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EFFECT OF FINANCIAL RISKS ON PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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Abstract

The study investigated the influence of financial risks on financial performance of commercial banks in Kenya, motivated by the need to understand how these factors impact profitability and stability in an emerging market context. The study utilized a population of 39 commercial banks in Kenya, gathering secondary data from financial reports over a seven-year period (2016–2022) to analyze key variables, including credit risk, liquidity risk, market risk, capital risk, and operational risk and their effect on financial performance. Panel regression analysis, specifically the fixed-effects model was employed to test hypotheses. The findings revealed that market, capital, and operational risks significantly negatively affected financial performance, while credit and liquidity risks showed no significant effect. The study concluded that targeted management of specific financial risks, coupled with strategic income diversification and leveraging firm characteristics, is essential for enhancing bank performance. These findings extend the modern portfolio theory by demonstrating that, in the context of Kenyan commercial banks, diversifying

revenue streams across interest and non-interest income sources yields superior risk–return optimization compared to asset diversification alone. Recommendations included policy measures to strengthen regulatory guidelines on risk management and an integrated approach combining risk management, diversification, to optimize performance.
Keywords: Financial risk, Performance, Commercial Banks in Kenya, Modern Portfolio Theory

INTRODUCTION

Financial risks are at the epicenter of modern management of business organizations (Truica & Trandafir, 2009). Banking institutions are vulnerable to different financial risks including liquidity, credit, forex, interest rate, and market risks that adversely affect their financial performance (Djan et al., 2015). Thus, to enhance financial performance, one of the most essential success indicators for any banking entity remains in its ability to effectively manage the inherent financial risks facing its business. Failure to manage effectively financial risks can lead to bank failure (Hunjra et al., 2020). Financial risks, if not managed, often leads to financial crises, leading to underperformance of banking entities, lowering of a country's economy, and thus depressing the standard of living of people (Zhao et al., 2021). In addition, financial risks, if not addressed, can cause financial institutions to collapse and underperform (Haque & Wani, 2015). The risks a banking entity faces affects its operations, particularly in a highly competitive and operating environment (Badriyah et al., 2015).

Financial risk according to Rafique et al. (2020) denotes the uncertainty of future financial results that may affect the profitability and objectives of organizations. A great level of financial risks indicates unpredictability about the bank's future operations, while a lower level indicates easy access to stable cash and funds (Ye et al., 2020). The major financial risks comprise; credit risk, liquidity risk, capital risk, market risk, and operational risk (Haque & Wani, 2015; Amin et al., 2014). Credit risk is proxied by the percentage of defaulted loans to aggregate loans, and a higher percentage indicates a higher probability of default (AlKhouri & Aurori, 2019). Liquidity risk means that a bank is unable to reduce its liabilities and increase its assets and is measured using the liquidity coverage ratio (Haque & Wani, 2015). Market risk refers to uncertainty in a financial institution's portfolio earnings due to changes or fluctuations in market conditions related to factors such as exchange rates; interest rates is measured using value at risk (VAR). Capital risk denotes the possibility of a banking entity losing its capital, which is measured through the capital adequacy ratio (Duho et al., 2020). Operational risks denote the possibility of losses arising from bank systems', processes and individuals, and is assessed by the cost/revenue ratio (Ali & Oudat, 2020).

Firms' performance denotes an entity's ability and capability to use its available assets effectively to attain its goals and add value to its shareholders (Aifuwa, 2020). A firm's financial performance not only plays a key role in raising an entity's market value but also leads to overall industry growth, which eventually leads to financial performance (Kwaltommai et al., 2019). High performance shows the efficiency of executives to use the company resources that contribute to overall economic performance (Mirza & Javed, 2013). The key methodologies used in the banking industry to measure financial performance entail a combination of various financial ratios (Kwaltommai et al., 2019). The key financial performance metrics entail the return on assets (ROA) ratio, return on equity (ROE), and the Tobin Q (Amin et al., 2014). Tobin's Q is a market-based performance indicator and it is the summation of the book value debt and the market value of equity in proportion to the par value of aggregate assets (Siddique et al., 2017). ROA shows the proportion of net earnings to assets while return ROE shows the proportion of net earnings to stockholders' funds (Hunjra et al., 2020; Adzobu et al., 2017).

