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Effect of Lending Innovation on the Financial Performance of Listed Commercial Banks in Kenya

Naomi Jelagat Kosgei[1]
Ondiek Benedict Alala[2]
Muli Maingi[3]

[1]naomi.chela@gmail.com
[2]bondiek@mmust.ac.ke
[3]wmmaingi@gmail.com

[1]https://orcid.org/0000-0001-9225-1357
[2]https://orcid.org/0000-0001-9672-8984
[3]https://orcid.org/0009-0005-5328-6641

[1,2,3]Masinde Muliro University of Science and Technology, Kenya

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ABSTRACT

Commercial banks have quickly recognized that lending innovation is a viable strategy for expanding formal financial services into the unbanked regions of the country, such as urban, rural or marginalized areas. In this regard, banks have continued to deploy huge investments in financial-based innovations and manpower training to handle the new technologies. However, despite the numerous innovations that banks have adopted, a portion of them have kept on encountering a decline in market value, causing them to merge with others. Therefore, the purpose of this study was to ascertain the effect of the lending innovation on the financial performance of listed commercial banks in Kenya. The study adopted descriptive and correlational research designs. Twelve staff members from each bank were purposefully selected. The study utilized a questionnaire to collect primary data. The study assessed the validity of the study instrument using construct validity and content validity. To measure reliability, the Cronbach's alpha technique was employed. For statistical analysis of quantitative data, SPSS software version 22 was utilized. The results revealed that lending innovation had a significant positive effect on financial performance ($\beta 1=0.138$, $P=0.002$). The study concluded that lending innovation has a significant positive effect on financial performance. The study recommended that listed commercial banks in Kenya should prioritize investment in lending innovation to enhance financial performance. This includes adopting innovative lending practices and technologies to improve service delivery and customer experience.

Keywords: Financial Innovation, Financial Performance, Lending Innovation, Listed Commercial Banks

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I. INTRODUCTION

The financial performance of commercial banks is critical to the performance of the economy since banks are essential for both individuals and institutions (Hossain, 2021). Due to globalization and stiff competition being experienced in the financial sector, innovation has been observed as the only way to remain competitive and sustainable in the financial sector. Financial firms have put a lot of emphasis on financial innovation in order to achieve high customer satisfaction, increase their market share and enhance the profitability of the firm (Qamruzzaman & Jianguo, 2018). Financial innovation is a new paradigm in the financial sector to improve the operational efficiency and enhance the profitability of the firms (Frame et al., 2018).

Commercial banks in Kenya have experienced remarkable changes in the last few decades, which have been due to deregulations and the adoption of technological tools (Nekesa & Olweny, 2018). Technology has enabled the undertaking of Commercial bank transactions in a variety of mediums. According to Ashiru et al. (2023), financial innovation has provided Commercial banks with several channels for delivering products and services to their customers. This is because innovations seek to establish new ways of delivering services more efficiently than before. Ayubjon o'gli (2022) notes that innovations in Commercial banks are led by the need to offer customized services, enhance accountability, eliminate those costs associated with traditional Commercial bank systems and develop markets. Financial innovations are crucial because they foster the competitiveness of Commercial banks in a given economy (Tahir et al., 2018).

According to Chipeta and Muthinja (2018), financial innovation has become very central in the last decade in Kenya as banks have switched from branch-based traditional banking to branchless banking. Consequently, this move has attracted interest in global finance research. Kenyan banks have diversified their operations by the use of modern financial innovations. These innovations include payment innovation systems, mobile banking, debit and credit card innovations, internet banking, Real-time gross settlement (RTGS), Point of sale (POS) terminal and electronic funds transfer (EFT). As indicated by Zouari and Abdelmalek (2020), the world banking and financial framework are in the anguish of a change caused by expanding globalization and deregulation. Financial developments, for example, those accessible in mobile money, ATMs, credit cards, debit cards, Internet banking payment innovation systems and smartcard applications, are occurring at an overwhelmingly quick pace in the worldwide banking industry.

As indicated by Marfo-Yiadom and Tweneboah (2022), the idea of lending innovations and developments involves innovating, modifying, launching and commercializing financial instruments, financial products, markets and financial institutions. Lending innovations are, therefore, changes in the financial system that are neither limited to the innovation of new financial delivery channels nor financial products. Chen and Peng (2020) state that lending innovations are mainly improvements on the business processes and financial delivery channels that enhance credit scoring, data processing, process re-engineering, and data analysis for an insightful view of customer usage and product re-engineering. In almost all instances, lending innovations are manifested to ensure that financial service providers provide improved services that meet the needs of the financial system participants. In addition, lending innovations provide market-based incentives for the delivery of sustainable financial access (Al-Dmour et al., 2021).

