within the Indian commercial banking sector, the study used interviews to assess banks' commitment to prioritizing sustainable project financing in one of the world's most populous countries. The study confirmed a strong interest among banks in prioritizing sectors for increased sustainable financing. It further emphasized the need for continued funding for sustainable projects, even as heavily polluting industries transition to greener processes.

The Alliance for Financial Inclusion (AFI) conducted a study on inclusive green finance, employing survey research methods to analyze the policy landscape of green finance across 14 developing countries, including Egypt and Tanzania from Africa. The findings revealed serious policy gaps in the prioritization of sustainable financing in Tanzania and other countries. The study recommended urgent development of policy and regulatory frameworks within the commercial banking sector to expedite sustainable finance, aligning with the Paris Agreement and the Sustainable Development Goals (SDGs).

Awoyungbo (2018) examined the implementation of sustainable banking principles in Nigeria by assessing 37 financial institutions, spanning banks, discount houses, and development finance institutions. The study, using a descriptive approach, found that while sustainable financing is not yet prioritized in the banking sector, there is

recognition among bank committee members of their role in delivering positive development impacts while safeguarding communities and environments. Sustainable banking was deemed consistent with individual and collective business objectives, presenting opportunities for economic growth, innovation, and competitiveness.

Mangwa and Jagongo (2022) focused on green financing and the financial performance of commercial banks listed in Kenya. Using the cross-sectional descriptive technique and employing structured questionnaires to draw data from senior, middle, and lower management staff from the targeted commercial banks, revealed that commercial banks need to explore new business opportunities for revenue growth, collaborating with relevant governmental and non-governmental partners championing for sustainable economic development. The study underscored the importance of diversifying revenue streams and collaborating with stakeholders for sustainable financial growth.

### **2.3.2 Bank Characteristics and Prioritization of Sustainable Finance Projects**

In this study, bank characteristics is the first independent objective variable and it has three broad proxies being corporate governance, finance characteristics, as well as firm level factors.

#### **2.3.2.1 Corporate Governance and Prioritization of Sustainable Finance Projects**

A study by Cakti and Aryan (2021) assessed the impact of board attributes on the disclosure of sustainable finance in the ASEAN banking sector, employing a panel data regression model. These inquiries illuminated how favorable developments in this area have steered the banking system toward adopting sustainable finance. The findings revealed that only board size had a positive and notable influence on sustainable finance. Meanwhile, factors like board gender, board education, and foreign board presence were deemed insignificant.

Durrani, Rosmin, and Volz. (2020) evaluated the central banks' role in scaling up sustainable finance. The study assessed the perspectives of monetary authorities in the Asia-Pacific region and both quantitative and qualitative methodologies were employed. The results indicated a significant relationship between sustainable committee and

sustainable financing. Furthermore, the composition of sustainable committees and sustainable financing did not serve as a moderating factor in the correlation between capital and firm value. This implies that banks prioritize sustainable finance because of its positive effects on their operations, ultimately resulting in improved value of the firm.

Another study by the Indian Chambers of Commerce and Industry Federation (2022) delved into factors to contemplate in shaping a sustainable financial system tailored for India. Conducting a financial sector inquiry and analysis, the study sought insights on the requirements of a sustainable financial system to address the growing need for sustainable financing in India. The findings highlighted the necessity for increased learning on sustainable financing, especially among financial institutions. The study also identified a need for a strategic shift and addressed perceived negativity by managers regarding green financing's perceived low return on investment. Recommendations included the development of a policy for sustainable financing aimed at banks and financial institutions, emphasizing key green economy priority areas and factors that could foster increased financing for sustainable projects and initiatives.

UNEP (2023) conducted an evaluation of eco-friendly funding methods for Micro, Small, and Medium Enterprises (MSMEs) across Africa. The study, employing sector and institutional policy assessments, document reviews, and sector analysis, scrutinized the green financing mechanisms for MSMEs across the financial sector in African countries. The findings revealed that financial institution managers encounter challenges in supporting sustainable financing, particularly for MSMEs in Africa. Moreover, financial institutions willing to extend financing to MSMEs face obstacles related to collateral requirements, a high default rate, MSME informality, and compounded difficulties for green MSMEs and those seeking to green their business operations. Lenders perceive sustainable projects, including those by MSMEs, as high-risk ventures. The study also highlighted the uncertainty surrounding the return on investment for sustainable venture funding, intensifying apprehensions among bank managers in sustainable project finance for this sector.

In a separate study, Somorin, Ndihi, and Ochieng (2021) assessed financing adaptation in Africa as a key driver of sustainable development in Sub-Saharan Africa. Utilizing qualitative and quantitative methods, the study found a general perception that sustainable projects and climatic adaptation initiatives are viewed as public goods, limiting potential business or private investment opportunities, including from commercial banks. The research also identified challenges related to the absence of clear models around costs, returns, viability, and timelines for adaptation projects, constraining private sector investments, such as those from banks, in sustainable-financed initiatives.

Yanda (2018) conducted an analysis of Tanzanian sustainable finance, using qualitative analysis of the policy context and institutional arrangements, coupled with a quantitative review of institutional spending on sustainable actions and initiatives. The results suggested that the sluggish adoption of sustainable finance at the sectoral commercial retail level is linked to the limited importance placed on financing sustainable actions by the national government. The study emphasized that sustainable finance is primarily treated as a budgetary rather than a policy issue, with the national strategy offering only minimal references to the financing mechanisms needed for implementing sustainable initiatives and actions.

In a cross-sectional descriptive study conducted by the Kenya Banking Association (2020) on the status of sustainable finance within Kenya's banking sector, data was gathered through a structured questionnaire from senior, middle, and lower management at leading commercial banks in Kenya. Despite the growth of bonds for project finance, the study highlighted that commercial banks play a pivotal role, providing two-thirds of worldwide finance. It emphasized that the banking system in Kenya holds significance in achieving the Sustainable Development Goals (SDGs) with their defined targets for a sustainable future for all although a lot depend of the characteristics and the policies that they have put in place.

### **2.3.2.2 Finance Characteristics and Prioritization of Sustainable Finance Projects**

Jiang, Xu, Cui and Subhani (2023) conducted a study focusing on the influence of bank capital, liquidity, and funding liquidity on sustainable bank lending in the MENA region.

Their analysis utilized an unbalanced panel dataset encompassing 55 banks and incorporated ESG scoring criteria from the years 2010 to 2020. The research revealed that higher capital and liquidity ratios hinder the MENA banking sector's ability to support sustainable projects and enhance lending capabilities. Furthermore, the study highlighted a significant positive correlation between funding liquidity and the growth of sustainable bank lending, indicating that funding liquidity contributes to boosting the capacity for sustainable bank lending.

Perdana, Sudiro, Ratnawati and Rofiaty (2023) assessed sustainable finance practices within the ASEAN banking sector. Their investigation explored the impact of sustainable finance and capital on firm value, with institutional ownership serving as a moderating variable. The study focused on entities listed on the ASEAN stock market between 2015 and 2021 and revealed a relationship between Capital Adequacy Ratios (CAR) and sustainable finance among banks listed on the ASEAN stock market.

Endiana and Suryandari (2021) evaluated the value relevance of sustainable finance. The evidence-based study evaluated banks from Indonesia. The findings regarding banks classified as "too-big-to-fail" suggest that increased capital ratios positively impact the growth of bank lending and levels of banks profitability. The findings suggest that higher profitability enables banks to issue sustainable loans more effectively in the market. Overall, the study highlighted a significant relationship between bank profitability and sustainable finance.

Another study by Abuatwan, (2023) on green finance impact on the banking sector sustainability performance in Palestine established a notable association between the bank's profitability and green financing, the study also established that relationship between green financing and return on assets (ROA). Additionally, Jianget et al. (2023) examined the influence of bank capital, liquidity, and funding liquidity on sustainable bank lending in the MENA region. Their study emphasized the positive effect of liquidity on the growth of sustainable bank lending. However, a study by Odongo et al. (2022) conducted in Kenya found no significant relationship between CAR and sustainable financing by banks.

### **2.3.2.3 Firm Level Factors and and Prioritization of Sustainable Finance Projects**

Vidyakin (2023) conducted an assessment of sustainable banking practices and the roles played by central and commercial banks. The study, based on a literature review encompassing 17 articles sourced from major economies and leading financial institutions worldwide, revealed that some financial institutions lack policies supporting sustainable finance. The study recommended a shift in their perspective to encourage the provision of loans and support for projects offering substantial community and social benefits, such as the construction of schools or hospitals. Furthermore, the importance of strong leadership focusing on sustainable finance was emphasized, promoting increased investments in clean energy, like solar and wind power, while avoiding funding projects with environmental pollution, even if they promise high returns on investment.