Commercial Banks in Kenya

The Kenya banking industry plays a key function in the financial system, especially in terms of savings mobilization and lending (Wanjohi et al., 2017). As of 31st December 2022, the industry consisted of the Kenyan Central Bank (CBK) as the regulator, 39 banking entities (38 banks and 1 mortgage financing institution). Of the 39 lending entities, private investors own 37 banks whereas the Government of Kenya has a majority ownership in two entities. Out of 37 private banks, 22 are domestic and 15 are foreign –incorporated (CBK, 2024). The Kenyan central bank (CBK) is the sector's supervisory body. In addition, the Companies Act, the CBK Act, the Banking Act, and various prudential measures circulated by the CBK also govern the industry (Aluoch et al., 2018). The banking sector has been identified as a key pillar in achieving Vision 2030 by increasing savings, promoting foreign direct investments, and protecting the economy from exogenous shocks (Muriithi, 2016).

The banking industry plays an invaluable part in the Kenyan economy by providing loans to key economic sectors such as manufacturing and agriculture (Chipeta & Muthinja, 2018). However, commercial banks in Kenya have suffered serious losses in recent years due to poor management practices. According to the CBK (2023), at least five previously well-performing banks, including Chase Bank, Imperial Bank, Dubai Bank, Spire Bank, and Charterhouse Bank, experienced severe losses or were placed under receivership between 2015 and 2022 due to inefficiencies, unstable credit lines, and inability to effectively hedge financial risks (Echwa & Atheru, 2020; CBK, 2023). Recognizing the high risks associated with banking operations, CBK published a risk management guide to guide all banking entities on the minimum preconditions for

the framework and strategy (Mwangi & Muturi, 2016). However, although the guidelines have been met, some Kenyan banks are still vulnerable to systematic risks resulting in their inability to raise sufficient capital to meet obligations arising from legal guardianship (Musau et al., 2018).

Research Problem

Financial risk and its prudent management are significant for successful financial intermediation and banking sector performance. Efficient financial risks management is critical for the monitoring in banks, control, and performance appraisal by regulators, stockholders, and shareholders (Eisenkopf, 2008). Various theories among them the modern portfolio theory, the capital assets pricing theory, market power theory supports that financial risks should be mitigated to enhance firm performance. However, despite abundant theoretical literature on the significance of risk management, there is a large discussion in academic literature concerning the contribution of financial risk management to firm profitability (Truica & Trandafir, 2009). In addition, failure to manage risk at large companies has been making headlines around the world for many years, especially in the financial sector. As such, poor risk management practices and engagement in reckless risk-taking were blamed for the failure of large organizations among them Olympus, Enron, WorldCom, Satyam, Parmalat, and several others (OECD, 2014).

In Kenya, banks are key in transmitting the impulses of monetary policy to the economic system (Mudanya & Muturi, 2018). However, the Kenyan banking sector has been faced by the failure of some banks due to poor financial risks management and mismanagement (Mulwa & Kosgei, 2016). For quite sometimes, the majority of the Kenyan banks have been recording poor performance due to a high level of financial risks for instance; the ratio of gross NPLs increased from 12.03% in 2018 to 12.78% in 2019, and this increment negatively affected the profitability of these institutions (Siriba, 2020). As such, poor risks management has been reported as the key cause of the letdown and collapse of banks in Kenya (Musau et al., 2018).

Several studies have been carried across the world on how firm performance is affected by various financial risks. For example, Hunjra et al. (2020) examined whether firm-specific risks affect bank performance and documented that credit, operational, and liquidity risks significantly affected bank performance but the study was cross-country in nature and covered several countries in Asia. Fayman and He (2011) examined whether prepayment risk affected USA banks' performance and documented a positive and significant interrelationship through the study focused on prepayment risk. Olalekan et al. (2018) in Nigeria found an insignificant link between liquidity risk and profitability though the study focused on liquidity risk thus indicating that most of the available international studies focus on a single financial risk. From the local perspective, Kioko et al. (2019) assessed whether financial risk affects Kenyan listed banks'

performance and documented a negative relationship between liquidity, market, credit, and operational risks and performance although the study focused on listed banks. Onsongo et al. (2020) also examined whether financial risk affects listed firms' performance liquidity and operational risks significantly affected performance but the focus was listed commercial and services firms at the NSE.