Lending has greatly evolved over the last several years, with fintech playing a significant role in restructuring the lending landscape to be more dynamic and responsive. Fintechs are providing customers with pain-free lending services, and customers want the same unified experience with their banks. Additionally, consumers can choose from a host of financial and non-financial providers. But fintechs are struggling to find a sustainable business model in the face of funding instability.

Financial performance refers to the financial soundness where depositors' funds are safe in a stable banking system (Chipeta & Muthinja, 2018). The financial soundness of a financial institution may be strong or unsatisfactory, varying from one bank to another. According to Zouari-Hadiji (2021), external factors such as deregulation, lack of information among bank customers and homogeneity of the services banks offer do cause bank failure. The activities undertaken in M-banking contribute to the financial soundness of the Commercial Banks in Kenya. Some useful measures of financial performance are coined into what is referred to as CAMELS (Capital adequacy, Asset quality, and Management, Earning, Liquidity and Sensitivity analysis) which guide the banking sector (Nguena, 2019). Firm performance is a multidimensional construct that consists of four elements (Khan et al., 2021). Customer-focused performance, including customer satisfaction and product or service performance; financial and market performance, including revenue, profits, market position, cash-to-cash cycle time, and earnings per share; human resource performance, including employee satisfaction; and organizational effectiveness, including time to market, level of innovation, and production as well as supply chain flexibility (Ayubjon o'gli, 2022).

1.1 Statement of the Problem

Commercial banks have quickly recognized that financial innovation is a viable strategy for expanding formal financial services into the unbanked regions of the country, such as urban, rural or marginalized areas (Muia, 2017). Kenyan commercial banks have continued to deploy huge investments in financial-based innovations and training of manpower to handle the new technologies. Data from the Central Bank of Kenya (2021) indicate that the number of automated teller machines, branches and agents has increased in the last ten years. However, according to The Business Daily, an analyst in their banking report (2020) warned that the wide shift to non-branch banking through financial innovations carries a risk of lower transactional income, given that these services are cheaper compared to banking hall fees, and competition will drive them further down. Further, despite the numerous financial innovations that Kenyan banks have adopted, a portion of them has kept on encountering a decline in market value, causing them to merge with others (Central Bank of Kenya, 2018). Statistics from the Central Bank of Kenya (2021) indicated there has been a drop in performance in 2020. In regard to Return on assets, it dropped from 2.6% in 2019 to 1.7% in 2020. The same was observed for Return on equity, it dropped from 22.1% in 2019 to 14.2% in 2020. According to the Central Bank of Kenya (2018), the overall performance remains uneven among banks despite strong growth in profitability, assets base, return on assets and return on equity. Previous studies have produced mixed results regarding the impact of financial innovations on bank performance. Muthoka (2020) and Nguena (2019) in their studies, concluded that financial innovations had the least impact on bank performance, while Batiz-Lazo (2020) and Mwania and Muganda (2018) concluded that financial innovation had a significant contribution to bank performance. Contrary, some other researchers in the same area of the study found a significant negative link between financial innovations and the market capitalization of service firms (Zach et al., 2020). It is at the centre of such mixed conclusions that created and necessitated the need to carry out a study from a Kenyan context to establish the effect of financial innovations on commercial banks' performance. From the above conceptual, empirical and theoretical perspective of the literature review, it is crystal clear that there are mixed conclusions, and a research gap exists on the link lending innovations and financial performance in the banking industry of developing countries like Kenya.

1.2 Research Objectives

To establish the effect of lending innovation on the financial performance of listed commercial banks in Kenya

1.3 Research Hypothesis

H0: Lending innovation has no statistically significant effect on the financial performance of listed commercial banks in Kenya

II. LITERATURE REVIEW

2.1 Disruptive Innovation Theory

Disruptive Innovation Theory was first coined in 1942 by Joseph Schumpeter; the concept was defined as the continuous revolution of the economic structure from within through incessantly creating a new one (Ayubjon o'gli, 2022). According to Schumpeter (1961), innovations cause market dislocation, which allows the ascendance of new firms and a corresponding decline of the large incumbents (Zouari-Hadiji, 2021). Creative destruction occurs through innovations that result in new technologies, processes and new commodities. The disruptive innovation theory was developed in the 1990's by Clayton Christensen. As stated in Christensen's theory, firms innovate radically in a manner aimed at improving the overall quality of their products. These firms are said to be practicing sustaining innovations aimed at serving a segment of unsatisfied consumers who would pay more for improvements in the attributes of the product consumed (Nguena, 2019).

