

Loan Restructuring and Financial Performance of Commercial Banks in Kenya

Risper Siroma Makui, Dr. Farida Abdul & Dr. Salome Musau

ISSN: 2616-4965



Loan Restructuring and Financial Performance of Commercial Banks in Kenya

^{1*}Risper Siroma Makui, ²Dr. Farida Abdul & ³Dr. Salome Musau

¹Student, School of Business, Economics and Tourism Kenyatta University

^{2&3}Lecturer, School of Business, Economics and Tourism Kenyatta University

How to cite this article: Makui, S, R., Abdul, F., & Musau, S. (2024). Loan Restructuring and Financial Performance of Commercial Banks in Kenya. *Journal of Finance and Accounting*, 8(3), 1-21. <u>https://doi.org/10.53819/81018102t7003</u>

Abstract

The study sought to evaluate the influence of corporate restructuring on the performance of commercial banks in Kenya. The financial performance of Kenyan banking institutions has been improving over the last five years. However, there was a reported decline in profitability in 2020, dropping from 159.1 billion shillings to 112.1 billion shillings. The specific objectives were to determine the effects of loan restructuring, non-interest income restructuring, financial technology restructuring, and the moderating role of bank size in the relationship between corporate restructuring and financial performance. The study was based on four theories: the technology acceptance model, financial intermediation theory, agency theory, and profit maximization theory. It adopted a causal research design and included 40 commercial banks operating in Kenya as of December 31, 2020, as the population. Secondary data collected from the Central Bank of Kenya covered a two-year period from January 2020 to December 2021. The data analysis included the use of descriptive statistics and panel regression analysis. Diagnostic tests were also performed to confirm that the assumptions required for regression analysis were satisfied. The findings revealed that loan restructuring, non-interest income restructuring, and financial technology restructuring all had a positive and statistically significant impact on the financial performance of commercial banks in Kenya. However, bank size did not moderate the relationship between corporate restructuring and financial performance. In conclusion, corporate restructuring significantly influenced the financial performance of commercial banks in Kenya. Based on the findings, the study recommends that banking institutions should enhance their use of technology in banking services. Commercial banks can develop secure and tamper-proof banking applications with robust security measures. Additionally, they can leverage technology to assess customers' creditworthiness based on personal information. Finally, commercial banks should consider diversifying their operations to improve their overall performance.

Keywords: Corporate Restructuring, Financial Performance, Commercial Banks, Loan Restructuring, Financial Technology



1.0 Introduction

Financial performance is a critical concept that assesses a firm's ability to meet its set financial objectives (Abernathy & Utterback, 2015). It indicates the extent to which a firm has achieved its financial targets and goals, reflecting the overall health and efficiency of the business (Nzuve, 2016). This aspect is vital for stakeholders like investors and shareholders, as it directly impacts their returns and the firm's attractiveness for investment (Fatihudin & Mochklas, 2018). Financial performance is a crucial indicator of a firm's success, highlighting its ability to efficiently manage and use assets throughout its operations (Karajeh & Ibrahim, 2017). Return on Assets (ROA) is one of the main metrics for assessing financial performance. It measures a company's profitability relative to its total assets, providing insights into how effectively a firm uses its assets to produce earnings (Mwangi & Murigu, 2015).

Further, corporate restructuring is a multi-faceted process aimed at enhancing a company's profitability and meeting its current needs by reorganizing its legal, ownership, operational, or other structures, as defined by Norley, Swanson, and Marshall (2017). This concept, further detailed by Hoeing and Morris (2018), can significantly impact a firm's capital value and stability. Kalaignanam and Bahadir (2018) classify restructuring into three categories: operational, financial, and portfolio. Specifically, financial restructuring involves negotiating new terms with creditors and other external parties to prevent liquidation and satisfy creditor demands under revised agreements (Lal *et al.*,2018; Norley *et al.*, 2017). Organizational restructuring focuses on adapting human resource functions to evolving circumstances (Hane et al., 2017). while portfolio restructuring, as described by Sánchez-Riofrío *et al.*, (2015) and Wu & Delios (2019), involves optimizing the asset portfolio by disposing of redundant assets and acquiring more relevant ones. In the banking industry, financial restructuring is particularly operationalized in terms of loan restructuring, non-interest income restructuring.

The commercial banking sector in Kenya, as defined by the Central Bank of Kenya (CBK, 2021), consists of firms engaged in banking operations such as receiving deposits, providing loans, and other financial services. This sector plays a vital role in the economy by mobilizing savings and providing credit (Martin, 2017). The CBK (2021) report highlights that the sector, including one mortgage finance firm, 40 commercial banks, and 13 microfinance companies, with 11 of the commercial banks listed on the Nairobi Securities Exchange (NSE), is under strict regulatory supervision. The industry has been undergoing significant corporate restructuring, especially in adopting financial technology as a strategic tool to cut costs and maximize revenues, a trend accelerated by the COVID-19 pandemic. Major banks like KCB, Equity, and NCBA have embraced digital platforms such as mobile banking applications to adapt to this changing landscape (CBK, 2020). The pandemic has led to the restructuring of loans and non-interest income due to its economic impact on customers. As a result, the financial performance of the sector has varied, with some banks seeing an increase in Return on Assets (ROA), while others have encountered declines. This has led to some banks failing, like Chase Bank, while others have been acquired or merged to enhance financial stability and reduce competition in the industry (CBK, 2020).



1.1 Statement of the Problem

The financial performance of Kenyan banking institutions has been improving over the last five years. However, the banks reported a decline in profitability in 2020, from 159.1 billion shillings to 112.1 billion shillings. In addition, some commercial banks in Kenya such as National Bank, Chase Bank and Imperial bank have faced performance challenges resulting to the closure of their operations. The current economic environment is Kenya is faced with the Covid-19 pandemic protocols, advanced technology and increased competition which has been a threat to the continuity of the operation of banks (CBK, 2021). To mitigate the threats, banks have adopted corporate restructuring as a way of improving the continuity of the firms, securing shareholders wealth and preventing likelihood of financial losses as well and creating a company image, in case of occurrence of a risky incident.

Studies by previous researchers have shown different findings influencing the corporate reorganization in relation to banks financial performance. Duong, Phan, Hoang, and Vo (2020) conducted a study on commercial banks in Vietnam to investigate the impact of financial restructuring on overall financial performance. Their research indicates that financial performance declined during periods of financial restructuring, specifically from 2012 to 2015 and also from 2016 to 2018. This is in contrast with Osoro (2019) embarked on a research of the way financial restructuring affects the financial performance of Kenyan banks which concluded that they are positively but insignificantly associated. These findings also contradicted by Kithinji, Mwangi and Litondo (2017) who focused on firm performance of banks because of the influence of bank reorganization. Variables identified for causing a major positive and adverse effect on output of Kenya's commercial banks were capital restructuring as well as asset restructuring, respectively. It was noticed that financial and organizational reform lacked a substantial influence towards financial results of Kenyan commercial banks.