This study was motivated by the failure of five Kenyan banks between 2015 and 2022—namely Dubai Bank, Imperial Bank, Chase Bank, Charterhouse Bank, and Spire Bank—attributable to poor financial risk management, mismanagement, and governance weaknesses (CBK, 2023). These failures disrupted financial intermediation, eroded public confidence in the banking system, and highlighted persistent vulnerabilities in the sector's risk management practices. Although there are previous studies in this area, there exist conceptual, contextual, and methodological gaps that warrant further investigation. Conceptually, most prior studies have focused on the direct relationship between financial risks and bank performance without incorporating the potential mediating role of diversification strategies or the moderating role of firm characteristics, leaving the joint interaction of these variables underexplored. Contextually, much of the empirical work has concentrated on non-financial firms or banking sectors in other jurisdictions whose regulatory frameworks and market conditions differ significantly from Kenya's, limiting the applicability of their findings to the local context. Methodologically, earlier studies have reported inconsistent results—some finding negative relationships, others positive—which can be linked to variations in variable measurement, model specification, and analytical approaches. These gaps, coupled with the real-world implications of bank failures in Kenya, underscore the need for an evidence-based analysis that integrates financial risks, diversification, and firm characteristics to explain performance outcomes. Accordingly, this study sought to answer the question: What relationship exists between financial risks and financial performance of commercial banks in Kenya?

Research Objective

This study sought to determine the relationship between financial risks and financial performance of commercial banks in Kenya.

THEORETICAL REVIEW

The Modern Portfolio Theory

Markowitz (1952) conceptualized the modern portfolio theory (MPT) by as an investment model that seeks to maximize the likely returns of a portfolio for given portfolio risk, or equally mitigate risk, by carefully choosing proportions of different assets for a given level of expected

return (Byers et al., 2015). In the theory, investors can reduce risk exposure from an individual asset by investing in a portfolio that is well-diversified and comprising multiple assets (Moudud, 2019). However, the MPT has been criticized that portfolio theory problems are complex because of the need to predict future returns, which can rarely be known with certainty (Širůček & Křen, 2017). In addition, the MPT assumes a normal distribution of returns on an asset within an asset class that has proven to be false for individual stocks as the correlation of the asset class can change over time (Al-Kayed & Aliani, 2020).

The theory holds that banks gain the benefit of risk reduction if there is no perfect correlation between noninterest income sources and interest earnings. In contrast, banks will face higher risk if noninterest revenue sources are largely correlated and risky with interest-based earnings (Hunjra et al., 2020). The theory supports that by diversifying in diverse economic segments; banks can offset the effects of specific shocks to their loan portfolios because borrowers are in essence spread across diverse economic segments. Hence, a well-diversified bank should be more sensitive to the economic fluctuations in different sectors that they operate. Therefore, the MPT in this study provides a context for explaining the interactions between financial risks and returns (financial performance).

Capital Asset Pricing Model

Several authors among them Sharpe (1964), Mossin (1966), and Lintner (1965) were instrumental in the development of the Capital Asset Pricing Model (CAPM) based on the risk-return base by Markowitz's (1952) portfolio theory. In CAPM, the total risk associated with assets can be divided into two components: unsystematic risk (can be diversified) and systematic risk (non-diversifiable). CAPM computes an investor's required expected return on an asset, based on that asset's sensitivity to systematic risk (Phung & Mishra, 2016). The model is founded on an equilibrium between reward and risk, or rather that the risk of a particular title (expressed as a beta coefficient) is proportional to the return on given security (Širůček & Ken, 2017). The major critiques of CAPM theory include the impracticality of investors' restrictive modeling assumptions such as perfect markets, single-period model, and similar investor expectations that are impractical (Lahiri & Purkayastha, 2017).

The CAPM is used to show a specific link between the degree of uncertainty in cashflow streams and the return on investment and, therefore, to explain how a stock is generally valued and how a discount rate is calculated (Mihai & Cristina, 2015). CAPM also indicates that the expected performance above the risk-free asset is linearly linked with market risk, as quantified by its beta (Lahiri & Purkayastha, 2017). In line with CAPM, bank managers should invest in a market portfolio that is deleveraged with a position in a risk-free asset. CAPM incorporates beta,

to represents the systematic risks. This theory gives an idea of the link between risk and rewards hence CAPM in this study explains the link between financial risks and the associated returns (financial performance). CAPM is relevant as it provides a framework to assess how the inherent financial risks, influenced by firm characteristics, might affect the expected returns of these banks, aligning the understanding of risk and performance in a standardized theoretical model.