Buehler, Eis, Kingsmill, and Levy (2023) evaluated the impact of US green bank financing using a descriptive study design that incorporated both qualitative and quantitative approaches. The findings indicated that heightened green financing by banks could generate significant impacts within and beyond disadvantaged communities, yielding high returns on capital. The study underscored the importance of banks supporting the United States in delivering sustainable financing initiatives across the country.

In a study by Lala and Stone (2023) that assessed the involvement of central and commercial banks in promoting sustainable finance in Africa, a descriptive analysis based on sector-specific factors was utilized. Despite serving as significant sources of funding for businesses and individuals, commercial banks often encounter obstacles in financing sustainable projects due to financial limitations. Additionally, certain categories of financial institutions and smaller entities may face difficulties in extending loans to ventures allocating funds in sustainable technologies, such as energy-efficient infrastructure and electric vehicles.

Moufty, Clark, and Al-Najjar (2021) conducted a comprehensive evaluation of sustainable dimensions and their impact on bank performance. Using a case study methodology centered on the European Union and the United States, the research collected the specific country evidence data. The results unveiled a notable positive

correlation between the size of banks and sustainable financing. Notably, the study emphasized that the degree to which banks supported or financed sustainable projects across various sectors was contingent on their size in terms of customer base and asset holdings, with larger banks allocating more funds to sustainable project financing.

In another investigation, Fernandes, Gwebu, Johansson, and Meattle (2023) scrutinized the climate finance landscape in South Africa. Employing a survey research method, the study deployed questionnaires disseminated to a variety of organizations spanning both public and private sectors, encompassing all funding sources and distribution channels. In addition to the questionnaires, individual interviews were conducted to delve deeper into the data and extract qualitative insights. The study underscored the pivotal role of banks as a crucial commercial source for sustainable finance in South Africa. Their participation greatly enhances the momentum of sustainable finance, anticipated to expand from the current yearly average of R131 billion to a three to fivefold rise. Importantly, the study unveiled that banks' funding choices for different sustainable projects are influenced by factors such as project type, scale, and expenses.

The results revealed that while banks play a substantive and concrete role in facilitating the country's sustainable development, their engagement in sustainable financing and extent of support for sustainable projects and initiatives are contingent upon various ownership factors. This encompasses considerations such as private or public ownership, listing on the Nairobi Securities Exchange (NSE), shareholding distinctions involving foreign ownership, government ownership levels, or local investor ownership (Kenya Banking Association, 2020). Banks with foreign ownership significantly supported sustainable finance. Additionally, the study investigated whether foreign banks operating in Kenya were incorporated in other countries that endorse sustainable financing, whether banks incorporated in Kenya had partial foreign ownership, and if banks incorporated elsewhere were fully owned by foreign interests. On the other hand, Lala and Stone (2023) established that bank in Tier one would support sustainable financing compared to the lower tier

### **2.3.3 Managers' Perceptions and Prioritization of Sustainable Finance Projects**

A study by the Indian Chambers of Commerce and Industry Federation (2022) explored factors involved in crafting a system for sustainable financing tailored to India's needs. Conducting a financial sector inquiry and analysis, the study sought insights on the requirements of a financial system to address the growing need for sustainable financing in India. The findings highlighted the necessity for increased learning on sustainable financing, especially among financial institutions. The study also identified a need for a strategic shift and addressed perceived negativity by managers regarding green financing's perceived low return on investment. Recommendations included the development of a banks and financial institutions' sustainable financing policy, emphasizing key green economy priority areas and factors that could foster increased financing for sustainable projects and initiatives.

Profitability, return on investment among other reasons have contributed to low ranking of sustainable projects by financial institutions. A study by Europa (2020) on stakeholder consultation survey on the renewed sustainable finance strategy used the consultative approach to determine the objectives and direction of the achievement of the EU's Sustainable Finance strategy. The study highlighted that the (perceived) lower profitability of certain sustainable projects have contributed to such project being ranked lowly and thereby attracting less financing by most financial institutions globally.

Another study by Procopio, Trotta, Strano and Iannuzzi (2020) conducted a study on Current and Future Challenges of Green Banking in Italy. The research conducted a literature review on sustainable finance within the commercial banking sector in Italy to offer insights into the primary regulations and policies governing green banking. Additionally, it aimed to outline the key initiatives implemented by two prominent Italian commercial banks and identify priority areas for sustainable finance. The study established that while there is a growing number of banks going green in Italy just like other parts of the world, the priority areas for sustainable finance is still determined by the common business drivers such as profitability. The study advised that there is a need to explore how banks can optimize profitability in green banking practices.

Song, Deng and Wu (2019) Conducted a study in China on the impact of green credit on commercial bank profitability. The study through a comparative analysis evaluated the profitability of green finance and other financing of other commercial ventures. The research revealed that in recent years, there has been a growing expectation for financial institutions to operate in a socially responsible manner, particularly by endorsing sustainable financing practices. Commercial banks, in particular, have shown a keen interest in financing green energy and sustainable projects, which are often more lucrative compared to other commercial ventures. This trend underscores the increasing prioritization of sustainable projects within the banking sector, driven not only by ethical considerations but also by the potential for profitability in environmentally conscious investments.

Akomea, Adeabah, Ofori and Tenakwah (2021) conducted a review of studies on green finance of banks. The research employed a content analysis methodology to thoroughly examine and condense forty-six (46) pertinent studies. It revealed that key green finance products offered by banks encompass green securities, green investments, climate finance, carbon finance, green insurance, green credit, and green infrastructure bonds. Moreover, the investigation found that the majority of commercial banks prioritize backing climate change adaptation initiatives aimed at environmental preservation. Specifically, there is a notable emphasis on supporting clean energy programs, including businesses promoting green energy and transitioning to innovative energy concepts.

Ogutu and Fatoki (2019) conducted a study on green financing and financial performance of listed Kenyan commercial banks. The study while using One Planet Living Framework used contextual and conceptual analysis of the related data. The study established that sustainable finance priority areas for financial institutions in Kenya remain projects that focus on protecting the environment and promotion of clean energy. The study recommended that the Kenyan banking sector should focus substantial efforts on comprehending the relevance of contemporary models in their operations, aiming to foster the growth of the banking industry while simultaneously safeguarding the environment.

## 2.4 Summary of Literature and Gaps

Although the above studies covered various aspects of prioritization of sustainable project finance, the studies were not exhaustive and therefore they leave gaps that this study sought to fill.