The differing outcomes in previous empirical studies regarding the impact of corporate restructuring on the financial performance of banks highlight the need for further research in this area. Moreover, many locally conducted studies have defined corporate restructuring in varied ways, often using narrow definitions. The moderating role of bank size regarding corporate restructuring effects on financial performance has also not being attended to in previous publications. There are also methodological gaps that arise from previous locally surveys carried out; the major local researches have relied on primary data to capture the financial restructuring influence on financial performance of banks whilst current survey applied the secondary data that is considered more objective.

1.2 Objective of the Study

The study had general and specific objectives.

1.2.1 General Objective

The general objective of this research is assessing the effect of corporate restructuring on financial performance of Kenyan commercial banks.

1.2.2 Specific Objectives

i. To examine the effect of loan restructuring on financial performance of commercial banks in Kenya



- ii. To establish the effect of non-interest income restructuring on financial performance of commercial banks in Kenya
- iii. To determine the effect of financial technology restructuring on financial performance of Kenyan commercial banks.
- iv. To establish the moderating role of bank size on the correlation between corporate restructuring and financial performance of Kenyan commercial banks

1.3 Research Hypotheses

 H_{01} : Loan restructuring has no significant effect on financial performance of Kenyan commercial banks.

H₀₂: Non-interest income restructuring has no significant effect on financial performance of Kenyan commercial banks.

H₀₃: Financial technology restructuring has no significant effect on financial performance of commercial banks in Kenya.

H₀₄: Bank size has no significant moderating influence on the association between

corporate restructuring and financial performance of Kenya's commercial banks.

2.1 Theoretical Framework

The theoretical review covered Agency Theory, Financial Intermediation Theory, Technology Acceptance Model, and Profit-Maximization Theory.

2.1.1 Financial Intermediation Theory

Mises' theory (1912) on financial intermediation suggests that financial institutions are key in moving resources from entities with surplus funds to those in need, highlighting the importance of financial intermediaries due to market challenges such as uneven information, high transaction costs, and regulatory barriers. Market imperfections, as highlighted by Merton (1995), are crucial in understanding the nature of these transactions and monitoring costs. The theory, critiqued by Andries and Cuza (2019) for its reliance on a variety of securities issued by numerous organizations, suggests that effective competition can still emerge in technologically advanced financial markets, even with limited financial securities and institutions. Banks respond to these challenges by restructuring to enhance financial intermediation, involving operational improvements and technological integration, as noted by Chang et al. (2019). This restructuring is aimed at more efficiently mobilizing savers and borrowers, thereby improving financial performance and service provision to a broader client base.

2.1.2 Agency Theory

Jensen and Meckling (1976) Agency theory addresses the relationship between principals (entrepreneurs) and agents (supervisors or managers), focusing on the decision-making process delegated by the principal to the agent and the associated agency costs, including information, contracting, moral hazard, and transaction costs. The theory, as explained by Freeman, Wicks, & Parmar (2004), and Jensen & Smith (2000), suggests that firms with a strong ownership structure influence bank restructuring, linking the interests of owners and managers towards better performance. Managers in financial institutions, acting as agents, play a crucial role in bank restructuring, part of financial sector reforms, with decisions about the restructuring



type and duration influenced by these managers, under guidelines from the central bank (Mario, 2019; International Monetary Fund, 2018). The theory also notes disparities in compensation and qualifications between managers in large, foreign banks and smaller, local banks, with foreign banks hiring more qualified managers, leading to higher profitability (Boateng et al., 2015; Bonin et al., 2004). This theory underpins the current research, emphasizing that aligning managers' interests with shareholders' leads to corporate decisions that maximize financial performance.

2.1.3 Technology Acceptance Model

The Technology Acceptance Model (TAM), developed by Davis in 1989, focuses on understanding user behavior towards technology, particularly emphasizing the importance of perceived usefulness and ease of use in determining the acceptance of technological systems. This model, critiqued in its early stages for not fully explaining the impact of technological and usability features on user acceptance (Moon & Kim, 2015), posits that the likelihood of technology adoption increases with its perceived utility in enhancing job performance and its user-friendliness (Gefen, Karahanna & Straub, 2017). In the context of electronic banking, the Technology Acceptance Model (TAM) suggests a direct relationship between the perceived usefulness of electronic banking services and their adoption (Potaloglu & Ekin, 2015). This framework has been influential in studies focusing on technological adoption, including the investigation of how technology usage boosts financial performance and influences financial technology restructuring in Kenyan commercial banks.

2.1.4 Profit Maximization Theory

Koetter (2004), a key proponent of the profit maximization theory, posits that superior performance is achieved through the optimal use of resources and pricing strategies aimed at maximizing profits. This theory, integral to traditional economics, holds that profit maximization is the primary and singular objective of companies, a principle that underpins ancient economic theories (Al-Hawar, 2014). Profit maximization is seen as the most efficient and rational goal for any business, providing a framework to predict business behavior and the impact of various market factors like pricing and output in different market scenarios (Kaushik & Rahman, 2015). In the context of this study, the theory is applied to understand how financial technology affects the financial performance of commercial banks in Kenya, particularly in the light of Covid-19 corporate restructuring. It is used to explore how Kenyan commercial banks leverage financial technology for accurate financial liability forecasting, testing the theory's principles to determine the direct correlation between commercial banks' financial success and their response to Covid-19 through corporate restructuring.

2.2 Empirical Review

Corporate restructuring and financial performance association have been supported by several empirical studies conducted locally as well as internationally however, the studies have resulted into mixed reactions.

2.2.1 Loan Restructuring and Financial Performance

Nopiyani, Sanjaya and Kartika (2021) analyzed how relaxation of credit restructuring affected financial performance in the course of the pandemic. The focus was on village credit institutions in Indonesia. This survey was undertaken on 81 village credit institutions in Indonesia. A sample of 46 village credit institutions was arrived at using random sampling method. There was collection of primary together with secondary



data while a simple linear regression model was adopted for analysis. The results revealed that credit restructuring significantly affected financial performance in the course of the pandemic. This study adopted ordinary regression analysis has its shortcomings such as sensitivity to outliers. A fixed or random effects model was adopted in this study.

