



RELATIONSHIP BETWEEN ECONOMIC RISK AND FINANCIAL, PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

Financial institutions play a key role in spurring the growth of the economy. Commercial banks operate in a highly volatile environment which threatens their ability to achieve their desired goals. The purpose of this study was to establish the relationship between economic risk and the financial performance of commercial banks in Kenya. The study was anchored on agency and prospect theories. Longitudinal and cross-sectional research design was used. The study population was 42 commercial banks in Kenya. 32 purposively sampled commercial banks which had audited financial accounts for the years 2016 to 2021 were included in the study. Secondary panel data collected using an extraction tool validated by experts from banks and academia was analyzed using R statistical software version 4.3.2. Reliability of the data was ensured by using audited financial reports. Descriptive and inferential data analysis techniques were used. Inferential statistics used were linear mixed effects multiple regression allowing random effects to vary by banks. The study findings showed that economic risk significantly influence financial performance with high liquidity and credit risks associated with lower ROE (beta; -10.36; 95% Confidence Interval (CI): (-18.45 to -2.27), p-value: 0.012) and (beta: -0.29; 95% CI (-0.46 to -0.13), p-value: 0.001.)The study concluded that there is a statistically significant relationship between economic risk and financial performance of commercial banks in Kenya. Based on the findings from this study, it is recommended that commercial banks may adopt a holistic approach to risk management by emphasizing economic risks. This study may significantly benefit the government, CBK and the commercial bank management in Kenya to inform policy framework as well as the academia and researchers as far as economic risk and financial performance of commercial banks is concerned.

1. INTRODUCTION

Businesses operate in a wider environment that comprises of the micro and macro environment. The macro environment encompasses political, economic, socio-cultural, technological, legal and environmental influences on organizations. According to Taricha (2022) economic risk has a significant effect on performance of firms. Taricha, (2022) recommends the need to keenly look into the macro environment at policy level to enhance firm performance. Bwire, & Omagwa, (2019) lists economic risk as a crucial consideration when lending as firms facing economic risk may have high loan interest rates, short loan maturity, and restrictive collateral requirements. According to Cuong, (2019), risk management and financial decisions go hand in hand and affects financial performance.

According Jorion (2007), credit risk is the uncertainty of an economic loss due to failure of a counterparty to fulfill their commitment. Credit risk is also influenced by various counterparty characteristics such as reputation, leverage, earnings and collateral (Caouette, Altman EI, Narayanan & Nimmo, 2011)

Economic risk is one of the factors that influence the credit risk in various ways – direct, indirect or reputational. An insolvent borrower may pose a direct risk to a bank as a result of incurring direct legal liability due to clearing up the contamination. A bank may suffer indirect risk if the borrower engages in an activity that damages the environment that results in financial penalties of cost escalation or revenue reduction, because the borrower's ability to repay loans is reduced due to the financial penalties impairing its profitability and cash flows.



2. OBJECTIVE

To establish the relationship between economic risk and financial performance of commercial banks in Kenya.

3. LITERATURE REVIEW

Theoretical Framework

The study was anchored on agency and prospect theories. Agency theory was developed by Jensen and Meckling (1976). This theory postulates that that firms must prioritize the interests of the shareholders in order to increase wealth which motivates the shareholders (Ifeanyi, Oge, & Gozie, 2016; Jensen and Meckling, 1976). According to shareholders, there is need for investment to be done on projects which reduces financial costs but maximize revenue. Economic risks tend to increase costs leading to reduced profits.

RELATED LITERATURE

Economic risk is the possibility of losing money on an investment or business venture. According to Muriithi and Waweru (2017) economic risks include; credit, liquidity, foreign exchange, interest rate. According to Hunjra, Tayachi, Mehmood & Hussain (2021), economic risk is a key component in business which informs operations and in turn affects performance. Economic risk to a large extent is informed by change in government policies in economic and social aspects. For the purpose of this study, economic risk comprised the following risk indicators; credit risks, exchange rates risk, interest rates risks and liquidity risks.

James & Kepha (2020) defines economic risk as a firm's inability to fulfill the unforeseen cash demands through generated cash flows. In other words, it is when a firm does not have enough cash to use for its operations. It may include reinsurance, liquidity technical provision, foreign exchange, interest rate, solvency, underwriting risk and credit risk among others. It is the possibility of losing money on an investment or business venture. Some more common and distinct economic risks include credit risk, liquidity risk, and operational risk. Economic risk is a type of danger that can result in the loss of capital to interested parties and incorporates liquidity risk, and credit risk.