**Table 2.1 Summary of Knowledge Gaps**

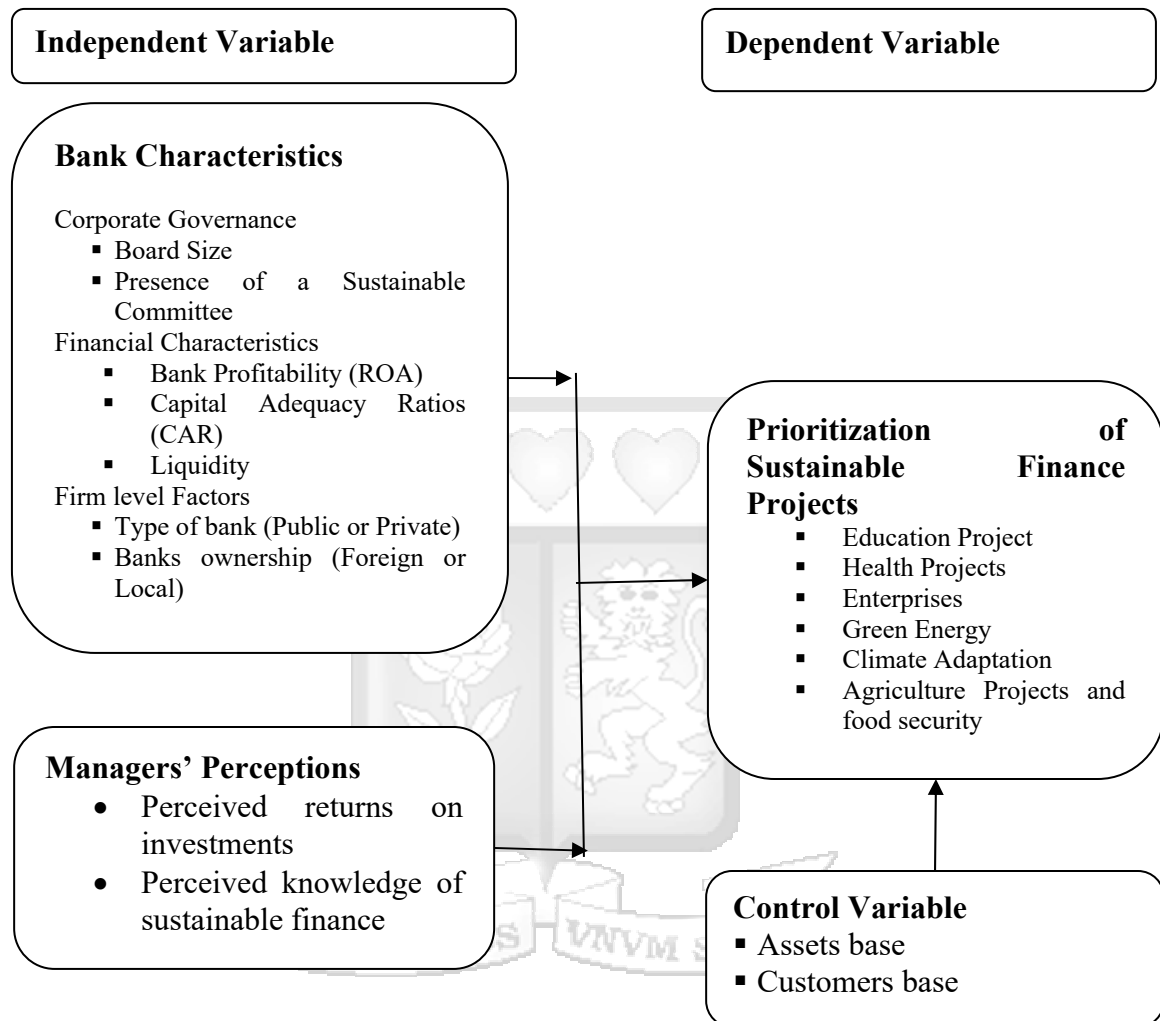
<b>Author</b>	<b>Study</b>	<b>Country</b>	<b>Findings</b>	<b>Study Gap</b>
Buehler, Eis, Kingsmill and Levy (2023)	Delivering impact from US green bank financing	USA	Increased green financing by banks would yield significant impacts both within and outside disadvantaged communities with high levels of return on capital	The study was carried out in USA and findings cannot be generalized to Kenya
Lala and Stone (2023)	The role of Central and Commercial Banks in promoting sustainable finance in Africa.	Africa	Commercial banks have considerable influence over the economy and possess the capacity to contribute to the advancement of a more sustainable future through various means, some of the commercial banks are unable to fund such projects due their financial capacities.	The study was not specific to Kenya and therefore the findings cannot be generalized to Kenya
Cigu, <i>et al</i> (2020)	The Nexus between Financial Regulation and Green Sustainable Economy	No country specific	Consistent regulatory framework in finance is instrumental in shaping both green financing and the green economy.	The study cover regulation and not the other factors proposed by the study
Ozili P (2022)	Policy Perspectives in Promoting Green Finance	USA	Green finance policy as important in helping the facilitation of the integration of green finance into conventional financing practices.	The study was carried out in USA and findings cannot be generalized to Kenya
Vidyakin (2023)	Sustainable Banking Practices and the role of Central Banks & Commercial Banks	Global	Some financial institutions have not put in place policies that support sustainable finance	The study was not specific to Kenya and therefore the findings cannot be generalized to Kenya
Ozili P (2022)	Green finance research	No country	The promotion of green	The study covered policy and

	around the world: a review of literature	specific	financing using policy and technology as critical in achieving cross the world	not the other factors proposed by the study
Mangwa, and Jagongo(2022)	Green Financing and Financial Performance of Listed Commercial Banks in Kenya	Kenya	The presence of contextual, conceptual, and population gaps validates the necessity for additional research concerning Green Financing and Financial Performance	The study was not on adaptation of green financing by commercial banks
Mohamed (2023) evaluated	Why sustainable finance is a moral obligation for commercial banks.	Kenya	Incorporating sustainable initiative is not only perceived by the banks management a as not just a moral duty but also a strategic necessity for banks to flourish in a delicate world that requires the collective attention of everyone.	The study did not cover the four independent variables proposed by the study.

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## 2.5 Conceptual Framework

Figure 2.1 is the conceptual framework that guided the present study:



**Figure 2.1: Conceptual Framework**

In Figure 2.1, while bank characteristics and managers' perceptions represent two key independent variables in the present study, the main dependent variable is prioritization of sustainable finance projects. Asset and customer base were control variables.

## 2.6 Operationalization of Study Variable

Operationalization involves converting theoretical concepts into measurable attributes using observable indicators. In this study, a rating scale spanning from 1 (strongly disagree) to 5 (strongly agree) was utilized to evaluate both independent and dependent

variables. The precise indicators utilized in the research are detailed in the table presented below.

**Table 2.2 Study Variables Operationalization**

Variable Type	Variable	Measurement	Data analysis	Literature
<b>Independent Managers' perceptions</b>	<ul style="list-style-type: none"> <li>▪ <b>Managers' perceptions</b></li> </ul>	Perceived returns on investments Perceived knowledge of sustainable finance	Descriptive analysis Correlational analysis Regression analysis	Procopio, Trotta, Strano and Iannuzzi (2020)
<b>Independent Bank characteristics</b>	<b>Commercial bank Corporate Governance</b> <ul style="list-style-type: none"> <li>▪ Board Size</li> <li>▪ Presence of a Sustainable Committee</li> </ul>	<b>Board Size:</b> Total Number of Board members <b>Presence of a Sustainable (1), Committee or not present (0)</b>	Descriptive analysis Correlational analysis Regression analysis	Lala and Stone (2023) Moufty, Clark, and Al-Najjar (2021)
	<b>Commercial bank Financial Characteristics</b> <ul style="list-style-type: none"> <li>▪ Bank Profitability (ROA)</li> <li>▪ Capital Adequacy Ratios (CAR)</li> <li>▪ Liquidity</li> </ul>	<b>ROA</b> =Net income/Av. total Assets <b>CAR</b> = Tier 1 Capital + Tier 2 Capital / Risk Weighted Assets <b>Liquidity:</b> CA/AL	Descriptive analysis Correlational analysis Regression analysis	Abuatwan, (2023) Jianget (2023) Odongo et al (2022)
	<b>Firm level factors</b> <ul style="list-style-type: none"> <li>▪ Type of bank (Public or Private)</li> <li>▪ Banks ownership (Foreign or Local)</li> <li>▪ Bank Tier</li> </ul>	Type of bank (Public or Private) Banks ownership (Foreign owned or Locally owned) Bank Tier	Descriptive analysis Correlational analysis Regression analysis	Kenya Banking Association 2020) Lala and Stone (2023)
<b>Dependent Variable</b>	Ranking of Sustainable Projects by commercial banks in Kenya	3 point Likert Scale	Descriptive analysis Correlational analysis Regression analysis	Europa (2020)
<b>Control Variable</b>	Bank Size	Total Assets	Secondary Data	Lala and Stone (2023)

## 2.7 Chapter Summary

This section encompasses several key components, including a theoretical framework, an empirical overview, and an exploration of the research gap. Moreover, it incorporates a conceptual framework that outlines the theoretical underpinnings of the study, as well as the operationalization of the variables under examination.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter offers a comprehensive outline of the methodological approaches employed in the study, with a focus on the foundational philosophical framework informing the research, the selected research design, and the methodology employed for data collection. It emphasizes the processes involved in determining the sample size of participants, along with evaluating the validity and reliability of the research outcomes. Moreover, the chapter delineates the methodology for analyzing the collected research data, thereby ensuring a thorough comprehension of the study's methodology and processes.

### **3.2 Research Philosophy**

Research philosophy serves as the foundational principle shaping a researcher's methodology, including their approach to addressing the research problem, selection of research design, and choices regarding data collection, analysis, and presentation (Zukauskas, Vveinhardt & Andriukaitiene, 2018). Within social research, three main philosophical orientations prevail: positivism, interpretivism, and pragmatism (Al-Ababneh, 2020). Interpretivism focuses on understanding individuals' beliefs, motivations, and reasoning in social situations to decode collected data's meaning. Pragmatism, a philosophical tradition, prioritizes the practical consequences of words, thoughts, and beliefs, rejecting the idea that thought mirrors reality (Bleiker, Morgan-Trimmer, & Knapp, 2019). Positivists, on the other hand, argue that truth exists independent of the researchers and the researched elements (Bleiker, Morgan-Trimmer, & Knapp, 2019). In positivism, the emphasis lies on objective observation and measurement, aiming to uncover universal laws governing social phenomena. (Park, Konge & Artino, 2020).

For this study, a positivism philosophy is deemed most appropriate. Positivism aligns with the study's aim to establish associations between sustainable finance prioritization by Kenyan commercial banks, bank characteristics, and the perspectives of bank managers on sustainable finance for projects.

### **3.3 Research Design**

The research adopted an explanatory design to effectively capture variables that can only be described rather than quantified using descriptive statistics (Schindler, 2001). Descriptive studies are ideal when variables under study cannot be quantified but need to be presented in a statistical form. Statistical measures like mean, standard deviation, percentages, and frequencies was employed. The study is scheduled to take place between April and May 2024. Similar studies by Adede (2017) and Onyango (2021) have successfully employed a cross-sectional design, providing a precedent for this research approach.