Okoye et al. (2020) using data collected from five banks in Nigeria, a panel analysis was carried out to compare bank performance during pre- and post-restructuring phases to examine the importance or effects of capital reform in improving the bank performance. The research was covering from year 1996 to 2016. Parameters of the model were evaluated using the generalized method of moments. During the pre-reform duration, results of the random effects model revealed that the impact on total assets was weak and positive also indicated growth in deposit on bank performance. The post-reform assessment showed that large-sized banks earned significantly low profits while in smaller banks it was vice versa. The evidence above is a confirmation that restructuring of the sector has substantial link on the profit performance of banks. Main focus of the research was capital restructuring and as such there is need to conduct a study on other types of restructuring like income and non-interest income restructuring.

Osoro (2019) conducted a study on the effects of financial structure reforms on the performance of Kenyan banks, focusing on 11 commercial banks listed on the Nairobi Securities Exchange and operational between 2008 and 2018. The study identified strategies such as changes in debt rates, income distributions, and asset ratios as part of financial restructuring. Multiple linear regressions were used to analyze the data. The findings suggested that financial restructuring does not significantly enhance the financial performance of Kenyan commercial banks. However, the study did not consider corporate restructuring in terms of loan and non-interest income restructuring or technological changes, which the current research addresses.

Kwaning, Churchill and Opoku (2019) using Agricultural Development Bank (ADB) which is one of Ghana's largest bank, undertook a study of cases with the aim of exploring the banks restructuring motivators alongside their influence on how banks performed financially. According to outcomes of the survey conducted on the ADB, the motivators that led to its restructuring were; business environment variations, poor strategic control, poor performance and weak governance. The effects of ADB's organizational structure as well as strategic control, corporate governance, employee costs along with performance resulted into revolutionized organizational structure, better governance, employee costs increment in addition to a reduction on ADB's profitability. This research was a case study of ADB whose economic and social context is different from Kenyan commercial banks and therefore the findings cannot be generalized.

2.2.2 Non-interest Income Restructuring and Financial Performance

Yusuf and Ichsan (2021) analyzed the performance of banks after the merging of bank Syariah Indonesia during the pandemic. The method used in this research is quantitative and the sample population includes the entire Sharia commercial banks of Indonesia in the period between 2011-2020. The study utilized secondary data. They administered descriptive and correlation analysis. Results show that the restructuring has a notable impact on financial performance of sharia banks in Indonesia. This study revealed restructuring had a notable positive effect on how the banks performed and that the Covid-19 pandemic played a role in the merger. Although this study focused on



restructuring, the operationalization did not take into account how non-interest income restructuring influences financial performance and therefore need for the current study.

Mwangi and Rugami (2021) studied banks in Mombasa County in order to establish the effect that firm reforms have on performance. Concerning the methods for the study, the Survey research design was embraced for the research in highlighting complex concepts according to the informants in reference to institution restructuring. Using structured questionnaires, collection of primary data from all Mombasa county banks was facilitated. The data was analyzed using Descriptive statistics. According to the results of this research, banks had implemented several restructuring plans lately where institutional reforms variables exercised in a huge way were: decentralization of processes, departmentalization as well as human resource restructuring while adopting of mergers and acquisition was at a low extent. The study conclusions stated that banks had enforced firm restructuring lately through exercising various variables resulting into better performance. Although this study focused on restructuring, the operationalization did not take into account how non-interest income restructuring influences financial performance and therefore need for the current study.

Duong *et al.* (2020) explores commercial banks in Vietnam while weighing the impact of financial restructuring on general performance. This research utilized secondary data gathered from 28 Vietnam commercial banks of audited financial reports covering 11 years that's (2008-2018). In the research, development of econometric regression model where the financial performance tested using Return on Asset along with Return on Equity being the dependent variable. Methods used in the study involve: Fixed Effects Model, pooled ordinary least square model, distinct Generalized Method of Moments and Random Effects Model. Findings indicated that restructuring of owners' equity alongside restructuring account payables are urgently required. For the overall improvement of financial performance these events are vital; increase the owners' equity, decrease the account payables as well as bad debts restructuring hence decreasing bad debts. Although, the financial restructuring that occurred during year 2012-2015 as well as 2016-2018, deteriorated the financial performance for that duration. The research took place in Vietnam where their social setting alongside economic setting contrasts that of Kenya.

2.2.3 Financial Technology Restructuring and Financial Performance

Gąsior (2021) sought to determine if banks were ready for the crisis with relation to financial technology. The goal of the study was to indicate the directions of any changes that banks take when under the influence of a turbulent environment and, with the use of a financial technology restructuring process in controlling crisis. The study utilized a literature analysis, a review of reports, questionnaire research and comments. The study revealed that all challenges brought about by the Covid-19 pandemic are decipherable by using digital technology. However, the research was done in a developed country whose social and economic setting is different from Kenya.

Ingow and Oluoch (2020) pursued to evaluate how Saccos financial performance in Kenya is affected by corporate restructuring. Population targeted by the survey included all the licensed Kiambu County SACCOS by the last month of 2015 by Ministry of Trade, industry and Co-operatives as well as the Sacco Societies Regulatory Authority (SASRA). The study consisted 35 SACCOS being the total population. Primary and secondary data was collected. Data processing took place and later analysis were conducted through descriptive statistics along with correlation analysis. The findings



showed capital restructuring having a substantial and helpful impact on SACCOS' financial performance in Kenya. Additionally, the research showed a negative although significant effect of Asset restructuring to financial performance of Kenyan SACCOs. This survey focused on SACCOs which has operational differences with commercial banks and therefore need for the current study.

Eke and Adaku (2019) sought to analyze Business Process Reengineering in Organizational Performance of banking sector in Nigeria. The study findings disclosed that Business Process Re-engineering assists by concentrating on end-customer by rendering competitive edge to the enterprises. The corporate organizations looking for enhancement in their present organizational performance as well as purpose in attaining cost leadership approach in its operating industry as well as environment should consider adopting Business Process Re-engineering which has become vital. However, the study was conducted in Nigerian Banking Sector which has different banking regulations, a void that this report would address.

2.2.4 Corporate Restructuring, Bank Size and Financial Performance

Shehzad, De Haan and Scholtens (2018) assessed the link that exists amidst size and profitability of the bank. The research implemented a longitudinal research design which inaugurate the relationships linking size to profitability. The survey used panel data covering a duration of fifteen (15) years. The findings unveiled that changes in profitability are subjected to the increase in the size of the firm. Consequently, the volatility of banks' profit depends on its size and profitability. The current study intends to establish if bank size can moderate on the link between Covid-19 corporate restructuring and financial performance of Kenyan commercial banks.

