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RELATIONSHIP BETWEEN FINANCIAL INNOVATIONS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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Abstract

The commercial banking industry in Kenya has, in the last ten years, involved itself in financial innovations, moving from traditional banking to better meet the growing complex needs of their customer and globalization challenges. This study, with its practical implications, explores the relationship between financial innovations and the financial performance of commercial banks, highlighting the positive outcomes that have been observed. The population of the study consisted of forty commercial banks that are currently operating in Kenya. The research was anchored on the diffusion of Innovation theory, Silber's theory of financial burden and Kane's theory of regulatory dialectic. Descriptive cross-sectional research designs were deployed. Primary data was collected using a structured questionnaire, and data was analysed using path analysis. The study results showed that banks in Kenya had adopted some financial innovations such as credit cards, mobile banking, internet banking and agency banking. They further revealed that financial innovations had a great impact on the financial performance of the banks, leading to improved firm performance and deepening the liquidity of banks in existing markets. This increased efficiency in the operations as a whole and especially in commercial banks in emerging markets and developing countries such as Kenya, painting an optimistic picture of the future of commercial banks in Kenya.

Keywords: Financial Innovations, Financial Deepening, Financial Performance, Commercial Banks in Kenya, Diffusion of Innovation Theory, Theory of Regulatory Dialectic

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INTRODUCTION

Innovation is an application of knowledge to produce new knowledge (Drucker, 1993). According to March (1991), although innovativeness and quality may intuitively appear to impact positively on a firm‘s performance, including growth, profitability, and market value in a similar fashion, pursuing these strategies may involve some hard choices in allocating resources. Tufano (2003) broadly defines financial innovation as the act of creating and then popularizing new financial instruments as well as new financial technologies, institutions, and markets. Financial innovations can be grouped as new products (adjustable rate mortgages; exchange-traded index funds); new services (online securities trading; Internet banking); new "production" processes (electronic record-keeping for securities; credit scoring); or new organizational forms (a new type of electronic exchange for trading securities; Internet-only banks). Of course, if a new intermediate product or service is created that is used by financial services firms, then it may become part of a new financial production process (DeYoung, 2001a)

Financial soundness is a situation where a depositor‘s funds are safe in a stable banking system. The financial soundness of a financial institution may be strong or unsatisfactory varying from one bank to another (BOU, 2002). External factors such as deregulation, lack of information among bank customers, homogeneity of the bank business, and connections among banks cause bank failure. Some useful measures of financial performance, the alternative term of financial soundness, are coined into what is referred to as CAMEL. The acronym "CAMEL" refers to the five components of a bank's condition that are assessed: Capital adequacy, Asset quality, Management, Earnings, and Liquidity.

Commercial Banks in Kenya form an important part of financial markets, which play a crucial role in the growth of Kenya's economy. They support virtually all sectors of the economy by offering diverse services which go a long way in fostering the growth of these sectors. The roles played by commercial banks in Kenya include providing a payment system for the exchange of goods and services, providing finance and financial advice to businesses and the general public and offering safe custody for deposits (CBK Bank Performance Report, 2010). Commercial banks are regulated by the Central Bank of Kenya, which publishes prudential guidelines regularly and relays these to all commercial banks. It also ensures compliance with the guidelines through close monitoring. The emergence of many commercial banks in Kenya is a measure of the growth and expansion of the sector. As of 2023, 40 commercial banks had operations in Kenya. This study was anchored on diffusion of Innovation theory (Rogers E.M, 1962), Silber's theory of financial burden (1975) and Kane's theory of regulatory dialectic (1981). The diffusion of innovations theory seeks to explain how and why new ideas and practices are adopted, including why the adoption of new ideas can be spread out over long periods. Silber's

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basic hypothesis emphasises the microeconomic framework of financial innovation. It could be summarized in the phrase that firms face some financial constraints and try to remove or lessen their burden. Silber uses the word firm for financial institutions. Kane (1981) argued that the most prominent and significant factor which initiates the financial innovation process is regulation.