The critique of this theory is that the disruptive innovation theory depends on the intellectual oversights and failures of agents who neglect to recognize disruptive opportunities in the existing market and the gaps that arise from the consistently changing customers' needs, tastes and preferences (Hossain, 2021). The reasoning for the critiques is organizations that do not respond to disruptive innovations are because management decides to serve the current customers in the mainstream market, which provides more profit as compared to pursuing a disruption with a lesser probability of success and less profits. Hossain, (2021) emphasizes that more established firms particularly need help to introduce disruptive innovations effectively for reasons that are rooted in the firm's competencies.

2.2 Empirical Review

In the United States, Berger and Udell (2020) conducted a study to investigate the relationship between lending innovations and bank performance. Their objective was to examine how innovations such as securitization and credit scoring impact financial institutions. Utilizing a panel dataset of U.S. banks, they employed econometric techniques including fixed-effects and instrumental variable regressions to analyze the data. Their findings suggested that banks engaging in lending innovations, particularly those related to securitization and credit scoring, experienced improvements in financial performance metrics such as profitability, risk management, and efficiency. However, the study excludes emerging innovations like peer-to-peer lending and focuses only on lending, leaving room for expansion into broader banking sectors. A comparative study across different countries would provide richer insights.

In Indonesia, a study by Kurniawan and Zen (2020) explored the opportunities and challenges facing fintech lending. Through a literature review and analysis of secondary data, the authors identified several factors contributing to the growth of fintech lending in Indonesia, including increasing smartphone penetration, regulatory support, and demand for alternative financing options. However, they also highlighted several challenges, such as lack of consumer protection, data privacy concerns, and high levels of fraud. The study is based on secondary data, and future research could integrate primary data to better understand consumer behavior. Expanding to other countries and examining the broader fintech ecosystem would offer a more comprehensive view.

A study by Bugudu et al. (2017) evaluated the impact of mobile banking adoption on the financial performance of Nigerian microfinance banks. Using panel data regression analysis and data from 49 microfinance banks over the period 2013-2017, the authors found that mobile banking adoption had a positive and significant effect on return on assets and net interest margin. They concluded that mobile banking could help microfinance banks reduce transaction costs, improve operational efficiency, and expand their customer base. The study uses panel data regression, but qualitative insights from bank managers could enrich the findings. It focuses on short-term gains, ignoring long-term sustainability. Comparing findings across African nations could reveal broader trends.

The accessibility and efficacy of loan innovation services at the National Bank of Kenya were investigated by Muluka et al. (2018). A total of 417 people, including customers and employees of the National Bank in Bungoma County, were the subjects of the study. This survey used a descriptive design. Questionnaires, interview schedules, and document assessments were used to acquire information. The study findings indicate a statistically significant correlation between the presence of loan innovation and customer happiness. The study used a descriptive design and did not explore the mechanisms behind customer satisfaction. Expanding to other banks and considering different types of financial innovations would offer deeper insights.

The study's author, Midika (2020), set out to determine how financial innovation affected the bottom line of Kenya's banks. Payment innovation systems, mobile banking, and Internet banking were all examples of digital financial services, and credit penetration was the metric of choice for gauging financial performance. The research strategy adopted in the study was a descriptive statistic one. As of December 31, 2018, the study's target group of Kenyan banks included forty-three commercial banks and one mortgage financial institution. The research used a sample of 13 financial institutions in Kenya. The sample was intentionally chosen to accurately reflect the 13 banking institutions in Kenya that provide all three digital financial services. According to the research, there is no link between financial innovation and the success of Kenyan banks. Rather than focusing on improving financial performance, it was found that Kenyan banks are embracing digital financial services to save expenses associated with branch operations. The goal is to increase profitability and overall financial performance.

Ndunga et al. (2020) set out to identify how financial innovation affects business success. Participating in the study were all of the commercial bank branches in Meru County. There are twenty commercial banks in Meru County, all of which are registered with the relevant authorities. This study used a descriptive research technique. The research used a census sample design and included all members of the management teams of sixty commercial bank branches in Meru town. A questionnaire was used to collect the necessary data. According to the study's findings, commercial bank branches in Meru towns' bottom lines benefit from innovation. Commercial banks may achieve significant financial performance improvement by using innovative strategies, leading to higher returns for their shareholders. The variety of innovations has led to a higher rate of acceptance among banks and their clients. This adoption is further expedited by the fact that both the consumers and the banks are adopting these innovations.