Pagano (2018) assessed the link amid firm size distribution and profitability in European Countries. The study examined the industry level and size structure. Panel data was used for fifteen years. An exploratory research design was used, and a positive and robust connection linking average size of an organization with the profitability was determined. The results indicate that larger size fosters productivity and firm profitability. The research took place in European countries where their social setting alongside economic setting contrasts that of Kenya.

Mwangi (2016) tested the firm size contribution on microfinance banks profitability in Kenya. A census survey was conducted involving a total of 9 microfinance banks. This study was covered in duration between 2011 and 2015 (5 years). A regression equation was chosen to find out the nexus between firm size and profitability. Firm size and operating efficiency were all discovered as having a substantial and positive influence to the profit-making ability of the Kenyan microfinance institutions. This research concentrated on microfinance banks which have operational differences with commercial banks and therefore need for the current study.

Kinuthia (2015) explored how size influences the performance Kenyan banks. The researcher opted for a mechanism known as descriptive research design for determining link existing amidst size along with financial performance of banks. This study involved a sample population of 35 Kenya's commercial banks. The discoveries unveiled a positive correlation among banks profitability with the customer base, deposits, liabilities, number of branches, and market share. The current study intends to establish if bank size can moderate on the link between Covid-19 corporate restructuring and financial performance of Kenyan commercial banks.



2.3 Conceptual Framework

The conceptual model developed in this study illustrates the relationship between all variables considered in this survey. The independent variables include loan restructuring, non-interest income restructuring, and financial technology restructuring. Financial performance is the dependent variable that the research aims to explain and has been tested using Return on Assets (ROA) as a measure.



Dependent variable





3.0 Research Methodology

The study employed the positivism research philosophy, assuming objective and quantifiable knowledge, contrasting with interpretivism's subjective approach (Cooper & Schindler, 2017). The study employed a causal survey research design to explore the impact of Covid-19 corporate restructuring on the financial performance of Kenyan banks. Additionally, a descriptive design was utilized to comprehend the relationship between the variables under study. (Khan, 2018). The target population comprised 38 Kenyan commercial banks as of 31st December 2021 (CBK, 2021). The sampling technique used was a census method, allowing for the inclusion of the entire target population in the analysis, addressing accuracy challenges associated with sampling (Khan, 2018). For data collection, secondary sources were utilized, specifically data from the Central Bank of Kenya, including annual reports covering a two-year period



from January 2020 to December 2021, analyzed quarterly. Data analysis was conducted using descriptive and inferential statistics, employing multiple linear regression models and correlation analysis to test the hypotheses linking Covid-19 corporate restructuring and financial performance, with STATA software version 25 used for analyzing the panel data (Cooper & Schindler, 2017; Khan, 2018).

4.0 Research Findings and Discussion

The study findings are presented per objective and in sections.

4.1 Descriptive Statistics

Descriptive statistics summarize the data collected in the study in a concise and simplified manner, making it easier to draw conclusions. Descriptive statistics describe the relationship between the variables in a target population. The statistics form the first step when conducting a research and are always done before inferential statistics (Kaur et al., 2018). The descriptive findings of this research are presented in the form of means, standard deviation, the minimum and the corresponding maximum values. The descriptive findings are presented in Table 1.

Table 1: Descriptive Statistics

| Variable | Mean | Std. Dev. | Min | Max | Observations |
|----------|---------|-----------|---------|---------|--------------|
| | | | | | |
| FP | 0.00729 | 0.01423 | -0.2061 | 0.11562 | N = 380 |
| LR | 0.16785 | 0.18319 | 0.00104 | 0.97187 | N = 380 |
| NIR | 0.31205 | 0.12954 | 0.00178 | 0.55037 | N = 380 |
| FTR | 0.42232 | 0.22528 | 0.00109 | 1.13276 | N = 380 |
| BS | 7.9112 | 0.59279 | 6.84003 | 8.94321 | N = 380 |

Where; FP-Financial Performance, LR-Loan Restructuring, NIR-Non-Interest Income Restructuring, FTR-Financial Technology Restructuring, BS-Bank Size. **Source: Research Data (2023)**

The study findings, as shown in Table 1, indicate that the average financial performance of commercial banks in Kenya is 0.00729, with a standard deviation of 0.0142 from the mean. This suggests that the banks' Return on Assets (ROA) is relatively low, aligning with the observations made by Brahmana et al. (2018). Notably, the CBK's report in 2021 highlights variations in the financial performance of banks, with some like KCB, Equity, Standard Chartered Bank, and Cooperative Bank experiencing an increase in their ROA, while others see a decrease, as they aim to enhance financial stability and competitiveness. Additionally, the study found that loan restructuring, with a mean of 0.16785, plays a crucial role in mitigating defaults and potential loss of funds for borrowers facing financial distress. This practice aligns with the concept of financial-related restructuring, as proposed by Norley, Swanson, and Marshall (2017), which includes renegotiating contracts with financial suppliers and creditors under new terms and conditions distinct from the original ones.

Furthermore, the study found that the non-interest income ratio, measured as the ratio of change in non-interest income to total income, had a mean of 0.31205, with corresponding minimum and maximum values of 0.00178 and 0.55037, respectively. This indicates that during the study period, commercial banks in Kenya heavily relied on non-interest income, primarily generated from fees such as deposit and transaction fees, as well as insufficient funds fees, to drive their performance. This aligns with the



observation that Kenyan banks face high competition in the sector, as noted by Kibicho (2015). To thrive in this competitive landscape, these banks need to develop strategies, such as embracing financial technology, to respond to the rivalry, secure their market niches, and increase their market share.

Table 1 offers important insights into the financial performance and strategies of commercial banks in Kenya. It reveals that the average financial performance, as measured by Return on Assets (ROA), stands at 0.00729. This figure suggests a relatively low but significant source of income and profit for banks with high leverage. The study also observed variations in financial performance across different banks, with some recording an increase in ROA and others experiencing a decline. Loan restructuring, as reflected in the average mean of 0.16785, was a strategy employed by banks to renegotiate and modify loan terms with borrowers facing financial distress, aiming to reduce defaults and minimize fund losses. Non-interest income played a significant role in the banks' performance, with a mean ratio of 0.31205, indicating its importance in a competitive banking sector. The study also highlighted significant investments in financial technology, with a mean ratio of 0.42232, suggesting the adoption of digital technology for online banking transactions. Lastly, bank size, represented by total assets, showed significant expansion during the study period, potentially contributing to risk diversification and long-term profitability for the banks.