### **3.4 Study Population**

The research target population consists of all the 37 Kenyan Commercial Banks. The study targeted business development management unit directly involved with sustainable finance in commercial banks across Kenya. A preliminary assessment of various commercial banks in Kenya revealed that Business Development Units are consistently present across all commercial banks. Thus, the study targeted a business development each from the 37 commercial banks in Kenya and hence census was adopted. The selection of this unit is based on the assumption that individuals in these roles possess the necessary information regarding priority sustainable finance projects undertaken by Kenyan commercial banks. Furthermore, the target population exclusively focuses on commercial banks headquartered in Nairobi. The list of banks covered by study are provided in Appendix III.

### **3.5 Data Collection Methods**

**Primary Data:** This included both qualitative and quantitative methods where through semi-structured questionnaires utilizing open and closed-ended questions to gather the required data. It was used to collect data on Projects Characteristics, Corporate Governance and Characteristics of Commercial Bank and Managers Perception on Sustainable Project Finance. Additionally, Key Interviews focused on.

**Secondary Data:** Secondary Data was obtained from banks supervisory reports and annual reports of banks for year ended 2022. This helped to collect information of the bank size with reference to asset base, customer base, Board Size, Presence of a

Sustainable Committee, Bank Profitability (ROA), Capital Adequacy Ratios (CAR) and Liquidity.

### **3.5.1 Questionnaire**

Semi structured questionnaires administered to the sampled respondents was used to draw the primary data for this study. According to Mugenda and Mugenda (2003), a questionnaire comprises of a series of questions posed to gather statistically relevant information on a researcher's area of interest. The questionnaire to be used by the study was a semi-structured questionnaire and included both open and closed ended questions. The questionnaires focused on one Officer who are in charge of sustainable finance/projects from each of the commercial banks covered by the study. The questionnaire was structured into four sections covering bio-data, prioritization of sustainable finance projects, bank characteristics and managers; perceptions in sections A, B, C and D respectively. This was in line with the specific objectives of the study.

### **3.5.2 Key Interviews**

Key Interviews were also conducted and focused on Head of Business Units from each of the commercial banks covered by the study. According to Silverman (1997), interviews can be used to probe for more information on the issues under investigation. Therefore, the key interviews helped in probing for more information on the priority sustainable finance projects by commercial banks in Kenya. This helped to enrich information collected for analysis of the third objective which was on managers' perceptions.

## **3.6 Research Quality**

This section is dedicated to conducting validity and reliability tests, which aim to bolster the credibility and robustness of the study and reinforces the trustworthiness and integrity of the study's findings and conclusions.

### **3.6.1 Study Validity**

Validity tests ensure that the research accurately measures what it intends to measure and operates as designed (Kerlinger, 2006). It also reflects the extent to which the data analysis results accurately represent the phenomenon being studied (Loebet et al., 2017). To enhance the validity of the study instruments, collaboration with the assigned supervisor were undertaken. Suggestions and recommendations provided were

incorporated into the final tools that were administered to the study respondents. This collaborative approach aims to ensure that the instruments effectively measure the intended aspects and produce valid results for the research.

### **3.6.2 Reliability**

This pertains to the extent of stability and consistency exhibited by an instrument (Kumar, 2010). The assessment of reliability in this study was conducted using Cronbach's alpha coefficient. George and Mallery (2003) offer guidelines for interpreting Cronbach's alpha is categorized as follows: a coefficient exceeding .9 indicates excellent reliability, above 0.8 is considered good, surpassing .7 is deemed acceptable, surpassing .6 is questionable, above .5 is poor, and anything below .5 is unacceptable. Cooper and Schindler (2006) regard a Cronbach's alpha coefficient ranging from 0.7 to 0.9 as satisfactory. Gliem and Gliem (2003) recommend a value of 0.7, while Asikhia (2009) suggests a reliability cutoff of 0.6. Bagozzi and Yi (2012) highlight that a value of 0.5 is considered reliable. According to Sekaran (2003), when the Cronbach's alpha coefficient approaches 1, it indicates greater internal consistency reliability for a questionnaire. A coefficient below 0.6 is considered inadequate, while values between 0.7 and 0.8 are considered acceptable, and those exceeding 0.8 are deemed good. In this study, a Cronbach's alpha coefficient of 0.7 or higher were viewed as demonstrating acceptable and satisfactory reliability.

### **3.7 Data Analysis**

The research employed qualitative and quantitative analysis methods. Quantitative analysis included both descriptive statistics and regression analysis. Descriptive analysis provided a clear and concise summary of Projects Characteristics, Commercial bank Characteristics (Corporate Governance, Financial Characteristics and firm level factors) and the managers' Perceptions on sustainable projects. Ranking of Sustainable Projects by commercial banks in Kenya, facilitates researchers or analysts in gaining insights and comprehending patterns, trends, and distributions present within the dataset. They included ratios, dispersion range, Likert scales, variance among others. Besides the use of descriptive statistics, the study also conducted regression analysis for the purpose of drawing inferences and deduction. Two regression models were adopted in achieving objectives 2 and 3 while objective one was achieved through descriptive statistics.

$$Y = \beta_0 + \beta_1 FI + \varepsilon \dots \dots \dots \text{(I)}$$

Y= Prioritization of sustainable finance projects

BCs= Bank Characteristics (as composite of corporate governance, financial characteristics and firm level factors)

B<sub>0</sub> = Constant

β<sub>1</sub>, Coefficient

ε = error term

$$Y = \beta_0 + \beta_1 MP_s + \varepsilon \dots \dots \dots \text{(II)}$$

Y= Prioritization of sustainable finance projects

MPs= Managers' perceptions

B<sub>0</sub> = Constant

β<sub>1</sub>, are Coefficients

ε = error term

The two regression models I and II above were critical in testing for the formulated hypotheses in the present study. Drawing of inferences from the regression analysis findings was done at 5% level of significance.

### 3.8 Diagnostic Tests

To assess the precision of the regression model and the appropriateness of the data, diagnostic tests were carried out to verify the statistical significance of all coefficients. These tests included examinations for multicollinearity, normality, and stationarity.

#### 3.8.1 Multicollinearity Tests

The study employed Variance Inflation Factors (VIF) to determine the absence of a linear relationship among predictor variables. A VIF value of 1 suggests no correlation among predictor variables, while a value exceeding 5 signifies a high correlation among these variables (Everitt & Skrondal, 2010). This therefore means that higher value of Variance Inflation Factors (VIF) indicates the existence of more multicollinearity (Dodge, 2008). The higher the VIF, the higher the probability of multicollinearity hence need to drop one of the predictor variables.

### **3.8.2 Normality Test**

Homoscedasticity denotes absence of multicollinearity by ensuring the study results are not overstated or understated hence guaranteeing a higher degree of stability of results. Normality was used to describe a symmetrical, bell-shaped curve, characterized by its peak frequency of scores at the centre and decreasing frequencies towards the extremes. (Pallant & Bailey, 2005). The study used a common measure for normality test of P-P plots, histograms as well as Shapiro–Wilk statistics was used but for this study, Shapiro–Wilk statistics was used.

### **3.9 Ethical Consideration**

The researcher prioritized confidentiality, informed consent, and research originality throughout the study. To safeguard confidentiality, respondents were identified using random letters instead of names or identifiable descriptions. The information shared by respondents, along with their departmental affiliations, remained undisclosed to third parties. It was used anonymously for policy influence related to addressing pandemic disruptions in the public sector and for academic purposes, as specified by the study. Informed consent was actively sought from all participants, with the flexibility for any participant to withdraw at any stage of responding to questionnaire items. The study strictly prohibits coerced or forced participation.

Participants in the sample had the voluntary option to partake in the study. Upholding research credibility, the researcher firmly rejects any form of dishonesty, fabrication, plagiarism, or unethical conduct. Consent was sought whenever necessary. To ensure ethical conduct, the researcher secured ethical clearance from the Strathmore Ethics Committee (SERSRC) and obtained approval from NACOSTI before initiating data collection from respondents. This comprehensive approach underscores the commitment to ethical standards and research integrity.

### **3.10 Chapter Summary**

This section covers essential components including the demographic under study, methods of sampling, procedures for data collection, and the methodologies used for data analysis and presentation. It is divided into various sections such as research design, target population, sample size determination methods, data collection protocols, and data analysis techniques. This systematic breakdown ensures a thorough and cohesive

examination of the study's methodology, facilitating clarity and understanding for readers. Additionally, it provides a framework for ensuring robustness and reliability in the research process.