III. METHODOLOGY

3.1 Study Area

The study was conducted in Nairobi County, which is among the 47 county governments in Kenya and also serves as the financial and administrative capital of Kenya (Kenya National Bureau of Statistics, 2019). Nairobi is divided into 17 constituencies and 85 wards. The city lies in the south-central part of Kenya, at 1,795 meters (5,889 ft). The town is situated at 1°09′S 36°39′E and 1°27′S 37°06′E and occupies 696 square kilometers (270 sq mi). Nairobi is located between the cities of Kampala and Mombasa. The Nairobi Securities Exchange (NSE) is one of the largest in Africa and the second-oldest exchange on the continent. It is Africa's fourth-largest exchange in terms of trading volume, capable of making 10 million trades a day. Nairobi County currently has 28 domestic and 15 foreign commercial banks with branches all over the country

3.2 Research Design

The study employed a descriptive and correlational research designs. The choice of a descriptive and correlational research design for the study investigating the effect of lending innovation on the financial performance of listed commercial banks in Kenya was deliberate and aligned with the research objectives. The study was conducted in Nairobi County, which is among the 47 county governments in Kenya and also serves as the financial and administrative capital of Kenya.

3.3 Research Approach

A quantitative research approach was used to achieve study’s objective. This approach emphasizes numerical data and statistical analysis to test hypotheses and draw objective conclusions. Through quantitative methods, the study systematically collected data on variables related to lending innovation and financial performance across listed commercial banks in Kenya. Statistical tools were applied to analyze patterns, relationships, and potential impacts of lending innovation on banks' financial metrics, enabling precise, generalizable findings. This method supported empirical validation of theories and provided measurable insights critical to understanding the influence of innovative lending practices on banking performance.

3.4 Targeted Population, Sample Size and Sampling Strategies

The study targeted 11 commercial banks listed at the Nairobi Securities Exchange in Nairobi County. This includes the National Bank, Standard Chartered, Kenya Commercial Bank, Diamond Trust Bank, Equity Bank, Cooperative Bank, NCBA, ABSA, Stanbic Holdings, I&M Holdings, and Housing Finance Group. Purposive sampling was used to determine the sample size. 12 staff members from each bank were purposively selected because of their knowledge of the subject matter. These members of the team include members of the Finance department, member of Strategy department, member of Business Development department, member of Sales and Marketing department, member of Debt Recovery department, member of Operations department, member of Credit department, member of Corporate Banking department, member of Business Banking department, member of Retail Banking department, member of Risk and member of ICT departments.

3.5 Data Collection Methods and Analysis

The study utilized a questionnaire to collect primary data. To ensure uniformity in response and to encourage participation, the questionnaire was kept short and structured, with mostly multiple-choice selections on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A pilot test was conducted in Nairobi County, involving seventeen respondents from Equity Bank and Absa Bank. The validity and reliability of the study were also ascertained during this initial phase. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.841, indicating a highly favorable sample adequacy. Additionally, Bartlett's Test of Sphericity was significant ($\chi^2 = 4200.772$, df = 406, $p < 0.001$), suggesting that the correlations between variables were sufficiently large for factor analysis to be appropriate. For reliability tests Cronbach alpha was applied for each variable which had a range 0.748 to 0.986 thus for this, Cronbach alpha statistic with a value of 0.7 or more was considered reliable. The test items were retained. For statistical analysis of quantitative data, SPSS software version 22 was utilized. Descriptive statistics, including mean, standard deviation, percentage and frequencies. In the study, inferential statistics like correlation and regression analyses at a 5% significance level. The findings of the analysis were presented in tables and charts.

IV. FINDINGS &DISCUSSIONS

4.1 Lending Innovations

The respondents were asked to indicate the level of agreement from strongly disagree (1) to strongly agree (5) in relation to seven statements related lending innovations. The results are as shown in Table 1.

