

Green Financing and Financial Performance of Listed Commercial Banks in Kenya

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Abstract: Purpose: The aim of this study is to investigate the influence of green financing on the financial performance of the listed commercial banks in the Nairobi Securities Exchange.

Materials & Method. For purpose of this research, an empirical approach was adopted whereby secondary data was used to draw inferences. Secondary data is that which has already been collected and conclusions drawn from. Thus, the study involved obtaining data from already published research materials which form a basis of reliable data for evaluation and interpretation. Notably, the secondary data consists of published articles, journals, and articles that were obtained in libraries and online through referred journal sites.

Results: From analysis of the existing literature, the study identifies presence of contextual, conceptual and population gaps that validates the need for further research with regards to the topic under study.

Unique contribution to theory, practice and policy. The Study will provide crucial information to the listed commercial banks in Kenya who rely on new business opportunities to increase their revenues as well as relevant governmental and nongovernmental agencies that are concerned with sustainable economic development. The article also contributes to the existing body of literature not only within the Kenyan context, but regionally and globally as efforts are made to mitigate against climate change.

Keywords: green financing; sustainable financing, financial performance; listed commercial banks.

1. INTRODUCTION

In the current global economy, one of the most significant and complicated challenge involves dealing with the environment with the key concern being how to minimize or completely avoid the consequences that arise from environmental degradation. According to Xu (2020), it is the United Nations Framework Convention on Climate Change that was held at the tail end of the 20th century that issues regarding the reduction of global emissions of environmental degrading discharges such as carbon dioxide amongst other greenhouse gases were discussed. Xu (2020) further notes that the Kyoto protocol that preceded the initial convention came up with the standards to be applied to reduce carbon emissions to protect the environment. Thus, the convention provided the basis for countries to pay attention to emission reduction, energy conservation, and air pollution. Individuals, governments, and the new entrants that are corporates have shown concern towards this problem and they have directed their efforts into conservation of the environment. In the developed countries, customers are inclined towards climate friendly products and services and as such, it has made corporates to align themselves to this new direction by adjusting their policies and business strategies with an aim of utilizing resources in a manner that protects the environment and thus, influencing climate change (Julia & Kassim, 2016). Furthermore, it has encouraged countries to develop and adopt measures to develop a green economy.

Thus, green Financing can be taken to denote an innovation in the financial sector and can be seen as a concept which entails the sustainable progress and development of the economy within a society. According to Lindenberg, (2014) green

finance encompasses financing of the private and public green investments, financing of policies that encourage initiatives that protect the environment from environmental damage, and it also integrates the core components of the financial systems that have a significant impact on green investments such as green bonds and green funds. Notably, green financing is a trend in financial development. While the model has been significantly embraced in advanced economies, green financing can be considered to be a new phenomenon that is slowly taking shape in Africa and specifically, in the Kenyan banking industry and thus, significant effort needs to be directed to understand the applicability of this modern model that aims at protecting the environment while growing the banking industry (UNEP, 2016). According to Song, Deng, & Wu (2019), the ecological environment has been worsening over the years and financial institutions are feeling the pressure to operate in a manner that depicts social responsibility. Similarly, most governments have been made aware of the impact of climate change and they have developed economic policies and programs that are directed towards protection of the environment.

While green financing entails financial facilitation of business ventures, according to Bohara (2018), green banking is another key component in ethical banking. It incorporates measures that aim at protecting the environment through reduction of their carbon footprints through banking activities which are environmentally friendly such as atm banking, green credit cards, mobile banking, green mortgaging, green loaning and green reward checking accounts.