4.2 Correlation Analysis

Correlation analysis was conducted to determine the degree and direction of the relationship between the study's variables. This analysis is useful as it explores the associative relationship between independent and dependent variables (Senthilnathan, 2019). The variables of the study included, loan restructuring, financial technology restructuring, non-interest income restructuring, bank size and financial performance of the commercial banks in Kenya. Correlation analysis was done at 0.05 significance level. The correlation results are outlined in Table 2 as follows.

| | FP | LR | NIR | FTR | BS |
|------------------------------------|--------|--------|--------|--------|--------|
| Financial Performance | 1.0000 | | | | |
| Loan Restructuring | 0.2968 | 1.0000 | | | |
| | 0.0000 | | | | |
| Non-interest Income Restructuring, | 0.1947 | 0.0325 | 1.0000 | | |
| | 0.0001 | 0.5277 | | | |
| Financial Technology Restructuring | 0.1664 | 0.0966 | 0.1562 | 1.0000 | |
| | 0.0011 | 0.06 | 0.0023 | | |
| Bank Size | 0.2097 | 0.2097 | 0.0603 | 0.0744 | 1.0000 |
| | 0.0000 | 0.0000 | 0.2413 | 0.148 | |

Table 2: Correlation Analysis Results.

Source: Research Data (2023)

The findings presented in Table 2 indicate a positive and statistically significant correlation (r=0.2967, p=0.000<0.05) between loan restructuring and financial performance among commercial banks in Kenya. This suggests that the practice of loan restructuring by commercial banks in Kenya has a beneficial impact on their financial performance. Loan restructuring involves lenders granting concessions to borrowers facing financial difficulties. These results align with Okoye et al.'s (2020) study, which



also found a weak but positive impact on total assets and deposit growth on bank performance post-reform. Additionally, Norley, Swanson, and Marshall (2017) emphasize the importance of financial-related restructuring, including contract renewal and revised terms, in improving bank performance.

The correlation results between non-interest income restructuring and financial performance reveal a positive and statistically significant correlation (r=0.1947, p=0.0001<0.05). The findings indicate that when commercial banks in Kenya undertake non-interest income restructuring, it has a positive and significant effect on their financial performance. This is consistent with the trend of many banks broadening their off-balance sheet activities to diversify income sources and enhance performance (Antao & Karnik, 2022). Additionally, similar positive effects of restructuring on financial performance were observed in the context of sharia banks in Indonesia by Yusuf and Ichsan (2021). It is evident that Kenyan banks are facing high competition and need to develop strategies such as financial technology to respond to this rivalry while securing their market niches and increasing market share (Kibicho, 2015).

The study found a positive and statistically significant correlation (r=0.1664, p=0.0011<0.05) between financial technology restructuring and the financial performance of commercial banks in Kenya. This implies that the restructuring of financial technology by commercial banks has a significant positive effect on their performance in Kenya. The embrace of digital innovation by these banks is intended to improve access and convenience in financial services. Nonetheless, it is important to mention that the study also revealed a notable negative impact of asset restructuring on the financial performance of Kenyan SACCOs. This suggests that not all forms of restructuring yield positive results in the financial sector.

The study revealed a positive and statistically significant correlation between bank size (r=0.2097, p=0.000<0.05) and the financial performance of commercial banks in Kenya, suggesting that an increase in the size of these banks leads to improved performance. Larger banks are likely to have larger asset bases, making them more profitable due to increased efficiency levels. These findings align with previous research indicating that larger bank size fosters productivity and firm profitability, supporting the notion that size matters in the banking sector. Additionally, the study highlighted the substantial and positive influence of firm size and operating efficiency on the profit-making ability of Kenyan microfinance institutions, further emphasizing the importance of size and efficiency in the financial industry.

4.3 Regression Analysis

This research employed the General Least Square regression model because the specified regression model appropriate for the study from the hausman test results is the random effects model. Regression model shows the linear relationship between the dependent and the independent variables in the study. The dependent variable in the study is the financial performance whereas the independent variables in the study include, loan restructuring, financial technology restructuring, non-interest income restructuring and bank size as the moderating variable in the study.

4.3.1 Model Summary

The model summary results of the study are presented in Table 3.



Table 3: Model Summary

| R-sq: | |
|--------------|--------|
| Within | 0.0838 |
| Between | 0.5776 |
| Overall | 0.1532 |
| Wald chi2(4) | 67.83 |
| Prob>chi2 | 0.000 |

Source: Research Data (2023)

R square indicates the degree of relationship between corporate restructuring and financial performance of commercial banks in Kenya. An R square of .1532 indicates that corporate restructuring explains 15.32% of the financial performance of the commercial banks in Kenya. This relationship is statistically significant at (0.000<0.05) at 95% level of significance.

4.4 Hypothesis Testing

To address the objectives, the corresponding hypotheses were tested using the Beta coefficients and P values in the estimated panel regression model. The panel regression model is presented in Table 4.

| FP | Coef. | Std. Err. | Т | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|-------|-------|------------|-----------|
| LR | 0.02178 | 0.00374 | 5.82 | 0.000 | 0.01442 | 0.02914 |
| NIR | 0.01844 | 0.00533 | 3.46 | 0.001 | 0.00795 | 0.02893 |
| FTR | 0.00714 | 0.00308 | 2.32 | 0.021 | 0.00109 | 0.0132 |
| _cons | -0.0051 | 0.00211 | -2.43 | 0.016 | -0.0093 | -0.001 |

 Table 4: Panel Regression Coefficients

Where; FP-Financial Performance, LR-Loan Restructuring, NIR-Non-Interest Income Restructuring, FTR-Financial Technology Restructuring. **Source: Research Data (2023)**

From the results presented in Table 4, the estimated model was

 $Y = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon.$

Y=-.0051+.0218 X_{1it}+.0184X_{2it}+.0071X_{3it}ii

Where

Y = Financial performance of commercial banks

 α = regression intercept.

 β_1, β_2 =regression slope

 $X_1 = Loan$ restructuring

X₂= Net Interest Income

X₃= Financial Technology Restructuring

From the estimated model, the constant of the model is positive (-.0051, P=0.016). The constant in a regression equation, also known as the intercept, is the value of the



dependent variable when all the independent variables are equal to zero. This implies in the absence of loan restructuring, non-interest income restructuring and financial technology, financial performance of Kenyan commercial banks will be -0.0051. This financial performance metric will be negative and significant (P=0.016).