Problem Statement

Performance is a key factor when it comes to running a business. Companies strive to have better performance than their peers in the industry. However, performance may be dismal due to the challenges banks face in the business environment (Usmani, 2021). The rising importance of the financial sector in modern economies, as well as the rapid rate of innovation in that sector, has generated a research interest in financial innovation. Indeed, a broad descriptive literature that discusses recent financial innovations and advances various hypotheses about them has arisen (Lea, 1996). Furst et al. (2000) studied Internet banking using logit models; Sullivan (2000) compared banks in the USA that had transactional Internet websites to those that did not have such websites, and Laderman (1990) examined the use of automatic teller machines (ATMs). The financial services market in Kenya has been subject to radical transformation since Kenya started to register economic growth in early 2003.

Banks in Kenya started to compete for Kenyan hugely untapped unbanked population. The distribution of retail financial services received growing attention in the academic and professional literature as it has been hailed as an increasingly important factor in determining whether a company competes effectively in its chosen markets (Chandler et al., 1962). Mwangi (2007) carried out a study on factors influencing the financial innovation of companies listed on the Nairobi Stock Exchange. Author concluded that Kenyan laws protecting investors were the major factor influencing financial innovation. This study sought to investigate the relationship between financial innovation and the financial performance of commercial banks in Kenya.

LITERATURE REVIEW

A key feature in the process of growth of global financial markets has been a steep increase in complexity brought about, among other things, by the many innovative mechanisms and instruments that have repeatedly blurred the boundaries between financial sectors. Innovative financial products and practices have, more often than not, generated new linkages among financial agents in different financial sectors. For example, the past 12 years have witnessed a steady growth in cross-sectoral risk transfer between banks, reinsurance and capital markets (Cummins, 2008). Financial innovations include creating and adopting new

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financial instruments, technologies, processes, and business models. These innovations can be categorised into product innovations (e.g., new financial products), process innovations (e.g., new ways of delivering financial services), and organisational innovations (e.g., new business models) (Frame & White, 2014). Financial innovations are essential for banks to stay competitive, meet customer needs, and comply with regulatory requirements (Berger, 2003). The success of these innovations depends on the bank's ability to implement and integrate them effectively into its operations (Sanchez, 2017).

Liquidity management is crucial for banks' stability and performance. Financial innovations, such as electronic payments and mobile banking, enhance liquidity by increasing the speed and volume of transactions (Demirgüç-Kunt & Huizinga, 2010). Innovations such as digital banking platforms and fintech collaborations provide competitive advantages by offering convenient, cost-effective, personalised services (Gomber et al., 2017). Tufano, (1989) longitudinal study between 1974-1986 on Financial Innovation and first mover advantages. Whose data was collected from a population of 1,944 publicly traded securities, and a sample of 58. With the aim of establishing whether investment banks that create new securities benefit by charging higher prices (underwriting charges) than imitators or by capturing large quantities. He concluded that investment banks that created new financial products did not charge higher prices in the period before imitative products appeared and, in the long run, charged lower than rivals.

Mwangi (2007) carried out a study on factors influencing the financial innovation of companies listed at the Nairobi Stock Exchange with the objective of explaining the macro-environmental and micro-environmental factors influencing financial innovation in Kenya‘s securities market. The study concluded that Kenyan laws protecting investors were the major factor influencing financial innovation. Kamotho (2009) in a study on Mobile Phone Banking: usage experiences in Kenya, observed that competition triggers innovation and creativity. Continuous innovation not only yields new products but also promotes efficiency in the performance of activities. Frame and White (2004) identify 39 related empirical studies, but most focus on the ―back end of innovation processes, looking at issues such as the way they are diffused, the characteristics of firms that adopt them, consequences for firm performance and social welfare.

METHODOLOGY

The study used descriptive research design as a research design. The target population of the study was all 40 commercial banks in Kenya. The study variables were operationalized: financial innovation (credit cards, mobile banking, internet banking and agency banking) and financial performance (return on investment). The data collection instrument used was a

questionnaire, which the researcher administered through the drop-and-pick method. The questionnaire was designed to capture information on the types of financial innovations adopted by the banks and their impact on various performance metrics. The multiple linear regression analysis was at a 5 percent significance level to test the relationships between financial innovation and financial performance among commercial banks in Kenya

FINDINGS AND DISCUSSIONS

The study sought to determine the relationships between financial innovation and financial performance among commercial banks in Kenya. The study was guided by the following null hypothesis;