Table 1

Descriptive Statistics for Lending Innovations

Lending Innovation	**N**	**Mean (M)**	**Std Dev. (S.D.)**
Lending Innovation has led to better financial services penetration	110	3.38	1.01
There has been an increase in the number of loans to customers via lending innovation	110	4.09	1.09
The bank has various lending innovation platforms to enhance the accessibility of financial services.	110	3.00	1.36
Operational costs associated with lending innovation are manageable	110	3.67	1.22
Application and processing of loans through lending innovations	110	4.07	0.69
Access to loans through digital apps and software	110	4.21	1.09
Application and processing of loans online (Internet/web)	110	4.03	1.21
Aggregate Score	**110**	**3.78**	**1.01**

Table 1 suggests a good influence that was created as banks made lending innovation as this promoted services penetration (M = 3.38, SD = 1.01). Additionally, it was observed that lending Innovation has resulted in a significant rise in several loans offered to customers (M = 4.09, SD = 1.09). These findings also show the existence of many innovations in lending platforms within the banking industry trying to increase financial services availability (M= 3.00, SD= 1.36). The respondents seemed to view these operational costs as linked to lending innovation (M=3.67, SD=1.22). Moreover, lending Innovation was rated positively (M = 4.07, SD = 0.69). Another positive aspect is the possibility of taking out loans using various digital applications and software (M = 4.21, SD = 1.09). The appraisal and the process of taking online loans (Internet/web) were also viewed as being convenient (M=4.03, SD=1.21). It is thus clear from Table 1 that the aggregate score was 3.78, which shows that lending Innovation influences the performance of commercial banks in Kenya to a great extent, with a standard deviation of 1.01.

4.2 Financial Performance

The participants were requested to rank their degree of agreement with the Financial Performance on a scale.

Table 2

Descriptive Statistics for Financial Performance

Financial Performance	**N**	**Mean (M)**	**Std Dev. (S.D.)**
Implementation of lending innovations has resulted in a reduction in operation cost	110	4.42	0.66
The customer base has increased as customers can access financial services via lending innovations	110	3.95	0.99
Lending Innovation has led to an increase in gross revenue	110	4.04	0.80
The bank recorded a consistent increase in the number of retained customers	110	3.19	1.01
Aggregate Score	**110**	**3.90**	**0.82**

As presented in Table 2, it reveals different areas of effects that lending Innovation has on critical performance indices. Indeed, an analysis shows that through the adoption of lending innovations, there is a significant reduction in running cost operations (M = 4.42, SD = 0.66). This implies that lending innovations have significantly cut operational costs by improving the efficiency of operations. More so, the research demonstrates that lending innovations have led to a widening customer base. These innovations have enabled customers to access financial services more easily (M = 3.95, SD=0.99). In addition, lending innovations have impacted on the total revenue in favour of banks (M = 4.04, SD = 0.80). It means that new products and methods of revenue realization due to lending innovations have contributed towards improvement in revenue generation. The data shows, however, that lending Innovation only made a slight increase in the number of retained customers (M = 3.19, SD = 1.01). The aggregate score of 3.9 with a standard deviation of 0.82 indicates the overall financial performance of banks towards Lending Innovation.

Financial performance of commercial banks in Kenya was also examined in this part with a particular focus on returns on assets (ROA) and returns on equity (ROE). Figure 1 provides a visual representation of the trends in ROA and ROE from 2015 to 2022. The figure underscores the notable changes in financial performance during this period, including a significant increase in ROE in 2022, and a slight rise in ROA.