Loan restructuring (X₁) is statistically significant to financial performance as shown by ($\beta = 0.02178$, P = 0.000). This means that controlling other variables in the model, a change in loan restructuring by a unit will lead 0.0218 units improvement in the financial performance of the commercial banks. Non-interest income restructuring (X₂) is statistically significant to financial performance as shown by ($\beta = 0.01844$, P = 0.001). Financial technology restructuring (X₃) is statistically significant to financial performance as shown by ($\beta = 0.01844$, P = 0.001). This means that controlling other variables in the model, an additional change in financial technology restructuring will lead 0.0071 units' improvement in the financial performance of the commercial banks.

H₀₁: Loan restructuring has no significant effect on financial performance of Kenyan commercial banks.

The study revealed a positive and statistically significant relationship (r=0.0218, p=0.000<0.05) between loan restructuring and the financial performance of Kenyan banks. This indicates that a unit change in loan restructuring leads to a 0.0218-unit improvement in the financial performance of commercial banks. The null hypothesis, which suggested no relationship between restructuring and bank performance, was rejected due to the significant positive coefficient. These findings are consistent with Okoye et al.'s (2020) research, which also found a weak but positive impact on total assets and deposit growth in bank performance.

H₀₂: Non-interest income restructuring has no significant effect on financial performance of Kenyan commercial banks

The study found a positive and statistically significant relationship (r=0.0184, p=0.001<0.05) between non-interest income restructuring and the financial performance of Kenyan banks. This suggests that an additional change in non-interest income restructuring leads to a 0.0184-unit improvement in the financial performance of commercial banks. The null hypothesis, suggesting no relationship between non-interest income restructuring and bank performance, was rejected because of the significant positive coefficient. This result is consistent with the findings of Duong et al. (2020), who highlighted the significance of restructuring owners' equity and accounts payable to enhance overall financial performance. Additionally, Kibicho (2015) highlighted the competitive pressure on banks and the need for strategies like financial technology to thrive in the market, a point further emphasized by Yusuf and Ichsan (2021).

H₀₃: Financial technology restructuring has no significant effect on financial performance of commercial banks in Kenya.

The study found a positive and statistically significant relationship (r=0.0071, p=0.021<0.05) between financial technology restructuring and the financial performance of Kenyan banks. This suggests that improvements in financial technology restructuring can lead to better financial performance in commercial banks. These findings are consistent with previous research indicating the importance of strategies



like financial technology in responding to market competition and enhancing organizational performance.

4.4 Moderating Effect of Bank Size on the Effect of Corporate Restructuring on Financial Performance.

This section presents the tests of the moderating effect of bank size on the effect of corporate restructuring on the financial performance of the commercial banks in Kenya.

4.4.1 Moderating Effect of Bank Size on the Effect of Loan Restructuring on Financial Performance

Testing the moderating effects of a moderator on the relationship between an independent variable and a dependent variable involves creating an interaction between the moderator and the independent variable, as explained by Warner (2013). The results of the tests of the moderating effects of bank size on the effects of loan restructuring on the financial performance of commercial banks in Kenya are outlined in Table 5 and 6.

Table 5: Regression Results

| FP | Coef. | Std. Err. | Т | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|------|-------|------------|-----------|
| LR | 0.02305 | 0.00381 | 6.04 | 0.000 | 0.01555 | 0.03055 |
| _cons | 0.00342 | 0.00095 | 3.61 | 0.000 | 0.00156 | 0.00528 |

Table 6 shows the moderating results of the analysis.

| FP | Coef. | Std. Err. | Τ | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|-------|-------|------------|-----------|
| LR | 0.02054 | 0.00386 | 5.32 | 0.000 | 0.01295 | 0.02812 |
| BS | 0.0037 | 0.00119 | 3.11 | 0.002 | 0.00136 | 0.00605 |
| _cons | -0.0254 | 0.00934 | -2.72 | 0.007 | -0.0438 | -0.0071 |

Table 6: Moderation Results

The models that was used to test the moderating effects of bank size on the effects of loan restructuring on the financial performance of commercial banks in Kenya were;

 $Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \varepsilon_{it} \dots iv$

Where

Y = Financial performance of commercial banks

 α = regression intercept.

 β_1, β_2 =regression slope

 $X_1 = Loan$ restructuring

X₂= Bank Size



 $Y = 0.0034 + 0.023X_1$v

 $Y = -.0254 + .021X_1 + .004X_2$ vi

From the results presented in Table 4.11, the constant of the model was positive (0.0034). Additionally, the coefficient of loan restructuring was positive and significant (r=.023, p=0.000<0.05). Upon interacting loan restructuring with the moderator (Bank size), the constant of the model becomes negative (-.0254). The coefficient of loan restructuring reduces to 0.021. Thus, the study concludes that bank size has a moderating effect on the effect of loan restructuring on the financial performance of commercial banks in Kenya.

4.4.2 Moderating Effect of Bank Size on the Effect of Non-Interest Income Restructuring on Financial Performance

The results of the tests of the moderating effects of bank size on the effects of non-interest income restructuring on the financial performance of commercial banks in Kenya are outlined in Table 7 and 8.

| FP | Coef. | Std. Err. | Т | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|------|-------|------------|-----------|
| NIR | 0.02138 | 0.00554 | 3.86 | 0.000 | 0.01049 | 0.03227 |
| _cons | 0.00062 | 0.00187 | 0.33 | 0.742 | -0.0031 | 0.0043 |

Table 7: Regression Results

Table 8 shows the moderating effect results of bank size on the effect of non-interest income restructuring on financial performance.

| FP | Coef. | Std. Err. | Т | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|-------|-------|------------|-----------|
| NIR | 0.02007 | 0.00544 | 3.69 | 0.000 | 0.00936 | 0.03077 |
| BS | 0.00477 | 0.00119 | 4.01 | 0.000 | 0.00243 | 0.00711 |
| _cons | -0.0367 | 0.00949 | -3.87 | 0.000 | -0.0554 | -0.018 |

Table 8: Moderation Results

The models that was used to test the moderating effects of bank size on the effects of non-interest income restructuring on the financial performance of commercial banks in Kenya were;

 $Y = \beta_0 + \beta_1 X_{1it} + \epsilon_{it} \dots vii$

 $Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \epsilon_{it} \dots viii$

Where

Y = Financial performance of commercial banks

 α = regression intercept.