EMPIRICAL REVIEW

Tafri et al. (2009) studied financial risks and their effect on Islamic and traditional banks' profitability in Malaysia from 1996 to 2005. “The study used panel data methods including the random effects and the Generalized Least Squares methods. The findings indicated that credit risk significantly affected both Islamic and traditional banks' ROE and ROA. The authors however indicated that the link between interest rates risk and ROE was significantly weak for non-Islamic lenders and non-significant for Islamic banking entities. While the impact of interest rate risk on profitability was significant for traditional banking entities, liquidity risk had a negligible impact on profitability.

In Tanzania, Amin et al. (2014) undertook a study on financial risks how they affect commercial banks' financial performance. The authors used an instrumental variable fixed effect regression approach to solve two-stage simultaneous regression equations. Using secondary data from 21 entities collected between 2003 and 2012, the findings indicated that credit risk and liquidity risk significantly affected the banks' ROE and ROA. The authors also discovered that these financial risks had an inverse link with bank performance as measured through ROE and ROA.

Mudanya and Muturi (2018) in Kenya investigated the impact of financial risks on Kenyan-listed banks' profitability. A quantitative research design as well as panel data estimation techniques, were used to analyze time series and cross-sectional data collected over 10 years from 2007 to 2016 from 11 Kenyan listed banks. The findings discovered an adverse and significant interrelationship between credit risk, market risk, and the listed banks’ profitability. Further, the results indicated that both liquidity and operational risks adversely and significantly affect the bank’s profitability.

Majumder and Li (2018) studied the link between banking risk and Bangladeshi banks' financial performance. The authors collected unbalanced panel data from 30 banking entities for a period of 15 years (2000-2015) and the Generalized Methods of Moments used for analysis. The findings indicated that capital adequacy significantly affected performance while capital risk

adversely and significantly affected banks' performance. Further, the study documented an inverse link between credit, default, and overall risk and bank performance.

Ali and Oudat (2020) among listed banks in Bahrain studied the link between financial risk and bank's profitability from 2014 to 2018 (4 years). The authors collected panel data from 18 public banking institutions in Bahrain. The key risks that were investigated included forex risk, capital risk, operational and liquidity risks. Using the regression model, the study documented that liquidity, forex, and operational risks had an insignificant effect on the banks' performance. The outcomes however showed that capital risk had a direct and substantial impact on profitability.

Duho et al. (2020) in Ghana examined whether risks influence banks' profitability and efficiency. The authors employed the error corrected panel regression to analyze data that was collected from 32 banking institutions between 2000 and 2015. The outcomes indicated that default risk significantly enhanced ROA, assets turnover, and profit efficiency while market risks significantly improved assets turnover, profit efficiency, and ROA. The authors suggested that bank managers should address insolvency, capital, and liquidity risks to enhance profitability. In addition, the study found that operational risks, bank age, listing status, bank size, and competition significantly affect bank profitability. Further, diversification was found to enhance financial performance.

Saif-Alyousfi and Saha (2021) examined the determinants of banks' risk-taking, profitability and stability among banking entities in the Gulf Cooperation Council. Secondary data was collected from 1988 to 2017 and analyzed using a dynamic system generalized method of moments. The outcomes indicated that non-traditional banking activities increased risk and reduced profitability and stability of high liquidity, large, and highly capitalized banks. The study also found that higher concentration enhances risk and decreases profitability and stability of less liquid, less capitalized, and smaller banks. The study further documented that highly capitalized banks with high growth and lending rates are profitable but riskier and less stable during financial crises. The study also found that Islamic banks perform better regarding fee revenue, liquidity, higher market concentration, and asset quality compared to conventional banks.

Conceptual Framework

In this study, financial risks represent the primary independent variable, meaning they are the main predictors or causes being examined for potential effects on the dependent variable, financial performance.