In a study carried out by Danye (2020) which focused on investigating the impact of green credit on the financial performance of commercial banks in China, the researcher notes that green credit has been adopted as an economic means. Green credit is described as a mechanism to support energy saving projects and by commercial banks implementing the green banking programs, they support low-carbon, low-pollution industries, encourage for environment friendly enterprises, promote transformational enterprises, as well as promoting realization of the sustainable development goals. Notably, all these is done while increasing the banks' profitability. By selecting a sample of ten Chinese banks as the source of data, financial performance was measured in terms of return on assets while green credit was estimated via Green Credit Ratio, Asset-liability ratio, Capital adequacy ratio, loan-to-deposit ratio, rate of economic development, Intermediate Income Proportion, and non-performing loan ratio. By carrying out a panel regression where the fixed effect model was adopted, the study found out that the coefficients of green credit ratio, asset liability ratio, loan to deposit ratio, rate of economic development, and the intermediate income proportion have significant influence on the return on assets of the commercial banks in China. However, the capital adequacy ratio and non-performing loan ratio in respect to green credit have an insignificant influence on the financial performance of the commercial banks in China.

Jameel, Chishti, Badeali, & Zaidi 2020, in their study on evaluating the nexus between sustainable green practices and firm financial performance with reference to commercial banks in Pakistan acknowledge that green banking is a new phenomenon in finance and it arises from the need to protect, preserve, and conserve the environment. The researchers recognize the different aspects involved in green banking and opted to evaluate the influence of mobile banking and online banking as aspects of green banking on the financial performance of commercial banks that was evaluated in terms of return on equity and return on assets. By using a sample of 24 listed commercial banks in Pakistan and performing regression analysis, the researcher conclude that the green aspects of mobile banking and online banking have a significant positive influence on financial performance on listed commercial banks in Pakistani.

Awino (2014) in her study on evaluating the relationship between green banking and financial performance of commercial banks in Kenya, notes that Kenyan commercial banks operated over a long time without considering the effect of their operations towards the environment. Thus, with the aim of determining the existing relationship between green banking and the financial performance of Kenyan commercial banks, the researcher collected data from the 43 licensed commercial banks in Kenya as at December 2013. By evaluating the green banking aspects of mobile banking and online banking and regressing them against the financial performance aspects of liquidity and capital adequacy, the researcher identified that there is an existing perfect positive relationship between green banking aspects of mobile banking and online banking towards the financial performance of commercial banks in Kenya.

1.1.1. Green Financing in Kenya

Kenya as a country is party to the United Nations Framework Convention on Climate Change the Kyoto Protocol as well as the Paris Agreement and over the years, it has made significant effort to adjust the country's plans, influence its policies, projects, strategies, and programmes to check on climate change (The National Treasury; Climate Policy

Initiative; The Kenya Climate Innovation Centre, 2021). Through the Vision 2030 blueprint, the National Climate Change Response Strategy, 2010; the National Climate Change Framework Policy; the National Policy on Climate Finance; the Green Economy Strategy and Implementation Plan; and the Climate Change Act, 2016 the government has provided a regulatory framework to enhance the response to climate change to achieve low-carbon emission and guarantee for climate-resilient economic development (The National Treasury; Climate Policy Initiative; The Kenya Climate Innovation Centre, 2021). Furthermore, as noted, the Kenyan economy significantly relies on natural resources which expose the country to climate change and consequently, it negatively impacts on the objective of sustainable economic development of the country.

While Kenya is committed towards the sustainable environment program, the government acknowledges that there is underfunding of these green projects and this can be attributed to the limited public resources (Mooldijk & Lütkehermöller, 2021). Through the Kenya Bankers association which is an umbrella body of licensed commercial banks in Kenya, banking institutions have been encouraged to facilitate green investments in collaboration with other institutions (Kenya Bankers Association, 2021). Notably, these banking institutions act as an intermediary whereby they are able to access funds from organizations that are at the core of promoting environmental sustainability and channel these funds to investors who target green projects that are deemed to be profitable. According to the Kenya Bankers Association (2021), the sustainable financing initiative journey in Kenya began in 2009 and has been positively adopted by the Kenyan commercial banks and in Africa, Kenya can be considered as one of the leading countries in the adaptation of sustainable financing.

1.1.2. Financial Performance

In any country's economy, banks are viewed to be key players dictating the financial system and they are deemed to be indispensable units in the modern society (Pinto, Hawaldar, Rahiman, & Sarea, 2017). Furthermore, Pinto et. al. (2017), notes that these banking institutions play a vital role towards economic development in terms of money marketing in both the developing and advanced countries. Particularly, banking activities play a role in mobilizing financial resources that is essential in investment in a particular industrial activity and as a result, contribute to the economic development of the nation.