 β_1 , β_2 =regression slope



 X_1 = Non-interest income X_2 = Bank Size $Y = 0.001 + 0.021X_1...$ ix

$Y = -.037 + .020X_1 + .005X_2 \qquad \dots \qquad x$

From the results presented in Table 8, the constant of the model was positive (0.001). Additionally, the coefficient of non-interest income restructuring was positive and significant (r=.021, p=0.000<0.05). Upon interacting non-interest income restructuring with the moderator (Bank size), the constant of the model becomes negative (-.037). The coefficient of non-interest income restructuring reduces to 0.020. Thus, the study concludes that bank size has a moderating effect on the effect of non-interest income restructuring on the financial performance of commercial banks in Kenya.

4.4.3 Moderating Effect of Bank Size on the Effect of Financial Technology Restructuring on Financial Performance

The results of the tests of the moderating effects of bank size on the effects of financial technology restructuring on the financial performance of commercial banks in Kenya are presented in Table 9 and 10.

| Table 9 | : Regressio | n Results |
|---------|-------------|-----------|
|---------|-------------|-----------|

| FP | Coef. | Std. Err. | Т | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|------|-------|------------|-----------|
| FTR | 0.01051 | 0.0032 | 3.28 | 0.001 | 0.00421 | 0.01681 |
| _cons | 0.00285 | 0.00153 | 1.86 | 0.064 | -0.0002 | 0.00586 |

Table 10 below shows the Moderating Effect of Bank Size on the Effect of Financial

Technology Restructuring on Financial Performance.

| FP | Coef. | Std. Err. | Τ | P>t | [95% Conf. | Interval] |
|-------|---------|-----------|-------|-------|------------|-----------|
| FTR | 0.00958 | 0.00315 | 3.04 | 0.003 | 0.00338 | 0.01577 |
| BS | 0.00476 | 0.0012 | 3.98 | 0.000 | 0.00241 | 0.00712 |
| _cons | -0.0344 | 0.00949 | -3.63 | 0.000 | -0.0531 | -0.0158 |

Table 10: Moderation Results

The models that was used to test the moderating effects of bank size on the effects of financial technology restructuring on the financial performance of commercial banks in Kenya were;

 $Y = \beta_0 + \beta_1 X_{1it} + \epsilon_{it} \dots x_i$

 $\mathbf{Y} = \beta_0 + \beta_1 \mathbf{X}_{1it} + \beta_2 \mathbf{X}_{2it} + \boldsymbol{\epsilon}_{it} \ \dots \dots \mathbf{X}ii$

Where

Y = Financial performance of commercial banks



$$\begin{split} &\alpha = \text{regression intercept.} \\ &\beta_1, \beta_2 = \text{regression slope} \\ &X_1 = \text{Financial technology} \\ &X_2 = \text{Bank Size} \\ &Y = 0.003 + 0.011 X_1 \dots xiii \end{split}$$

 $Y = -.034 + .010X_1 + .005X_2$ xiv

From the results presented in Table 9 and 10, the constant of the model was positive (0.001). Additionally, the coefficient of financial technology restructuring was positive and significant (r=.021, p=0.000<0.05). Upon interacting financial technology restructuring with the moderator (Bank size), the constant of the model becomes negative (-.037). The coefficient of financial technology restructuring reduces to 0.020. Thus, the study concludes that bank size has a moderating effect on the effect of financial technology restructuring on the financial performance of commercial banks in Kenya.

5.0 Summary of Findings

The main objective of the study was to assess the impact of corporate restructuring on the financial performance of Kenyan commercial banks. The study investigated the impact of loan restructuring, non-interest income restructuring, financial technology restructuring, and the moderating role of bank size on the relationship between corporate restructuring and financial performance in Kenyan commercial banks.

The first objective focused on the impact of loan restructuring. The results showed a positive and statistically significant relationship between loan restructuring and financial performance, indicating that changes in loan restructuring led to improvements in financial performance.

The second objective examined the effect of non-interest income restructuring. The findings showed a positive and statistically significant relationship between non-interest income restructuring and financial performance, indicating that changes in non-interest income restructuring positively affected financial performance.

The third objective assessed the impact of financial technology restructuring on financial performance. The results indicated a positive and statistically significant correlation between financial technology restructuring and financial performance, implying that changes in financial technology restructuring were associated with improved financial performance.

The fourth objective explored the moderating role of bank size in the relationship between corporate restructuring and financial performance. The study findings established that bank size had a moderating effect on the relationship between restructuring and financial performance in Kenyan commercial banks.

Overall, the study concluded that corporate restructuring, including loan restructuring, non-interest income restructuring, and financial technology restructuring, had a positive impact on the financial performance of Kenyan commercial banks, with bank size playing a moderating role in this relationship.



5.1 Conclusion

The study concludes that loan restructuring positively impacts the financial performance of Kenyan commercial banks by making it easier for customers to repay loans and reducing defaults. Based on the findings, the study concludes that loan restructuring is beneficial for financial performance.

The study concludes that non-interest income restructuring significantly and positively influences the financial performance of commercial banks in Kenya, thereby diversifying their sources of profit. The study findings show that restructuring non-interest income streams has a beneficial impact on financial performance.

Financial technology restructuring had a positive impact on the financial performance of commercial banks, providing convenience and access to banking services, but it also raised security concerns. Based on the findings, the study concludes that financial technology restructuring positively influences financial performance.

Bank size was identified as a significant moderator, with larger banks performing better due to economies of scale in resource utilization, critical for Kenyan commercial banks' performance. Based on the findings, the study concludes that bank size moderates the relationship between corporate restructuring and financial performance.

5.2 Recommendations

The study recommends that commercial banks diversify their operations to enhance sustainability. Banks should not solely depend on loan interest for profits but also focus on increasing non-interest incomes. One strategy could involve setting a minimum cash withdrawal limit at teller counters, enabling tellers to assist more customers with large fund withdrawals, thereby maximizing transactional income. For smaller withdrawals, customers could be encouraged to use mobile banking or bank agents, further contributing to the growth of non-interest income streams.

Further, the study recommends that further studies be conducted in the effect of corporate restructuring on the financial performance of commercial banks in Kenya with restructuring, non-interest income restructuring, financial technology restructuring and bank size being the independent variables and political goodwill and regulatory frameworks being the moderating variable.

REFERENCES

- Abernathy, W., & Utterback, J. (2015), *Innovation and the evolution of technology in the Firm*, Harvard University Press, Cambridge, MA.
- Al-Hawar, M. (2019). The effect of automated service quality on bank financial performance and the mediating role of customer retention. *Journal of Financial Services Marketing*, 2(1), 13-19
- Boateng, A., Cai, H., Borgia, D., Bi., & Ngwu, F. (2015). The influence of internal corporate governance mechanisms on capital structure decisions of Chinese listed firms. *Review of Accounting and Finance*, *16*(4), 444-461. <u>https://doi.org/10.1108/RAF-12-2015-0193</u>
- Bonin, J, Hasan, I., & Wachtel, P. (2004). Privatization matters: Bank efficiency in transition countries. *Journal of Banking & Finance*, 29(8-9), 2155-2178. https://doi.org/10.2139/ssrn.542722
- Central Bank of Kenya (2020). Bank supervision annual reports. CBK. Nairobi.