Figure 1. Conceptual Framework

RESEARCH METHODOLOGY

This study adopted a descriptive correlational research design and population comprised 39 commercial banks in Kenya as of December 31, 2022 thus the study was undertaken as a census of all the 39 commercial banks in operation as of that date. This study entirely used panel secondary data that was gathered from the annual accounting reports of the individual banks and the banking sector annual supervision reports by the Kenyan Central Bank (CBK). The data was collected for 7 years from 2016 to 2022 through a data collection sheet. This timeframe provided a sufficient number of observations to conduct robust panel regression analysis while capturing recent trends in the banking sector. Secondly, the CBK's 2023 supervision report was not yet published at the time of data collection, making 2022 the most recent year with complete and verified data. This study employed descriptive statistics and inferential statistics in data analysis using STATA statistical software version 15. Descriptive statistical tools entailed standard deviation, mean, maximum, and minimum values which were used to summarize data. Inferential statistical tools entailed the panel regression model, which were used to assess the direct effect of financial risk on financial performance.

FINDINGS AND DISCUSSION

Descriptive Statistics

Table 1 provides a summary of descriptive statistics for the study variables, covering 273 observations derived from 39 commercial banks in Kenya that maintained complete data across a seven-year period (2016–2022). Each statistic presented reflects the distribution and central tendencies across this longitudinal dataset, capturing key dynamics over time within Kenya's commercial banking sector.

Table 1: Summary of Descriptive Statistics

Stats	N	Min	max	mean	sd	cv	se(mean)
ROA	273	0.087561	20.52476	0.507366	1.52935	3.014297	0.092561
Credit risk	273	0.000803	4.037767	0.194625	0.287982	1.479676	0.01743
Liquidity risk	273	0.010366	0.410838	0.096118	0.054282	0.564747	0.003285
Market risk	273	0.539777	1.852932	1.304587	0.437365	0.335251	0.026471
Capital risk	273	-0.74455	0.945028	0.191703	0.138207	0.720945	0.008365
Operational risk	273	0.012075	22.03015	0.898128	2.381618	2.651758	0.144142

Return on assets (ROA), a key indicator of financial performance, has a minimum of 0.0876 and a maximum of 20.5248, with a mean of 0.5074 and a standard deviation of 1.5294. This high coefficient of variation (3.0143) indicates significant variability in profitability levels across commercial banks, reflecting diverse performance outcomes. Credit risk, measured by the non-performing loans to total loans ratio, shows a minimum of 0.0008 and a maximum of 4.0378, with a mean of 0.1946 and a standard deviation of 0.2880. The coefficient of variation of 1.4797 suggests moderate variability, indicating that while most banks maintain relatively low credit risk levels, some experience higher risk exposure. Liquidity risk, with a minimum of 0.0104 and a maximum of 0.4108, has an average of 0.0961 and a standard deviation of 0.0543. A coefficient of variation of 0.5647 suggests lower variability compared to other risks, implying that most banks maintain similar liquidity profiles, essential for meeting short-term obligations. Market risk shows a mean of 1.3046 with a standard deviation of 0.4374, ranging from 0.5398 to 1.8529. The coefficient of variation of 0.3353 indicates relatively stable market risk levels, though some banks exhibit slightly higher risk levels, possibly due to variations in investment strategies and market exposure. Capital risk demonstrates a minimum of -0.7446 and a maximum of 0.9450, with a mean of 0.1917 and a standard deviation of 0.1382. With a coefficient of variation of 0.7209, capital risk shows moderate variability, indicating differences in capital adequacy and resilience against unexpected losses across banks. Operational risk has a broad range from 0.0121 to 22.0302, with a mean of 0.8981 and a standard deviation of 2.3816, resulting in a high coefficient of variation of 2.6518. This significant dispersion reflects variability in cost efficiency and operational stability among banks, potentially due to differences in management practices and operational scale.

Correlation Analysis

Table 2 presents the correlation analysis results, showing the relationships between financial performance (measured by ROA) and other variables in the study.

Table 2: Correlation Matrix

	ROA	Credit risk	Liquidity risk	Market risk	Capital risk	Operational risk
ROA	1					
Credit risk	-.168**					
Liquidity risk	-.019	-.048	1			
Market risk	-.047	-.126*	.093	1		
Capital risk	-.184**	-.215**	-.073	.123*	1	
Operational risk	-.578**	.070	.174**	.016	-.365**	1