## CHAPTER FOUR: RESEARCH FINDINGS, ANALYSIS AND PRESENTATION

### 4.1 Introduction

The purpose of this study was to find out the priority sustainable finance projects by commercial banks in Kenya. This chapter therefore presents results and discussions of the study from the data collected through the questionnaires in which the researcher sorted views and opinions on the priority sustainable finance projects by commercial banks in Kenya. The chapter is divided into five sections that include the response rate, the general information of the respondents; the descriptive statistics of the variables under investigation; and the diagnostic analysis and the inferential statistical analysis of the data collected.

### 4.2. General Information

The study had sought to establish the general information of the respondents. The general information was crucial in ensuring that the study included the respondents intended for the study; their gender age, education level and how long they had been served universities and therefore understood the relationship between student's Admission Policies and Quality of University Education in Private Universities with their HQ in Nairobi, County. The response is shown in table 4.1 below. The study targeted 37 respondents that included Business Development Units from each of the commercial banks covered in Kenya.

**Table 4.1: General Information**

<b>Response</b>	<b>N (%)</b>
<b>Category of the respondents</b>	
Business Development Managers	26(70.3)
Business Development Directors	8(21.6)
Others	3(8.1)
<b>Total</b>	<b>37 (100.0)</b>
<b>Years worked in Bank</b>	
Less than 2 years	7(18.9)
2-5 years	9(24.3)
6-10 years	15(40.5)
Above 10 years	6(16.2)
<b>Total</b>	<b>37 (100.0)</b>
<b>Years worked in Project Finance in the Bank</b>	
Less than 2 years	14(37.8)
2-5 years	15(40.5)
6-10 years	5(13.5)

Above 10 years	3(8.1)
<b>Total</b>	<b>37 (100.0)</b>
<b>Role in Project Finance</b>	
Policy Development	10(27.0)
Policy Implementation	20(54.1)
Fund Evaluation	6(16.2)
Credit Financing	1(2.7)
<b>Total</b>	<b>37 (100.0)</b>

The study established that out of the 37 respondents that participated from each of the bank covered by the study indicated that 70.3% of these respondents were Business Development Managers, 21.6% were Business Development Directors while 8.1% of the respondents were other respondents although from the same targeted departments were not from the tow category of the respondents. Results also indicated that 18.9% of the respondents had worked with the commercial banks for less than 2 years, 24.3% had worked with the commercial banks for between 2-5 years, 40.5% of the respondents had worked for the banks for 6-10 years while 16.2% had worked for the commercial banks for above 10 years.

The results also indicated that 37.8% of the respondents had worked in the position of Project Finance in the commercial Banks for less than 2 years, 40.5% had worked in the position of Project Finance in the commercial Banks for between 2-5 years, 40.5% of the respondents had worked in the position of Project Finance in the commercial Banks for 6-10 years while 8.1% had worked with in such position for above 10 years. Lastly, the findings of the study established that 27.0% of the respondents had been involved in Policy Development for Project Finance, 54.1% participated in Policy Implementation in Project Finance in the commercial Banks they worked for, 16.2% of the respondents were involved in the evaluation of project finance while 2.7% were involved in credit financing.

#### **4.3 Diagnostic Analysis**

The study also carried out a diagnostic test before carrying out the regression tests. This was conducted to ensure that the model assumptions are met. The study utilized the collinearity tests as described below.

### 4.3.1 Collinearity Test

The study used Variance Inflation Factors (VIF) to ensure that there is no linear relationship between predictor variables in this study. A VIF value that is equal to 1 indicates lack of correlation among predictor variables while a value that is more than 5 indicates a high correlation among predictor variables (Frost, 2020).

**Table 4.2: Collinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
1 Corporate Governance characteristics	.267	3.819
Financial Characteristics	.189	4.122
Firm level factors	.382	2.341
Bank Managers Perception	.367	1.678

From Table 4.2 above, Corporate Governance characteristics, Financial Characteristics, Other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and Bank Managers Perception have a VIF of 3.819, 4.122, 2.341 and 1.678 respectively. This implies that there is no correlation among the independent variables hence the data could be subjected to regression analysis. Additionally, the estimated regression coefficient indicated by all the variables that are less than 5 are not inflated due to collinearity.

### 4.3.2 Normality Test

The findings on normality were determined and summarized as indicated in Table 4.3.

**Table 4.3: Normality Test**

Shapiro-Wilk	Statistic	Sig.
Corporate Governance characteristics	.904	.054
Financial Characteristics	.853	.072
Other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier)	.964	.067
Bank Managers Perception	.895	.112

Shapiro-Wilk test of normality was conducted to determine whether Corporate Governance characteristics, Financial Characteristics, Other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and Bank Managers Perception data is normally distributed. We accept the null hypothesis for all the data set for all the variables ( $p = .054$ ;  $p = .072$ ,  $p = .067$  and  $p = .112$ ) and conclude

that data for corporate governance characteristics, financial characteristics, other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and Bank Managers Perception data is normally distributed and therefore the four data set were fit for analysis.

#### 4.4 Prioritization of Sustainable Finance Projects by Commercial Banks

The study aimed at determining the prioritization of sustainable finance projects by commercial banks in Kenya. This objective was realized through a question that had been presented to respondents where they were required to provide ranking from the most important to the least important. List them from the least important to the most important: (1-Least Important ,2-Important, 3-Most Important). Table 4.4.

**Table 4.4: Project Important Area**

<b>Project Important Area</b>	<b>Ranking</b>
Education Project	5
Health Project	6
Enterprises	4
Green Energy	1
Climate adaptation	2
Agriculture and Food security	3

The findings of the study in Table 4.4 were that Green Energy was ranked highest when it comes to sustainable finance, followed by Climate adaptation then Agriculture and Food security in that order. The results also indicated that health projects were among the least of the sustainable projects financed by the commercial banks in Kenya. Although most of the leading banks in terms of assets base supported **enterprises** compared to other banks that had low asset base.

#### 4.5 Bank Characteristics and Prioritization of Sustainable Finance Projects

The study was set out to establish the effect of bank characteristics on prioritization of sustainable finance projects by commercial banks in Kenya. Bank characteristics in this study were represented by corporate governance, financial characteristics and bank specific factors.

##### 4.5.1 Descriptive Statistics on Bank Characteristics

Disruptive statistics on bank characteristic were determined and the findings summarized as indicated in Table 4.5

**Table 4.5: . Descriptive Statistics on Bank Characteristics**

<b>Bank Board Size</b>	<b>Frequency</b>	<b>Percentage</b>
5 and below	4	10.8
6-9 Members	16	43.2
10-14 Members	13	35.1
15-20 Members	3	8.1
Above 20 Members	1	2.7
<b>Total</b>	<b>37</b>	<b>100.0</b>
<b>Sustainability Factors</b>	<b>Response</b>	
	<b>Yes, N (%)</b>	<b>No, N (%)</b>
Bank has sustainable finance committee	13(35.1)	24(64.9)
The bank provides financial or non-financial incentives to encourage clients to undertake sustainable initiatives	<b>15(40.5)</b>	<b>22(59.5)</b>
The bank has a long sustainable goal	<b>19(45.9)</b>	<b>18 (54.1)</b>
Private Banks finance sustainable more project compared to public commercial banks	24(64.9)	12(32.4)
Foreign owned banks support sustainable project compared to local banks	29(78.4)	8(21.6)
The banks with international presence support sustainable project more compared to local banks	27(73.0)	<b>10(27.0)</b>
Banks in Tire 1 support sustainable projects more than others	28(75.6)	<b>9(24.4)</b>
<b>Banks financial performance factors</b>	<b>Yes</b>	<b>No</b>
The bank's profitability influences the levels of project finance among commercial banks	26(70.3)	11(29.7)
More profitable banks support more project finance among commercial banks	23(62.2)	14(37.8)

Results in Table 4.5 indicate that 10.8% of the commercial banks in Kenya had a board membership size of 5 and below, 43.2% had had a board membership of 6-9 Members while 35.1% of them had a board size of 10-14 board Members. The study also established that 8.1% of the commercial banks in Kenya had 15-20 board members while only 2.7% had a board membership of above 20 Members. Results indicated that Cooperative Bank of Kenya had the highest number of board members followed by Access Bank Kenya while Citibank, Kingdom Bank Limited and Paramount Universal Bank had the least number of board of directors.

There was highest agreement among respondents was that foreign owned banks support sustainable project compared to local banks at 78.4%, followed by banks in Tire 1 support sustainable projects more than others at 75.6% and that the banks with international presence support sustainable project more compared to local banks at

73.0%. The results also indicated that the least agreement was that only 35.1% of the commercial banks covered by the study had sustainable finance committee at 35.1%, banks providing financial or non-financial incentives to encourage clients to undertake sustainable initiatives was only while the bank has a long sustainable goal at 40.5%.