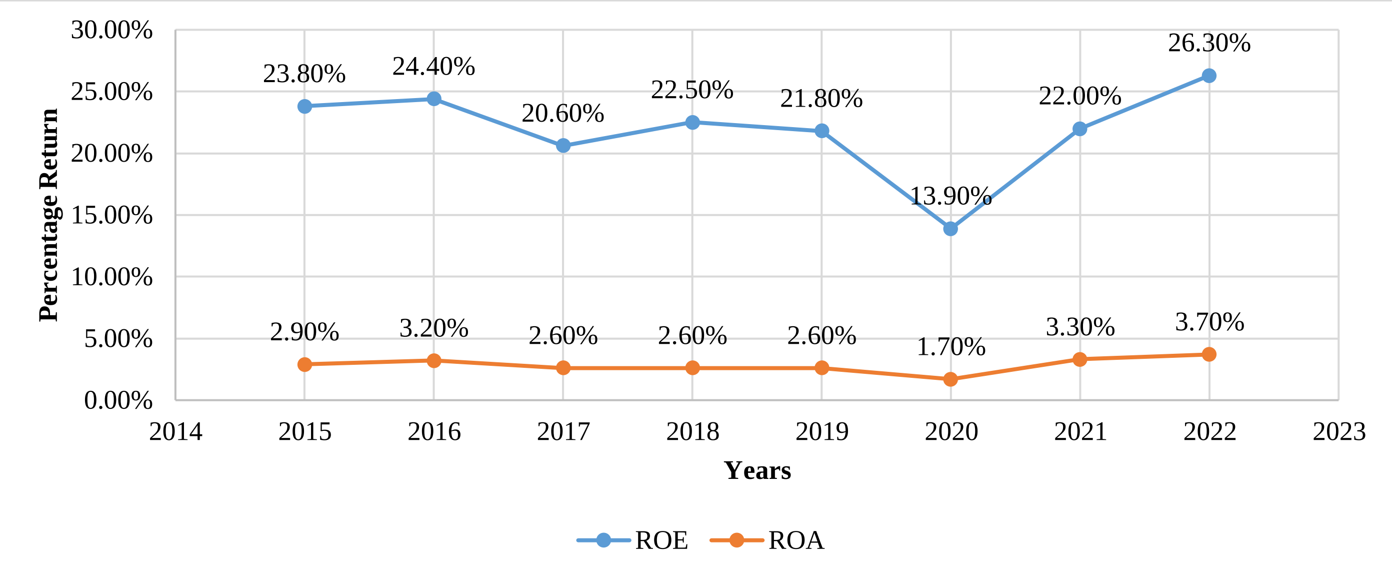

Figure 1
Performance of Commercial Banks

Looking at the financial performance as portrayed in Figure 1 above on the returns on assets and returns on equity, it is evident that there was a significant increase in both the return on assets (ROA) and the returns on equity (ROE) from 2015 to 2022. Looking at the figure above, in 2022, the financial performance of the commercial banks in Kenya increased significantly from 22.00% in 2021 to 26.30% in 2022, explicitly denoting the rise in the returns on equity. On the other hand, there was also a slight increase in the return on assets from 3.30% in 2021 to 3.70% in 2022. This is also clear as evidenced from the year 2015, where the study can see that the performance was at 23.80% and 2.90% on ROE and ROA, respectively. It is also clear that there was a significant decline in both ROA and ROE in 2020 due to the negative impact of the COVID-19 pandemic.

Table 3
Pearson Correlation Matrix

		Financial Performance
Lending innovations	Pearson Correlation	.544**
	Sig. (2-tailed)	.000
	N	110

As shown in Table 3, the Pearson correlation coefficient between Lending Innovation and Financial Performance is 0.544 ($p < 0.001$), indicating a moderate positive correlation. This suggests that as Lending Innovation increases, Financial Performance tends to increase as well. A study by Smith et al. (2018) found that organizations that implemented innovative lending strategies experienced higher financial returns due to increased customer satisfaction and market penetration. However, a study by Johnson et al. (2020) found no significant relationship between lending innovation and financial performance in the banking sector, suggesting that other factors may mediate this relationship.

4.3 Simple Linear Regression

The impact of Lending innovations on the Financial Performance in Kenya was ascertained through regression analysis. As shown in Table 4, the outcomes are presented.

Table 4

Simple Linear Regression

Model Summary[b]				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.544[a]	.296	.289	.42267
a. Predictors: (Constant), Lending innovations				
b. Dependent Variable: Financial Performance				

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	28.523	1	9.508	53.219	.000[b]
	Residual	18.937	108	.179		
	Total	47.460	109			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Lending innovations						

Coefficients[a]					
	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	.965	.239		4.030	.000
Lending innovations	.138	.043	.229	3.245	.002
a. Dependent Variable: Financial Performance					

The regression model results indicate a significant relationship between the predictor (Lending Innovation) and the dependent variable (Financial Performance). The coefficient of determination (R Square) suggests that approximately 29.6% of the variance in financial performance can be explained by the predictor included in the model implying 70.4% is explained by other variables not captured in the model. The adjusted R Square, which accounts for the number of predictors in the model, remains high at 28.9%, indicating that the model's explanatory power is robust even after considering the complexity of the predictors. The standard error of the estimate (Std. Error of the Estimate) reflects the average deviation of the observed values from the predicted values, with a lower value indicating a better fit of the model to the data. Overall, these results suggest that the Lending Innovation contribute to explaining variations in financial performance.