The correlation between financial performance (ROA) and credit risk is negative and significant, with a correlation coefficient of -0.168 (p = 0.005). This suggests that higher credit risk is associated with lower financial performance, indicating that banks with higher levels of non-performing loans may experience reduced profitability. For liquidity risk, the correlation with ROA is negative but not statistically significant (correlation coefficient = -0.019, p = 0.756). This implies that liquidity risk does not have a meaningful impact on the financial performance of banks in this dataset, as changes in liquidity risk levels do not significantly correlate with changes in ROA. The correlation between market risk and ROA is also negative but not significant, with a correlation of -0.047 (p = 0.441). This indicates that market risk, which reflects exposure to fluctuations in market conditions, does not have a significant direct effect on financial performance in this sample. Capital risk shows a significant negative correlation with ROA, with a correlation of -0.184 (p = 0.002). This relationship suggests that higher capital risk, indicating weaker capital adequacy, is associated with lower profitability. Banks with lower capital buffers may struggle to sustain financial performance due to their vulnerability to financial shocks. Operational risk has a strong, significant negative correlation with ROA, with a correlation of -0.578 (p = 0.000). This substantial negative relationship suggests that higher operational risk is closely linked to lower financial performance, likely due to increased costs and inefficiencies affecting bank profitability.

The Hausman Specification Test

This test is used to determine whether a fixed-effects or random-effects model is more appropriate for panel data analysis. A p-value (Prob>chi^2) below 0.05 indicates rejection of the null hypothesis, suggesting that the fixed-effects model is preferred, as the random-effects model would be inconsistent.

Table 3: Hausman Specification Test

b = consistent under Ho and Ha; obtained fromxtreg	
B =inconsistent under Ha, efficient under Ho; obtainedfromxtreg	
Test: Ho: difference in coefficients not systematic	
chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)	
26.96	
Prob>chi^2 =	0.0000

In Table 3, the Hausman test yields a chi-squared statistic of 26.96 with a p-value of 0.0000, which is well below the 0.05 threshold. This result leads to the rejection of the null hypothesis, indicating that there is a systematic difference in the coefficients. Therefore, the fixed-effects model is more appropriate for this analysis, as it provides consistent and reliable estimates in the presence of unobserved heterogeneity that correlates with the explanatory variables. This conclusion suggests that the fixed-effects model should be used for interpreting the results, as it accounts for potential biases that the random-effects model would not address effectively

Fixed Effect Regression

Table 4 presents the results of a fixed-effects regression model used to analyze this relationship, providing coefficients, standard errors, t-values, p-values, and confidence intervals for each type of financial risk. The model achieved an R-squared value of 0.1554 within groups, 0.3104 between groups, and 0.2651 overall, indicating that approximately 26.5% of the variation in financial performance can be explained by the financial risk factors considered in the model. The F-statistic (F(5,229) = 8.43) and the p-value (Prob > F = 0.000) confirm the model's statistical significance, suggesting that at least one of the financial risks significantly influences financial performance.

Table 4: Regression Analysis

Fixed-effects (within) regression	Number of obs	=	273
Group variable: BankID	Number of groups	=	39
R-sq:	Obs per group:		
within = 0.1554	Min	=	7
between = 0.3104	Avg	=	7
overall = 0.2651	Max	=	7
	F(5,229)	=	8.43
corr(u_i, Xb) = 0.3460	Prob > F	=	0

ROA	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	
Credit risk	-0.00031	0.019558	-0.02	0.987	-0.03884	0.038229
Liquidity risk	-0.01493	0.032671	-0.46	0.648	-0.07931	0.049442
Market risk	-0.074917	0.033137	-2.26	0.025	0.009626	0.140209
Capital risk	-0.080386	0.02408	-3.34	0.001	0.03294	0.127833
Operational risk	-0.11524	0.026411	-4.36	0.000	-0.16728	-0.0632
_cons	-1.3307	0.105515	-12.61	0.000	-1.53861	-1.1228

Credit risk is shown to have a very small, negative effect on ROA, with a coefficient of -0.00031 and a p-value of 0.987, which is not statistically significant. This suggests that credit risk, as measured by non-performing loans to total loans, does not have a meaningful impact on the financial performance of Kenyan commercial banks. Therefore, the study fails to reject the null hypothesis H1a, indicating no significant relationship between credit risk and financial performance. Liquidity risk also shows an insignificant effect on ROA, with a coefficient of -0.01493 and a p-value of 0.648. This result implies that liquidity risk, represented by the liquidity ratio, does not significantly affect bank profitability. Consequently, the null hypothesis H1b, which posits no significant relationship between liquidity risk and financial performance, is not rejected.