The study established that the bank's profitability influences the levels of project finance among commercial banks by 70.3% while the more profitable the commercial banks is the more they are able to support project finance. This indicated that the more profitable banks have high percentage support of sustainable finance initiatives as they have more resources to invest in sustainable finance.

#### 4.5.2 Regression Results Linking Bank Characteristics and Prioritization of Sustainable Finance Projects

Linear regression analysis was performed to establish the effect of bank characteristics on prioritization of sustainable finance projects. Table 4.3 gives an overview of the findings.

**Table 4.6: Regression Results Linking Bank Characteristics and Prioritization of Sustainable Finance Projects**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.874a	0.763	0.759	0.434943		
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		.521	.158		-3.291	.001
Bank characteristics		.431	.058	.399	7.496	.000

The findings in Table 4.6 indicate the value of R-square as 0.763, this means that 76.3% change in prioritization of sustainable finance projects by commercial banks in Kenya can be explained by their specific characteristics. The p-value in Table 4.3 being 0.000 i.e.  $p < 0.05$ , it follows that bank characteristics are significant predictors of prioritization of sustainable finance projects.

#### 4.6 Managers' Perspectives and Prioritization of Sustainable Finance Projects

This study examined the effect of managers' perspectives on prioritization of sustainable finance projects by commercial banks in Kenya. This objective was achieved through descriptive statistics and linear regression analysis as indicated below:

#### 4.6.1 Descriptive Statistics on Managers' Perspectives

Descriptive statistics on managers' perspectives were established and summarized as indicated in Table 4.7.

**Table 4.7: Descriptive Statistics on Managers' Perspectives**

Statement	Yes	No
Does your role involve integrating sustainable initiatives considerations into financial decision-making processes?	25(68%)	12(32%)
How would you rate the overall understanding of sustainable finance concepts among managers within the bank?	<b>Knowledgeable</b>	<b>Very Knowledgeable</b>
	19 (51%)	18(49%)
Is it more profitable to finance other projects other than Sustainable project?	<b>Yes</b>	<b>No</b>
	22 (59%)	15 (41%)
Sustainable project does not provide better business opportunity for banks	<b>Yes</b>	<b>No</b>
	16 (43%)	21 (57%)

The findings in Table 4.7 show that 68% for most of the respondents, their roles involved integrating sustainable initiatives considerations into financial decision-making processes. Similarly, 51% of the respondents were knowledgeable on sustainable finance concepts among managers within the bank. At the same time, 59% of the respondents believed that it was more profitable to finance other projects other than Sustainable project while 57% disagreed on whether sustainable project provided better business opportunity for their banks.

#### 4.6.2 Linear Regression Results Linking Managers' Perspectives and Prioritization of Sustainable Finance Projects

The findings of linear regression analysis were determined linking managers' perspectives and prioritization of sustainable finance projects and the findings are as summarized in Table 4.8.

**Table 4.8: Linear Regression Results Linking Managers' Perspectives and Prioritization of Sustainable Finance Projects**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
2	.796	.633	.631	2.32502		
		<b>Unstandardized Coefficients</b>	<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>	
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)		.521	.158		-3.291	.001
Managers' Perceptions		.325	.049	.661	6.623	.000

From Table 4.8, it is clear that 63.3% change in prioritization of sustainable finance projects by commercial banks in Kenya can be explained by their managers' perceptions. This implies that there exist other factors aside from managerial perceptions that can affect prioritization of sustainable finance projects that future studies should focus on. At 5%, it was evident that managers' perceptions were significant predictors and enablers of prioritization of sustainable finance projects by commercial banks in Kenya.

#### **4.7 Chapter Summery**

The general respondent information, descriptive statistics, the Collinearity Test, and inferential statistics, such as correlation and multilinear regression analysis, are all provided in this chapter. The chapter also shows the analysis from both qualitative and quantitative data.



## **CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter covers various sections including the discussions of the study findings, the conclusion and the recommendations of the study. The chapter covered the recommendations, limitations of the study as well as suggestions for further research.

### **5.2 Discussions of the study findings**

A discussion of the findings after analysis is set out in subsequent sections:

#### **5.2.1 Prioritization of Sustainable Finance Projects by Commercial Banks in Kenya.**

The findings of the study indicated that although the commercial banks prioritized sustainable finance in education, Enterprise and health sector, the education subsector that the commercial banks prioritized sustainable finance in the primary school sub-sector followed by secondary school with little funds directed to tertiary institutions. The health subsector remains among the top sectors that are prioritized by the commercial banks for sustainable finance, as Medical Equipment and Pharmaceutical components in the health sector being the most funded through sustainable finance followed by medical Infrastructure with little funds directed to Medical Insurance.

In the enterprise sector, Manufacturing and Retail are the most prioritized by the commercial banks for sustainable finance followed by Macro and Micro Projects respectively while in the green energy, the commercial banks prioritized sustainable finance on solar projects followed by Biogas Projects with Geothermal and Windmill Projects pointed to be the least focused on by the commercial banks in Kenya. On the other hand, the commercial banks Kenya prioritized sustainable finance for Climate Adaptation subsector that the commercial banks preferred for sustainable finance was Purchase of water tanks Projects followed by the purchasing of clean energy vehicles projects with little focus on plantation of trees, restoration of vegetation and roads projects.

Lastly, in the agriculture sectors, the area that the commercial banks prioritized was Climate Smart Farming Projects followed by drought resistant farming while

Sensitization of Climate Smart Farming Projects was the least prioritized by commercial banks in Kenya. Effective policies are required in the Implementation in Project Finance in the commercial Banks as cited by a study Alliance for Financial Inclusion (2023) that urgent development of policy and regulatory frameworks within the commercial banking sector to expedite sustainable finance, aligning with the Paris Agreement and the Sustainable Development Goals (SDGs). The importance of prioritization of Sustainable finance have also been emphasized by Mangwa and Jagongo (2022) who underscored the importance of diversifying revenue streams and collaborating with stakeholders for sustainable financial growth

### **5.2.2 Bank Characteristics and Prioritization of Sustainable Finance Projects by Commercial Banks in Kenya**

Corporate Governance and Financial Characteristics were significant in prioritization of Education Sustainable Projects and initiative, Characteristic that include Bank type whether private or public and bank Tier and Financial Characteristics were significant in the prioritization of Health Sustainable Projects and initiative, Financial Characteristics and Corporate Governance were significant in the prioritization of the prioritization of green energy projects while Financial Characteristics and Corporate Governance significantly influenced the prioritization of enterprise Sustainable Projects and initiative in the commercial banks in Kenya. The results also indicated that prioritization of sustainable finance targeting Climate Adaptation Projects and initiative were significantly influenced by Financial Characteristics, Corporate Governance and Other Characteristic that includes Bank type whether private or public and bank Tier) were significant. Lastly, all the four factors of Financial Characteristics, Corporate Governance, Other Characteristic that include Bank type whether private or public and bank Tier were significant and Project Characteristics significantly influenced the prioritization of sustainable finance targeting agriculture and foods sustainable projects.

The finding of the study highlights commercial banks characteristics as a determining factor in prioritizing sustainable finance to various sectors supporting findings by Jiang, Xu, Cui and Subhani (2023) who highlighted a significant positive correlation between funding liquidity and the growth of sustainable bank lending, indicating that funding liquidity contributes to boosting the capacity for sustainable bank lending. The

significance influence of financial factors in sustainable financing were also cited by Odongo et al. (2022) who established a positive effect of liquidity on the growth of sustainable bank lending although a study by conducted in Kenya found no significant relationship between CAR and sustainable financing by banks. The study also identified corporate governance and especially board size as critical in influencing sustainable finance prioritization which supports findings by Cakti and Aryan (2021 that established that only board size had a positive and notable influence on sustainable finance. Meanwhile, factors like board gender, board education, and foreign board presence were deemed insignificant.

### **5.2.3 Effects of Managers' Perspectives on Prioritization of Sustainable Finance Projects by Commercial Banks in Kenya**

Corporate governance plays a pivotal role in shaping sustainable finance practices within commercial banks. Banks with robust corporate governance structures are inclined to prioritize sustainable finance across diverse customer segments and sectors. To incentivize clients towards sustainable initiatives, these banks often offer financial and non-financial incentives, such as reduced interest rates for sustainable projects across various sectors and extended loan durations for supporting sustainable financing efforts. Moreover, these banks may provide advisory services and expertise to help clients integrate sustainability into their business strategies effectively. Notably, the extent of sustainable finance engagement is closely linked to a bank's profitability. Banks that generate higher profits are more likely to allocate resources and support sustainable finance endeavors, reflecting a symbiotic relationship between financial success and environmental and social responsibility. Additionally, regulatory frameworks and industry standards can influence banks' approaches to sustainable finance, with transparent reporting and accountability mechanisms further reinforcing the importance of corporate governance in driving positive environmental and social outcomes through financial activities.