H_0: *Financial innovation has no effect on financial performance among commercial banks in Kenya*

Table 1: Regression Output

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	F Change	df1	df2	Sig. F Change
1	.686[a]	.470	.408	.66952	.470	7.545	4	34	.000

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.529	4	3.382	7.545	.000[b]
	Residual	15.241	34	.448		
	Total	28.769	38			

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	.161	.074		2.176	.005		
	Credit cards	.294	.124	.267	2.372	.002	.494	2.023
	Mobile banking	.440	.202	.421	2.172	.004	.264	3.788
	Internet banking	.587	.226	.535	2.596	.014	.366	2.729
	Agency banking	.641	.229	.623	2.792	.003	.406	2.462

a. Dependent Variable: financial performance

b. Predictors: (Constant), agency banking, credit cards, internet banking, mobile banking

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The findings revealed that the coefficient of determination (R^2) was 0.47. This implied that financial innovation explained 47% of the variation in financial performance. The model was significant in overall (F 7.545, P-value = 0.000<0.05). The model of financial innovation on financial performance had good predictive power. Credit cards (β = 0.294, t = 2.372, P-value = 0 .000<0.05), mobile banking (β = 0.440, t = 2.172, P-value = 0 .004<0.05), internet banking (β = 0.587, t = 2.596, P-value = 0 .014<0.05) and agency banking (β = 0.641, t = 2.792, P-value = 0 .003<0.05) were all individually significant. Agency banking had the highest influence on financial performance, followed by Internet banking, Mobile banking and Credit cards, respectively. Thus the hypothesis that financial innovation has no effect on financial performance among commercial banks in Kenya was rejected. The resulting regression model was;

Financial Performance = 1.61 + 0.294 Credit cards + 0.440 Mobile banking + 0.587 Internet banking + 0.641 Agency banking

The results conform to those of Tufano (1989), who concluded that investment banks that created new financial products did not charge higher prices in the period before imitative products appeared and, in the long run, charged lower than rivals.

CONCLUSION AND RECOMMENDATIONS

Financial innovations play a pivotal role in enhancing the financial performance of commercial banks in Kenya. By improving liquidity, asset quality, and market competitiveness, these innovations enable banks to achieve greater efficiency and profitability. The study recommends that commercial banks prioritise financial innovation to maintain their competitive advantage and drive sustainable growth. To enhance the financial performance of commercial banks in Kenya through financial innovation, several strategic actions are recommended. Firstly, banks should invest in cutting-edge technologies such as mobile banking, blockchain, and artificial intelligence. These technologies can streamline operations, improve transaction efficiency, and significantly enhance the customer experience by offering convenient and faster services. Developing customer-centric innovations is also crucial. Banks must focus on creating financial products and services that meet the evolving needs of various customer segments. This includes designing personalized banking solutions, flexible loan products, and innovative savings plans that cater to the specific needs of different groups. Strengthening regulatory compliance is another essential strategy. Banks should work closely with regulatory bodies to ensure their financial innovations comply with existing regulations. This proactive approach will help mitigate risks associated with regulatory changes and enhance the bank's reputation in the market. Continuous staff training is vital for the successful implementation of financial

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innovations. Investing in training and development programs will ensure that employees are up-to-date with the latest financial technologies and trends, enabling them to implement and manage new solutions effectively. Collaborating with financial technology firms can provide banks with additional expertise and resources in innovation.

Partnerships with fintech firms can lead to the development of new financial products, improved service delivery, and an expanded market reach. As banks adopt more digital solutions, enhancing cybersecurity measures becomes increasingly important. Robust cybersecurity protocols are essential to protect sensitive customer data and maintain trust in the bank's digital services. Monitoring and evaluating innovations is necessary to assess their impact on financial performance. Establishing a framework for continuous monitoring and evaluation will help banks make informed decisions and adjust their strategies as needed. Finally, promoting financial literacy among customers is key to increasing the adoption rates of new financial products and services. Educating customers about the benefits and usage of these innovations will lead to higher customer satisfaction and loyalty. By implementing these recommendations, commercial banks in Kenya can effectively harness the power of financial innovations to improve their financial performance and gain a competitive edge in the market. Future research should explore the long-term impacts of financial innovations and identify factors that influence their successful implementation.

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