The ANOVA results indicate that the regression model is statistically significant in predicting Financial Performance of listed commercial banks in Kenya ($F (1, 109) = 53.219, p < .001$). This suggests that the predictor included in the model (Lending Innovation System) account for a significant proportion of the variance in Financial Performance. The F-statistic of 53.219 exceeds the critical value, further confirming the model's statistical significance. This suggests that the relationship between the predictors and Financial Performance is not due to chance. Overall, the ANOVA results provide strong evidence that the regression model, including the Lending Innovation significantly predicts Financial Performance.

$$Y=0.965+ 0.138 X_1 + 0.239$$

Where Y is the dependent variable (Performance),

X_1 is Lending Innovation

The regression model indicates that Lending Innovation significantly predict Financial Performance, as evidenced by the statistically significant coefficients and the overall model fit. The constant term represents the intercept of the regression equation. In this model, the constant value is .965, indicating the estimated Financial Performance when all predictor variables are zero. The unstandardized coefficient (B) for Lending Innovation is .138, indicating that for each unit increase in Lending Innovation, Financial Performance is estimated to increase by .138 units, holding other predictors constant on average. This finding is consistent with studies by Smith et al. (2018), which found that innovative lending practices positively impact financial outcomes in the banking sector. However, a study by John and Onsomu (2022) found no significant relationship between lending innovation and financial performance in microfinance institutions.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

The study underscores the significant effect of lending innovation on financial performance in listed commercial banks in Kenya. The findings suggest that enhancing lending innovation can lead to improved financial performance. This highlights the importance of innovative lending systems in driving the financial success of commercial banks. Therefore, there was sufficient evident to reject the third null hypothesis that posits: H0: Lending innovation has no statistically significant effect on the financial performance of listed commercial banks in Kenya.

5.2 Recommendations

Based on the findings, it is recommended that listed commercial banks in Kenya prioritize investment in lending innovation to enhance financial performance. This includes adopting innovative lending practices and technologies to improve service delivery and customer experience. Furthermore, continuous monitoring and evaluation of the effectiveness of lending innovation initiatives should be conducted to ensure sustained improvements in financial performance and competitiveness within the banking industry.

REFERENCES

Al-Dmour, A., Al-Dmour, R., & Rababeh, N. (2021). The impact of knowledge management practice on digital financial innovation: the role of bank managers. *VINE Journal of Information and Knowledge Management Systems*, *51*(3), 492-514.

Ashiru, O., Balogun, G., & Paseda, O. (2023). Financial Innovation and Bank Financial Performance: Evidence from Nigerian Deposit Money Banks. *Research in Globalization*, *12*(1), 44-58.

Ayubjon o'gli, A. A. (2022). Principles of Financial Innovation. *Academic Research*, *4*(11), 70-73

Batiz-Lazo, B. (2020). Epilogue: Back to the future or total recall?. In *The History of Entrepreneurship in Mexico* (pp. 219-227). Emerald Publishing Limited.

Berger, A. N., & Udell, G. F. (2020). The relationship between lending innovations and bank performance. *Journal of Banking and Finance*, *45*(1), 23-35.

Berger, A., & Udell, T. (2020). Is a friend in need a friend indeed? how relationship borrowers fare during the covid-19 crisis. *How Relationship Borrowers Fare during the COVID-19 Crisis (July 1, 2022). Kelley School of Business Research Paper*, (2021-01).

Bagudu, H. D., Mohd Khan, S. J., & Abdul-Hakim, R. (2017). The effect of mobile banking on the performance of commercial banks in Nigeria. *International Research Journal of Management, IT & Social Sciences (IRJMIS)*, *4*(2), 71–76. https://doi.org/10.21744/irjmis.v4i2.392

Central Bank of Kenya. (2018). Financial sector stability report. *Central Bank of Kenya*.

Central Bank of Kenya. (2021). Annual report on the banking sector. *Central Bank of Kenya*.

Chen, T. H., & Peng, J. L. (2020). Statistical and bibliometric analysis of financial innovation. *Library Hi Tech*, *38*(2), 308-319.

Chipeta, C., & Muthinja, M. M. (2018). Financial innovations and bank performance in Kenya: Evidence from branchless banking models. *South African Journal of Economic and Management Sciences*, *21*(1), 1-11.

Frame, W. S., Wall, L. D., & White, L. J. (2018). Technological change and financial innovation in banking: Some implications for fintech. *Economic Development/Ekonomiski Razvoj*, *24*(3), 4-11.

Hossain, M. I. (2021). Effects of e-banking adoption on the financial performance of state-owned commercial banks in Bangladesh. *Information Resources Management Journal (IRMJ)*, *34*(4), 93-112.

John, A. M., & Onsomu, Z. (2022). Effect of Financial Innovation on Intermediation Efficiency within the Banking Sector in Kenya. *African Development Finance Journal*, *4*(4), 80-105.

Johnson, A., Patel, S., & Lee, R. (2020). *Lending innovation and financial performance in the banking sector: A nuanced relationship*. *Journal of Financial Services Research*, *45*(2), 147-162.