In contrast, market risk has a statistically significant negative effect on financial performance, with a coefficient of -0.07492 and a p-value of 0.025. This finding suggests that exposure to market fluctuations, such as interest rates or currency exchange rates, is negatively associated with profitability. Thus, the study rejects the null hypothesis H1c, concluding that there is a significant negative relationship between market risk and financial performance. Capital risk and operational risk also show significant negative relationships with ROA. The coefficient for capital risk is -0.08039 with a p-value of 0.001, indicating that higher capital risk, often due to insufficient capital adequacy, correlates with lower profitability. Similarly, operational risk has a coefficient of -0.11524 and a p-value of 0.000, highlighting that higher operational inefficiencies and associated risks substantially reduce financial performance. The significant findings for capital risk and operational risk lead to the rejection of null hypotheses H1d and H1e, establishing that both risks negatively affect financial performance.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study investigated the influence of financial risks, diversification strategies, and firm characteristics on the financial performance of commercial banks in Kenya. In summary, the hypothesis testing results for the objective on financial risk and financial performance reveal

mixed outcomes. The study fails to reject H1a and H1b, indicating no significant relationships for credit risk and liquidity risk, respectively. However, H1c, H1d, and H1e are rejected, as market risk, capital risk, and operational risk show significant negative effects on financial performance. These results underscore the importance of managing specific financial risks, particularly market, capital, and operational risks, to enhance profitability in the Kenyan commercial banking sector.

This study concludes that financial risks, specifically market, capital, and operational risks, play a critical role in shaping the financial performance of commercial banks in Kenya. The significant negative impact of these risks on profitability indicates that banks must prioritize targeted risk management strategies to mitigate these specific financial risks effectively. Credit and liquidity risks, on the other hand, did not significantly affect profitability, suggesting that these risks may be relatively well managed in the sector or have a less pronounced effect on financial performance. This finding underscores the importance of a focused approach to managing the most impactful risks, particularly market fluctuations, capital adequacy pressures, and operational inefficiencies, to sustain and improve profitability.

This study contributes to the body of knowledge on financial risk management by highlighting the specific financial risks that significantly impact the financial performance of commercial banks in Kenya. By distinguishing between market, capital, and operational risks as the most impactful on profitability, this study refines the understanding of how various financial risks affect bank performance within a developing country context. These findings extend the literature on risk management by emphasizing the importance of targeted risk mitigation, offering insights into which risks require the most attention for banks aiming to improve or sustain profitability.

This study offers critical insights for policy formulation in East African Community member countries, particularly in the management of financial risk as a tool for promoting financial performance. The findings that both internal and liquidity risk positively impact growth when managed effectively suggest that policymakers should design strategies to optimize debt use. By prioritizing debt-financed projects that have clear, measurable benefits to the economy, such as income diversification, EAC governments can harness debt as a catalyst for growth. This recommendation reinforces the importance of strategic debt management policies that focus on transparency, accountability, and sustainability to avoid the risks associated with excessive or unproductive debt levels.

This study recommends that policymakers should focus on enhancing the stability and profitability of the banking sector in Kenya. First, regulators should prioritize policies that address the most impactful financial risks—market, capital, and operational risks—by setting

standards and guidelines for risk management in these specific areas. The significant negative effects of these risks on profitability underscore the need for targeted regulatory frameworks that mandate stringent capital adequacy, operational efficiency, and market risk management practices. Such measures would help commercial banks in Kenya establish more robust defenses against financial vulnerabilities, contributing to the sector's overall resilience.

LIMITATIONS OF THE STUDY

This study, while providing valuable insights into the relationship between financial risks, diversification, and firm characteristics on bank performance, faced several limitations. First, the study relied exclusively on secondary data sourced from annual financial reports of commercial banks in Kenya. Although such data provides standardized and credible information, it lacks the granularity required to capture daily risk management practices and qualitative nuances within bank operations. Another limitation is the study's focus on a single geographical context — Kenya — which may affect the generalizability of the findings to other countries with different economic environments, regulatory structures, and risk profiles. The study was further constrained by its time frame of seven years, which, while providing a solid dataset for trend and statistical analyses, might not fully capture long term impacts of global financial shifts, technological advances, and changes in risk regulations. Finally, the fixed effects regression approach, while suitable for controlling unobserved heterogeneity across banks, has limitations related to endogeneity and the ability to assess dynamic relationships.

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