- Chang, Y., Chen, S., & Zhang, L. (2019). Local financial intermediation and foreign direct investment: Evidence from China. *International Review of Economics & Finance*, 7(3)2, 198-216.
 Cooper, D., & Schindler, S. (2017). Business research methods. *McGraw-Hill Irwin*.
- Davis, F.(1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–339. https://doi.org/10.2307/249008
- Duong, T., Phan, H, Hoang, T., & Vo, T. (2020). The effect of financial restructuring on the overall financial performance of the commercial banks in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(9), 75-84. <u>https://doi.org/10.13106/jafeb.2020.vol7.no9.075</u>
- Eke, G., & Adaku, A. (2019). Business process reengineering in organizational performance in Nigerian banking sector. *Academic Journal of Interdisciplinary Studies*, *3*(5), 113.
- Fatihudin, N. & Mochklas, M. (2018). Inefficient markets, anomalies, and investor behavior: A Literature Review. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(2).
- Freeman, R., Wicks, A., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited". *Organization science*, *15*(3), 364-369. https://doi.org/10.1287/orsc.1040.0066
- Gąsior, A. (2021). Technological Restructuring During COVID-19 Pandemic. *European Research Studies*, 24(2B), 994-1003.
- Gefen, D., Karahanna, E., & Straub, D. (2017). Trust and TAM in online shopping: An integrated model. *MIS quarterly*, 51-90.
- Ingow, A., & Opuodho, G. (2019). Effect of corporate restructuring on financial performance of SACCOS in Kenya. *International Journal of Recent Research in Commerce, Economics and Management*, 6(4), 199-204.
- International Monetary Fund. (2018). Strengthening the International Monetary Fund for Stability and Sustainable Development. *T20 Policy Brief, March.*
- Jensen, C., & Smith, C. (2000). Stockholder, manager, and creditor interests: Applications of agency theory. *Theory of the Firm*, 1(1). <u>https://doi.org/10.2139/ssrn.173461</u>
- Jensen, C., & Meckling, H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. <u>https://doi.org/10.1016/0304-405X(76)90026-X</u>
- Kalaignanam, K., & Bahadir, C. (2018). Corporate brand name changes and business restructuring: is the relationship complementary or substitutive?. *Journal of the Academy of Marketing Science*,41(4), 456-472
- Kaushik, K., & Rahman, Z. (2015). Innovation adoption across self-service banking technologies in India. *International Journal of Bank Marketing*. 33(2), 96-121.
- Khan, J. (2018). Research Methodology. New Delhi. APH Publishing Corporation
- Kinuthia, C. (2015) .*The relationship between size and financial performance of Commercial Banks in Kenya* (Doctoral dissertation, University of Nairobi, Kenya).
- Kithinji, M., Mwangi, M., Litondo, K., & Ogutu, M. (2017). Bank Restructuring and Financial Performance. *International Journal of Economics, Commerce and Management*, 5(10), 84-98.
- Koetter, M. (2004). The stability of bank efficiency rankings when risk preferences and objectives are different. *European Journal of Finance*, *14*(2), 115-135.



- Kwaning, C., Churchill, Q., & Opoku, A. (2019). The impact of organizational restructuring on the financial performance of public banks: a post restructuring assessment of Agricultural Development Bank, Ghana. *Research Journal of Finance and Accounting*, *5*(16), 106-112.
- Lal, M., Pitt, N. & Beloucif, S. (2018). Loan Restructuring, Human Capital and Digital towards MSME Performance in the COVID-19 Pandemic. *APMBA (Asia Pacific Management and Business Application)*, *10*(2), 177-192.
- Mario, K. (2019). Recommendations for the ECB's Monetary Policy Strategy Review. Task Ahead: Review of the ECB's Monetary Policy Strategy– Compliation of Papers, Monetary Dialogue, 75-98.
- Merton, R. (1995). Financial innovation and the management and regulation of financial institutions. *Journal of Banking & Finance*, 19(3-4), 461-481.
- Kim, D., Kang, S., & Moon, T. (2015). Technology acceptance and perceived reliability of realistic media service. *Indian Journal of Science and Technology*, 8(25), 1.
- Martin, P. (2017). Digital Inclusion for Access to Information: A Study on Banking and Financial Institutions in India. *SAGE Open*, 7(3), 2158244017720479.
- Mwangi, J. (2016). *The Effect of Firm Size on Profitability of Microfinance Banks in Kenya* (Doctoral dissertation, University of Nairobi).
- Mwangi, N., & Maina, R. (2021). Organization restructuring and performance of commercial banks in Mombasa County, Kenya. *International Journal of Business Management, Entrepreneurship and Innovation*, 3(3), 103-122.
- Mwangi, M. & Murigu, J. (2015). The Determinants of Financial Performance in General Insurance Companies in Kenya. *European Scientific Journal*, 11(1), 288–297
- Nopiyani, P., Sanjaya, S., & Kartika, D. (2021). The Impact of Credit Restructuring Relaxation on Financial Performance during the Covid-19 Pandemic. *International Journal of Social Science and Business*, 5(4).
- Norley, L., Swanson, J., & Marshall, P. (2017). *A Practitioner's Guide to Corporate Restructuring*. New York, NY: City Planning Publishing
- Nzuve, R. (2016). Impact of macroeconomic factors on financial performance of deposit-taking micro finance institutions in Kenya (Doctoral dissertation).
- Osoro, P. (2019). *The effect of financial restructuring on the financial performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).
- Sánchez-Riofrío, A. M., Guerras-Martín, L. Á., & Forcadell, F. J. (2015). Business portfolio restructuring: a comprehensive bibliometric review. Scientometrics, 102(3), 1921-1950
- Shehzad, T., De Haan, J., & Scholtens, B. (2018). The relationship between size, growth and profitability of commercial banks. *Applied economics*, 45(13), 1751-1765.
- Wang, G., Guangjin Yu, G. & Shen, X. (2020). The Effect of Online Investor Sentiment on Stock Movements: An LSTM Approach. *Hindawi Complexity*, 2020(11).
- Wu, Z., & Delios, A. (2019). The emergence of portfolio restructuring in Japan. Management International Review, 49(3), 313-335.