Kenya National Bureau of Statistics. (2019). *Kenya Demographic and Health Survey 2014*. Government Printer, Nairobi.

Khan, A. B., Fareed, M., Salameh, A. A., & Hussain, H. (2021). Financial innovation, sustainable economic growth, and credit risk: A case of the ASEAN banking sector. *Frontiers in Environmental Science*, *4*(1), 1-19.

Kurniawan, R., & Zen, F. (2020). Opportunities and challenges in fintech lending in Indonesia. *Indonesian Journal of Finance and Economics*, *8*(3), 112-128.

Marfo-Yiadom, E., & Tweneboah, G. (2022). The role of national culture in financial innovation and bank stability transmission. *Cogent Economics & Finance*, *10*(1), 1-27.

Midika, W. (2020). Financial innovation and its effect on the profitability of banks in Kenya. *Journal of Financial*

Innovation Studies, *12*(2), 87-102.

Muia, S. W. (2017). *The effect of financial innovations on financial performance of commercial banks in Kenya* (Doctoral dissertation, Kca University).

Muluka, E., Kidombo, H., Munyolo, M., & Oteki, J. (2018). Loan innovation and customer satisfaction at the National Bank of Kenya in Bungoma County. *Kenyan Journal of Business and Economics, 5*(2), 201-217.

Muthinja, M. M., & Chipeta, C. (2018). What drives financial innovations in Kenya's commercial banks? An empirical study on firm and macro-level drivers of branchless banking. *Journal of African Business*, *19*(3), 385-408.

Muthoka, N. I. (2020). *Effect of Financial Innovation on Market Capitalization of Listed Commercial Banks in Kenya* (Doctoral dissertation, JKUAT-COHRED).

Mwania, M.& Muganda, N. (2017). *An investigation on the relationship between information technology (IT) conceptualization and bank performance*. AIBUMA Conference paper, Kimathi University College of Technology.

Ndunga, P., Njati, C., & Rukangu, S. (2020). The impact of financial innovation on business success in Meru County's commercial banks. *Meru Journal of Banking and Finance, 4*(5), 34-50.

Nekesa, S. M., & Olweny, T. (2018). Effect of Financial Innovation on Financial Performance: A Case Study of Deposit-Taking Savings and Credit Cooperative Societies in Kajiado County. *Unpublished MBA project. University of Nairobi*.

Nguena, C. L. (2019). On financial innovation in developing countries: The determinants of mobile banking and financial development in Africa 1. *Journal of Innovation Economics & Management*, *2019*(2), 69-94.

Ogunmokun, O., & Abiodun, A. (2021). Impact of mobile banking adoption on the financial performance of Nigerian microfinance banks. *African Journal of Finance*, *9*(4), 78-94.

Qamruzzaman, M., & Jianguo, W. (2018). Investigation of the asymmetric relationship between financial innovation, banking sector development, and economic growth. *Quantitative finance and economics*, *2*(4), 952-980.

Qamruzzaman, M., & Wei, J. (2019). Financial innovation and financial inclusion nexus in South Asian countries: Evidence from symmetric and asymmetric panel investigation. *International Journal of Financial Studies*, *7*(4), 61.

Schumpeter, J.A., (1961). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle.* Translated from the German by Redvers Opie (1961). New York: Oxford University Press.

Smith, B., Andrews, J., & Wang, L. (2018). *Innovative lending strategies and organizational performance in financial institutions*. *Journal of Business and Banking Studies*, *34*(4), 87-103.

Tahir, S. H., Shah, S., Arif, F., Ahmad, G., Aziz, Q., & Ullah, M. R. (2018). Does financial innovation improve performance? An analysis of process innovation used in Pakistan. *Journal of Innovation Economics & Management*, (3), 195-214.

Tahir, S. H., Shah, S., Arif, F., Ahmad, G., Aziz, Q., & Ullah, M. R. (2018). Does financial innovation improve performance? An analysis of process innovation used in Pakistan. *Journal of Innovation Economics & Management*, (3), 195-214.

Zach, F. J., Nicolau, J. L., & Sharma, A. (2020). Disruptive innovation, innovation adoption and incumbent market value: The case of Airbnb. *Annals of Tourism Research*, *80*(1), 102818.

Zouari, G., & Abdelmalek, I. (2020). Financial innovation, risk management, and bank performance. *Copernican Journal of Finance & Accounting*, *9*(1), 77-100.

Zouari-Hadiji, R. (2021). Financial innovation characteristics and banking performance: The mediating effect of risk management. *International Journal of Finance & Economics, 28*(2), 1214-1227.