According to Greenwood & Jovanovic (1990), financial performance is considered to be a subjective measure that informs whether a corporation is appropriately utilizing its assets in conducting its business while generating desirable revenues. By analyzing this aspect, it indicates the financial health of the company. Since these institutions are for profit making, their best evaluation approach that can be applied involves the analysis of their financial performance which entails evaluating profitability, investment, and return on assets (Ongore & Kusa, 2013). Simply, to ascertain whether a corporation is doing well or not involves evaluating its financial efficiency, liquidity, repayment capacity, solvency and the core element being profitability which is a measure of the extent to which a company is generating surpluses from the committed factors of production. Also, other financial aspects that are essential for evaluation include profit after taxes, the earnings before interest and taxes, net operating income and the net asset value of these commercial banks. These variables of financial performance measurement provide subjective measures for evaluating how these enterprises utilize their assets and how efficient the operational structure is in comparison to other companies in similar or different industries.

1.1.3. Financial Performance of Listed Commercial Banks in Kenya

The Finance Act of Kenya of 2008 stipulated that all commercial banks of Kenya have a minimum capital of Kenyan Shillings Two Hundred and Fifty million but the Act was modified in 2012 such that commercial Banks should have a minimum capital of Kenyan Shillings one billion. Moreover, they are expected to hold eight percent of gearing ratio, eight percent of outfitting proportion as well as a twelve percent all-out money to all-out hazard weighted resources. The aim for these strict requirements is to ensure that only viable commercial banking services providers exist and as such, financial performance of these enterprises is key. Consequently, despite the demand for finance being high, according to the central bank of Kenya, there are only forty-two fully fledged and licensed commercial banks in the country.

Nalianya & Miroga (2020) notes that the Kenyan banking environment has been characterized with consolidations in the form of mergers as well as acquisitions with the aim of consolidating their resources and avoiding revocation of their licenses as well as merging their resources and consequently increase their financial performance in terms of profitability.

Noteworthy, As of 1st December 2021, there existed 12 listed commercial banks in Kenya despite there being forty-two licensed banks. With listing, it entails that the banks are publicly owned and they have a high disclosure requirement regarding their operations. While they have been increasing their presence in various regions to increase their consumer base and consequently increase their revenue, one unexploited avenue is the provision of green financing services to potential investors.

1.2. Statement of the Problem

According to Bolton, Despres, Silva, Samama, and Svartzman (2020), the exhibited environmental degradation not only poses a challenge to governance of global socioeconomic systems, but it also affects the financial systems. It influences the production as well as the consumption patterns that are the major causes of the emission of the harmful greenhouse gases whose accumulated concentration in the atmosphere is at critical level. While banking actives are not directly impacted by the exhibited negative climate change, they do have a huge responsibility to play in conserving the environment. Most business ventures rely on bank facilitation in terms of capital generation through loans that facilitate investment, production, or consumption of particular products or services. Therefore, banks as intermediaries have a significant role to play to ensure business enterprises undertake profitable but sustainable business ventures (Bohara, 2018).

With a number of studies being carried out on green financing and financial performance of corporates in other countries, little has been studied in the Kenyan context. With Kenyan banks being a major intermediary in facilitating investments by major companies as well as individuals, they have a huge responsibility to play in facilitating sustainable growth and investment. Moreover, since the public has a high desire for environmental conservation, listed commercial banks that are publicly traded and owned are more likely to incorporate green policies in their business as they target to entice the public for patronage which results to increased business opportunities and possible increase in revenues. Thus, based on this background, carrying out research regarding green banking and financial performance of listed commercial banks in Kenya is essential.