There is need for the commercial banks to ensure that the conditions for sustainable finance are not overly stringent, facilitating easier access to sustainable financing. Slow integration of sustainable finance was also cited by Barthet (2021) that revealed uneven progress in integrating these aspects into banking portfolios due to uncertainty about the

impact of SDG interventions. Additionally, as indicated in the study, lack of effective policies was also a hindrance towards sustainable finance by commercial banks in Kenya and supports recommendations by Indian Chambers of Commerce and Industry Federation (2022) that there is need for the development of a banks and financial institutions' sustainable financing policy, emphasizing key green economy priority areas and factors that could foster increased financing for sustainable projects and initiatives.

The findings indicated that compared to other projects, education projects were still ranked first, followed by Energy and then health as the sectors that the banks supported sustainable finance. The managers believed that larger banks in terms of assets and made the highest profits supported were more involved in project finance compared to smaller banks. Additionally, international banks supported sustainable finance compared to the other banks with only their operations in Kenya. The findings of the study indicated that the perception of low profitability of sustainable finance was the reason for low implementation among commercial banks in Kenya. This supports findings by Procopio et al (2020) that the priority areas for sustainable finance is still determined by the common business drivers such as profitability and Song et (2019) who stated that prioritization of sustainable projects within the banking sector is driven by the potential for profitability in environmentally conscious investments.

### **5.3 Conclusion**

The study findings reveal that commercial banks have shown a preference for prioritizing sustainable finance in the education, enterprise, and health sectors, particularly within private organizations. This emphasis on private entities may stem from commercial banks tailoring their sustainable finance initiatives to align with the commercialized nature of these organizations. Notably, commercial banks often structure their sustainable finance offerings similarly to commercial loans, providing extended repayment periods to accommodate the financial dynamics of these entities. Additionally, some banks incentivize sustainable finance by offering low-interest rates on loans extended to customers engaging in sustainable initiatives, further encouraging adoption and investment in environmentally and socially responsible projects.

The findings of the study also indicated that corporate governance and financial characteristics had the most significant influence in prioritization of sustainable project in the areas of education, health, green energy projects, enterprise, climate adaptation agricultural and food security projects by commercial banks in Kenya. Corporate Governance frameworks guide banks in making strategic decisions aligned with environmental and social responsibilities, while financial characteristics determine the feasibility and profitability of sustainable initiatives. Moreover, the study reveals that factors such as Bank Type (private or public) and Bank Tier significantly impact the prioritization of sustainable finance, highlighting the diverse approaches taken by different banking institutions. Additionally, Project Characteristics emerge as a significant determinant, particularly in the prioritization of sustainable finance targeting agriculture and food sustainability projects, reflecting the nuanced considerations involved in financing initiatives with specific environmental and social objectives. These findings provide valuable insights into the factors shaping sustainable finance practices within the Kenyan banking sector and underscore the importance of robust governance frameworks and financial considerations in driving positive environmental and social impacts through financial activities.

Managers' perceptions indicate the correlation between robust corporate governance and the likelihood of commercial banks employing sustainable finance across various customer segments and sectors in Kenya. The study illuminates the proactive measures undertaken by Kenyan commercial banks to incentivize clients to engage in sustainable initiatives, including offering reduced interest rates for sustainable projects spanning diverse sectors. Furthermore, the level of sustainable finance engagement appears to be closely tied to commercial bank profitability, with higher profits correlating with greater support for sustainable finance endeavors. Notably, Education projects emerged as the top priority for sustainable finance, followed by Energy and Health sectors, indicating a strategic focus on areas with significant societal and environmental impact. Larger banks, characterized by substantial assets and profitability, exhibited greater involvement in project finance compared to smaller counterparts, underscoring the influence of financial capacity on sustainable finance initiatives. Moreover, banks with operations solely within Kenya demonstrated a comparatively higher commitment to supporting sustainable

finance, highlighting the importance of local context and market dynamics in driving sustainability efforts within the banking sector. These findings provide valuable insights into the strategic priorities and operational dynamics shaping sustainable finance practices among commercial banks in Kenya.

#### **5.4 Implications of Research**

Different stakeholders can derive the findings of the study to exercise judgments differently depending on their need. The study findings have implications on management, knowledge and policy makers.

##### **5.4.1 Contribution to Policy**

Commercial banks in Kenya play a significant role in supporting the economy and spurring economic growth across the country. They are also a source of employment for many Kenyans. Sustainable development is becoming critical across the world and commercial banks can provide a source for much required resources to support across many sectors. This makes the sustainable finance a matter of policy concern. Additionally, with sustainable finance being identified as one of the priority sectors, the commercial banks need to enhance sustainable finance to ensure that effective funding for sustainable projects. Drawing from the insights of this study, commercial banks are poised to enhance their sustainable finance initiatives, identifying opportunities and prioritizing sectors for such financing. Moreover, the Central Bank of Kenya and the Bankers Association of Kenya stand to benefit from the study's findings, enabling them to enact policy interventions and provide guidelines on prioritizing areas for sustainable finance, particularly among the diverse array of financial institutions comprising Kenya's banking landscape.

##### **5.4.2 Contribution to the Management**

The study findings suggest that prioritizing of sustainable finance is critical for sustainable finance among commercial banks in Kenya and therefore, in order for commercial banks to fully implement sustainable finance and benefit from the new opportunities provided in the current market development, they need to ensure that they understand the areas that need prioritization in funding and identify how best they can

benefit from it. Specifically, they need to identify the priority areas that are not only viable but also will benefit them in terms of return on investment. Based on the findings all the above prioritization areas are critical in ensuring that the benefit from the new opportunities provided in the current market development. Further the findings of this study provide insight to the management on necessary policies and requirements that can ensure the effective implementation of sustainable finance. The management of the commercial banks will also understand the factors that affect the prioritization of sustainable finance.

### **5.4.3 Contribution to Knowledge**

The study specifically viewed prioritizing of sustainable finance in terms of financial characteristics, Corporate Governance characteristics and other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and bank managers' perception on sustainable financing and priority areas for sustainable financing. The findings indicated a significance relationship between financial characteristics, Corporate governance characteristics and other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and bank managers' perception and university ranking of sustainable financing. Reference to in applying the peer emulation theory of sustainable finance to our study where the study stresses that economic actors are more inclined to pursue particular sustainable financing objectives simply because their respected peers have already adopted them or have a history of doing so.

Additionally, the adaptation of sustainable finance will present disruption to the other banks activities. In applying the system disruption theory of sustainable finance to the study, striving for sustainable finance objectives could disturb the existing framework of the traditional financial system, consequently affecting businesses that heavily depend on conventional financing. Based on the findings, scholars will use it as a basis for further studies to expand knowledge. The findings of this study are in support of the significance relationship between financial characteristics, Corporate Governance characteristics and other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and bank managers' perception and university ranking of sustainable financing among commercial banks in Kenya. This perspective underscores

the potential for coexistence and collaboration between traditional and sustainable financial practices, providing opportunities for gradual and voluntary adoption of sustainable principles within the financial landscape. (Gutterman, 2020; Krauss, Krüger, and Meyer, 2016; Ozili, 2021).

Therefore, the study recommends that Central Bank of Kenya as a regulator of the financial sector in Kenya provide policy directive to ensure that there is increased prioritization of sustainable finance and assist in conducting a proper examination of the priority areas for sustainable finance. Additionally, the commercial banks need to identify the various challenges in adaptation of sustainable finance to ensure that all drawbacks are addressed and that the Commercial Banks establish priority areas and projects for sustainable finance.

### **5.5 Suggestion for Further Studies**

The study recommends further research on the rate of return of sustainable finance and other lending ventures and investment so that the banks can make effective decision on the best option for sustainable finance. There is also need to conduct a study on the factors that affect the sustainable finance in commercial banks in Kenya in various sectors that include education, health, climate change, enterprising, food and security among others. The study also recommends that commercial bank identify policy gaps in sustainable finance and ensure that proper policies are put in place in order to ensure that all the banks do not only help in addressing the effects of climate change and supporting sustainable projects and initiative but also plays a critical role in providing the necessary funds required for supporting sustainable projects in Kenya.

### **5.6 Study limitations and suggestions for further studies**

The study was limited to only covered four variables that included corporate Governance characteristics and other characteristics (whether the bank is private or public, whether the bank is local or international and the bank tier) and bank managers' perception and university ranking of sustainable financing among commercial banks in Kenya (or variables). Future studies should include factors that may affect prioritization of projects in sustainable finance. The study only focused on key respondents from only one unit

(that is directly associated with sustainable finance) and therefore the findings may not be as exhaustive enough as required, future studies should focus on a wider range of respondents for more compressive findings.