1.3. Theoretical Review

The One Planet Living Framework

In 2011, Bioregional and the WWF developed the One Planet Living Framework with the sole purpose of assisting governments, corporates, and individuals to adopt ways of living and working within a fair share of the limited resources within our planet. The framework proposes ten principles that provide a basis to help the individuals and corporates to evaluate the challenges that they face in with regards to sustainable living and operations. Furthermore, these principles assist in developing appropriate alternatives that can be implemented to ensure for environmental sustainability. The first principle is with regards to zero carbon emission and entails making buildings energy efficient. Also, it calls for the delivery of the energy to be done with reliable renewable technologies. The second principle entails zero wastage and encourages reuse to reduce waste while the third principle advocates for sustainable transportation whereby the modes of transport with low carbon emissions are encouraged and where possible, the need to travel should also be reduced. As per the framework, the fourth principle encourages for the use of sustainable healthy goods or products that are to be sourced in a local geographic environment, made from waste or renewable resources and also, they should be embodied to low energy. The Fifth principle requires that individuals and corporates should select local and organic diets and they need to reduce food wastages. The sixth principle entails the use of water conservatively in the production process as well as in buildings. Also, there is need to engage in managing floods as well as water pollution. The seventh principle is aligned towards protecting the biodiversity and the various natural habitats via appropriate land usage as well as appropriate integration to the built environment. The eighth principle calls for supporting and participating in arts as well as reviving local identities. The ninth principle calls for the creation of bioregional economies which support employment, inclusive communities and encourages for international fair trades. The tenth and last principle encourage for active, social, and meaningful lives across regions with the sole purpose of promoting individual wellbeing as well as good health (Bonina, Burris & Kimberly 2012)

2. CONCEPTUAL FRAMEWORK

The figure below represents a hypothesized conceptual framework applied by the study. Given the review of literature and the theoretical background relating to the various dimensions of green financing and the elements used to evaluate the financial performance of listed commercial banks in Kenya, the model below was developed and applied. The elements of green financing which consist of carbon assets financing, Environmental financing, and Emission allowances are the variables to predict the financial performance. Financial performance as the dependent variable was evaluated based on return on equity, return on assets, and return on Investment. Thus, through evaluation of these aspects, the impact of green financing on financial performance of listed commercial banks in Kenya were determined.

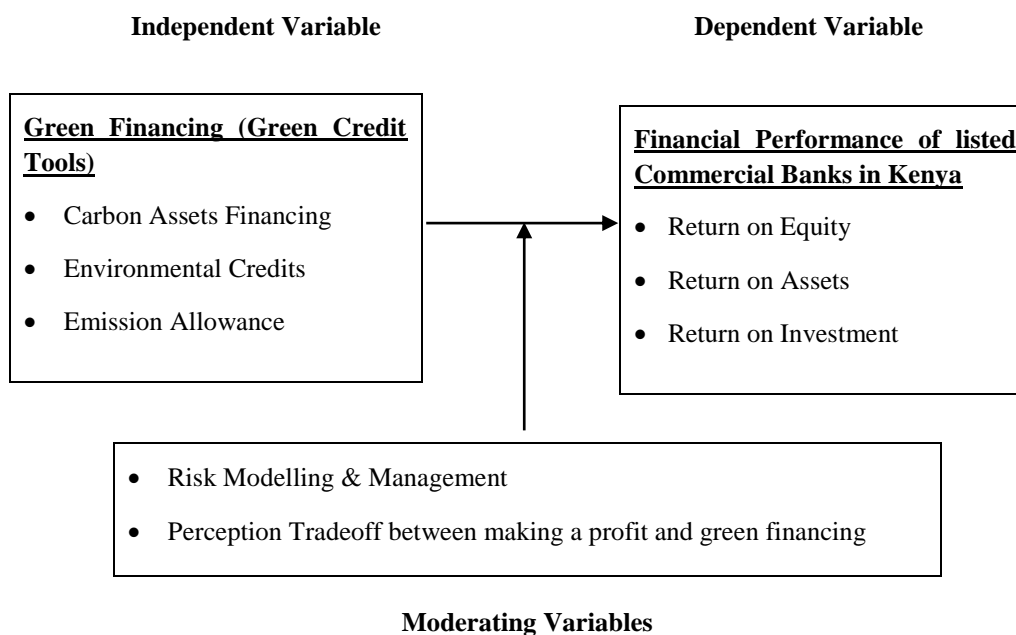


Figure 1: Conceptual Framework

3. METHODOLOGY

The study adopted a desktop or empirical methodology which entails use of already existing data that is not collected via fieldwork. Typically, such research is less costly, takes less time, and reliable since it is based on adequately analyzed data where sensible conclusions and recommendations are drawn from. Thus, the study depended on government working papers, peer reviewed studies that have been published in refereed journals, published articles, reports, studies, and statistics. The sources were selected majorly based on the topic and the materials can be deemed to be closely associated to the current study with majority of the studies coming from the field of finance and economics. These sources can be considered to be authentic and as such, suitable for use in this study.