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## APPENDICES

### APPENDIX I: INTRODUCTORY LETTER

Cla Bangale Rd, Machakos Estate  
P O Box 59857 - 00200, Nairobi, Kenya.  
Cell: +254 703 034 414/5/7, Twitter: @SBSKenya  
Facebook/LinkedIn: Strathmore Business School  
Email: info@sbs.ac.ke or visit www.sbs.strathmore.edu



Tuesday 30<sup>th</sup> April 2024

To Whom It May Concern,

**RE: FACILITATION OF RESEARCH – REHEMA WANJA RIZIKI**

This is to introduce Rehema Wanja Riziki, a Master of Science in Development Finance (MDF) student at Strathmore University Business School, admission number MDF/089100/20. As part of our MDF Programme, Rehema is expected to do applied research and undertake a project. This is in partial fulfilment of the requirements of the MDF course. To this effect, she would like to request appropriate data from your organization.

Rehema is undertaking a research paper on *“An Evaluation of Priority Sustainable Finance Projects by Commercial Banks in Kenya”* The information obtained shall be treated confidentially and shall be used for academic purposes only.

Our MDF Programme seeks to establish links with industry, and one of the ways of doing so is directing our research to areas that would be of direct use to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest and of practical value to your organization.

We appreciate your support and shall be willing to provide any further information if required.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Alois Njenga".

Alois Njenga,  
Manager – Graduate Programmes,  
Strathmore University Business School.

Strathmore University Business School is a proud member of:



**APPENDIX II: RESEARCH QUESTIONNAIRE INTERVIEW GUIDE FOR OFFICER IN CHARGE OF SUSTAINABLE FINANCE/PROJECTS**

**GENERAL INFORMATION**

Kindly read carefully and fill the following questionnaire using the provided instruments in each section.

The data collected through this questionnaire will be handled with the highest level of confidentiality. The report of the study will not make any reference to specific organizations or individuals.

**SECTION A : RESPONDENTS DETAILS**

1. What is your current position?  
.....
2. How long have you worked for commercial banks in Kenya?.....
3. How long have you worked in sustainable finance?.....
4. What is your role within the bank, particularly concerning sustainable finance?.....

**SECTION B:**

**SECTION C: RANKING OF SUSTAINABLE PROJECTS FOR FINANCING BY COMMERCIAL BANKS IN KENYA**

5. Please rank the following sustainable projects financing areas from the most important to the least important. List them from the least important to the most important: (1-Least Important ,2-Important, 3-Most Important)

Project Important Area	Least Important	Important,	Important,
Education Project	1	2	3
Health Project	1	2	3
Enterprises	1	2	3

Green Energy	1	2	3
Climate adaptation	1	2	3
Agriculture and Food security	1	2	3

**SECTION C: BANK CHARACTERISTICS**

6. What is the board size of your organization?.....
7. Does the bank have a Sustainable Finance(SF) Committee?  
 Yes                       No
8. Does the bank's Profitability influence the levels of project finance among commercial banks?  
 Yes                       No
9. Can you say that more profitable banks support more project finance among commercial banks?  
 Yes                       No
10. Do Private Banks finance sustainable more project compared to public commercial banks?  
 Yes                       No
11. Can you say that foreign owned banks support sustainable project compared to local banks?  
 Yes                       No
12. Do the banks with international presence support sustainable project more compared to local banks?  
 Yes                       No
13. Do Commercial Banks in tier 1 support resource intensive sustainable projects?  
 Yes                       No

**SECTION D: MANAGERS PERCEPTION ON SUSTAINABLE PROJECT FINANCE**

**Please respond to the following question based on your opinion and give explanations where need be:**

14. Does your role involve integrating sustainable initiatives considerations into financial decision-making processes?  
 Yes                       No

15. How would you rate the overall understanding of sustainable finance concepts among managers within the bank?

Least Knowledgeable  Knowledgeable  Very Knowledgeable)

16. Is it more profitable to finance other projects other than Sustainable project?

Yes  No

17. Sustainable project does not provide better business opportunity for banks.

Yes  No

**Thank You for Your Participation**



**APPENDIX III: INTERVIEW GUIDE FOR OFFICER IN CHARGE OF SUSTAINABLE FINANCE/PROJECTS**

The study seeks to evaluate priority sustainable finance projects by commercial banks in Kenya.

Instruction: The following are questions which you are requested to fill on the evaluate priority sustainable finance projects by commercial banks in Kenya.

You are kindly requested to respond to the questions with utter most sincerity. Information obtained from this questionnaire will be treated with uttermost confidentiality.

**Section A : General Information**

- 18. What is your current position? .....
- 19. How long have you worked for commercial banks in Kenya?.....
- 20. How long have you worked in sustainable finance?.....
- 21. What is your role within the bank, particularly concerning sustainable finance?.....

**Section B: Organizations Details**

- 1. Do you think that corporate governance influences sustainable finance by commercial banks.....
- 2. Please explain if any the financial or non-financial incentives to encourage clients to undertake sustainable initiatives.....
- 3. Can you say that the levels of sustainable finance depend on the commercial bank profitability.....
- 4. Please explain how does your bank determine the terms and conditions associated with sustainable financing.....

.....  
.....  
5. Please outline the long-term sustainable initiatives goals your bank has set for itself, particularly in the context of financing projects.....  
.....  
.....

**Section C: Ranking of Sustainable Projects for Financing by Commercial Banks In Kenya**

Which projects do you prefer financing

- i) Private
- ii) Public

Please explain

.....  
.....

How do you rank the following sustainable projects financing areas

- Education Project
- Health Project
- Enterprises
- Green Energy
- Climate adaptation
- Agriculture and Food security

Please explain

.....  
.....

**Section D: Managers Perception on Sustainable Project Finance**

Provide examples of how sustainable initiatives factors influence investment or financing decisions in the bank?

- i) .....
- ii) .....
- iii) .....
- iv) .....
- v) .....

From your perspective, what are the main challenges or barriers managers face in implementing sustainable finance practices?

- i) .....
- ii) .....
- iii) .....
- iv) .....
- v) .....

Please explain how these challenges be addressed to facilitate a smoother integration of sustainable initiatives in financial decision-making

.....  
.....

In your opinion, please explain the extent to which sustainable finance practices align with the overall corporate objectives and goals of the organization.....

From your perspective, please explain the future trends and priorities for sustainable finance within the bank.....

.....  
.....

**THE END**

**THANK YOU FOR YOUR PARTICIPATION**

## APPENDIX III: ETHICAL APPROVAL



24<sup>th</sup> April 2024

Ms Riziki Rehema,  
rehema.riziki@strathmore.edu

Dear Ms Riziki,

**RE: An Evaluation of Priority Sustainable Finance Projects by Commercial Banks in Kenya**

This is to inform you that SU-ISERC has reviewed and approved your above SU-masters research proposal. Your application reference number is SU-ISERC2180/24. The approval period is from 24<sup>th</sup> April 2024 to 23<sup>rd</sup> April 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.
- 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,

Mr Ambrose Rachier,  
Chairperson; SU-ISERC

**APPENDIX IV: NACOSTI PERMIT**

  
**REPUBLIC OF KENYA**

  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION**

**RefNo: 341627** **Date of Issue: 13/May/2024**

**RESEARCH LICENSE**



**This is to Certify that Ms. Rehema Riziki 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: An Evaluation of Priority Sustainable Finance Projects by Commercial Banks in Kenya for the period ending : 13/May/2025.**

**License No: NACOSTI/P/24/35253**

**341627**  
**Applicant Identification Number**

  
**Director General  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY &  
INNOVATION**

**Verification QR Code**



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Scan the QR Code using QR scanner application.**

**See overleaf for conditions**

## APENDIX VI: LICENSED COMMERCIAL BANKS IN KENYA

1. ABC Bank (Kenya)
2. Absa Bank Kenya
3. Access Bank Kenya
4. Bank of Africa
5. Bank of Baroda
6. Bank of India
7. Citibank
8. Consolidated Bank of Kenya
9. Cooperative Bank of Kenya
10. Credit Bank
11. Development Bank of Kenya
12. Diamond Trust Bank
13. Ecobank Kenya
14. Equity Bank Kenya
15. Family Bank
16. First Community Bank
17. Guaranty Trust Bank Kenya
18. Guardian Bank
19. Gulf African Bank
20. Habib Bank AG Zurich
21. Housing Finance Company of Kenya
22. I&M Bank
23. Kingdom Bank Limited
24. Kenya Commercial Bank
25. Mayfair Bank
26. Middle East Bank Kenya
27. M Oriental Bank
28. NCBA Bank Kenya
29. Paramount Universal Bank
30. Prime Bank (Kenya)
31. SBM Bank Kenya
32. Sidian Bank
33. Spire Bank
34. Stanbic Holdings Plc
35. Standard Chartered Kenya
36. United Bank for Africa
37. Victoria Commercial Bank

**Source: CBK (2023)**