4. RESULTS

The findings were summarized and categorized into research gap categories namely; contextual, Conceptual, and Population gaps

4.1 Contextual Gap.

In a study carried out by Akhter, Yasmin, & Faria 2021, that focused on evaluating green Banking Practices on financial performance of the commercial banks in Bangladesh, they identified that practices on green banking have a significant positive influence on the financial performance of commercial banks. Similarly, studies by Bohara (2018), Danye (2020), Julia & Kassim (2016), Mamun & Rana (2020), Xi, Wang, & Yang (2021), Nanda & Bihari (2012), Song, Deng, & Wu (2019), Tawfik, Kamar, & Bilal (2021), and Zhang (2018) provide a contextual gap since they were all carried out in different continents and countries. Thus, given the differential in area of application, it is possible that the results drawn from their evaluation may not be similar to the Kenyan context, hence, it provides a gap to be analyzed and more knowledge can be gained from the Kenyan frontier.

4.2 Conceptual Gaps

In consideration of studies carried out by Fathonya, Khaq & Endric (2020), Rahaman, Hoque, & Roy (2018), Gilchrist, Yu, & Zhong (2021), Lee, Park, & Tian, (2021), Olmo, Saiz, & Azofra (2021), Long, Li, Wu, & Song (2021), Uadiale & Fagbemi, (2012), Aduda & Kingoo (2012), and Ogutu & Fatoki, (2019), a conceptual gap existed. Notably, the gap exists on the conceptual framework whereby key elements can be considered to be some key elements or components of green financing.

4.3 Population Gap

Awino (2014), Julia & Kassim (2016), Bohara (2018), Choi & Escalante (2020), Danye (2020), Jameel, Chishti, Bandeali, & Zaidi (2020), Akhter, Yasmin, & Faria (2021), Ghosh, Nath, & Ranjan, (2021), Lee, Park, & Tian (2021) Zheng, Siddik, Masakujjaman, & Fatema (2021) and Xi, Wang, & Yang (2021), carried out a similar study with the aim of identifying the influence of sustainable financing on financial performance of commercial banks but based on a different population of evaluation. Thus, it provides a population gap that can be analyzed and more information can be gained with regard to this developing finance aspect.

5. CONCLUSIONS AND RECOMMENDATIONS

The study will be significant to state owned enterprises, students, general public and State Corporations Advisory Committee as it will offer contributions from both a theoretical and practical perspective.

To regulatory bodies such as NEMA, KBA, and the CBK, they can utilize findings from this study to enhance their policy formulation and regulation with the aim of ensuring that banks engage in sustainable projects while achieving expected reasonable profitability. Theoretically, the study will also provide more information regarding the importance of green financing and the preceding impact on the financial performance of listed commercial banks in Kenya.

To the commercial banks, understanding the importance of green financing and the available mechanisms of facilitating the concept as well as understanding the actual impact of this concept on their financial performance will be of significant value their operations. As a dimension towards, banks are likely to develop, designing, implement and manage new financial products that will propel them towards more profitability hence an improved financial performance.

The general public as stakeholders are also meant to benefit from the study since recommendations are likely to encourage for green investment opportunities, provide a link to financial facilitation to green projects, while also ensuring for the protection of the environment through production of environmentally friendly goods, and provision of environmentally friendly services that will significantly improve on their living standards.

In regards to the field of academics, this research regarding the impact of green finance to financial performance of commercial banks will significantly contribute and add to the already existing body of knowledge regarding green financing and financial performance of corporations. While it also provides more theoretical knowledge and empirical literature, researchers in this field of finance will also benefit.

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