Liquidity risk is computed using current ratio and quick ratio (Mamatzakakis & Bermpei, 2017). It occurs when an organization is unable to accomplish its financial obligations in the short term. Credit risk on the other hand is the current and prospective risk to earnings and capital as a result of inability of an obligor to meet contractual requirements. Mirie (2018) posits that non-performing loans which are experienced by financial institutions can be used to measure credit risk. Matayo & Muturi, (2018) did a study that examined how market risks influence the financial performance of Nigerian banks, focusing on variables such as interest rate risk (IRSK), foreign exchange rate risk (FXRSK), capital adequacy risk (CARSK), and equity risk (EQRSK).

The study by Matayo & Muturi, (2018) analyzed 15 commercial banks from 2011 to 2020, using secondary data sourced from their financial statements. Employing an ex-post facto research design, the study utilized a panel least square estimation model, alongside descriptive analysis, correlation, and variance inflation factor (VIF), with the Kao Cointegration Test assessing long-term effects. The analysis covered 150 bank-year observations. Findings revealed that IRSK, FXRSK, and CARSK had a negative impact on bank profitability, while EQRSK showed a minimal positive effect in the short term. Long-term, market risks were shown to significantly threaten banks' performance. The study concluded that Nigerian banks must adopt effective risk management strategies, particularly in light of rapid technological advancements in the 4th industrial revolution, to enhance profitability and competitiveness. On the other hand, solvency risk can be computed by using a ratio of total liabilities to total assets and reinsurance risk by using a ratio of premium ceded to total assets (Sisay, 2017).

Abdirahman, (2020) undertook a study aimed to determine the effect of loan quality on the financial performance of commercial banks in Kenya, focusing on variables such as loan quality, bank size, loan loss provision coverage ratio, standard risk costs, write-off ratio, and liquidity. The research targeted all 42 licensed commercial banks in Kenya, using secondary data and panel data analysis to assess multiple units over varying time periods. Methodologically, the study employed inferential statistics, including correlation analysis and panel multiple linear regression, with Ordinary Least Squares (OLS) as the estimation technique.

The findings revealed that loan quality and bank size significantly influence financial performance, with non-performing loans negatively impacting profitability, while bank size has a positive effect. Recommendations were



made for policymakers, including the National Treasury and the Central Bank of Kenya (CBK), to implement management control systems, corporate governance codes, and credit risk mitigation frameworks like Basel I and II to improve loan quality and enhance financial performance. Additionally, commercial bank practitioners were advised to focus on improving loan quality and increasing bank size to strengthen financial outcomes.

Wani and Ahmad (2018) studied the relationship between economic risk and financial performance of insurance firms in India and concluded that liquidity risk, solvency risk, capital management risk and firm size had a negative significant relationship with financial performance. Cuong (2019) in a study on assessment of the influence of financial risk as a measure of liquidity risk on the European banks' financial performance noted that a negative significant relationship between liquidity risk and the financial performance of the European banks existed.

Chipa and Wamiori, (2020) carried out a study on economic risks and its influence on financial performance of investment firms listed at the Nairobi Securities Exchange in Kenya and found that operation risk and liquidity risk, had a positive statistical effect on financial performance (ROA) of insurance firms as opposed to credit and interest rate risk which had negative significant relationship with performance according to a study done in Kenya

The study by Javid, Farooqi, Shoukat, and Rasheed (2020) investigated the relationship between financial risks and the financial performance of conventional banks in Pakistan over the period from 2014 to 2018. The research focused on 22 banks listed on the Pakistan Stock Exchange and employed a quantitative methodology, utilizing panel data regression analysis found out that credit risk had a significantly negative effect on both ROA and ROE, interest rate risk was found to have a positive relationship with financial performance, while liquidity risk did not show any significant relationship with either ROA or ROE. The study conclude that credit and interest rate risks are key influencers of financial performance of conventional banks with firm size significantly moderating this relationship. Patarai & Mohamad, (2016) in a study examined the relationship between economic risk and the financial performance of Islamic banks in Malaysia from 2008 to 2014, using panel data from fifteen Islamic banks obtained from the Bank Scope database. The study focused on economic risks including: credit risk, liquidity risk among other risks. The findings revealed that credit risk and liquidity risk had no significant relationship with bank performance. Onsongo, Muathe, and Mwangi (2020) in a study of assessment of implications of economic risk on the performance of commercial banks and service firms indicated that, there was an insignificant positive effect on ROE.

Liquidity risk had a significantly negative relationship with ROE whereas a research study conducted on the relationship between economic risks and firm's performance of banks in Turkey by Arif and Showket (2019) revealed that solvency risk, liquidity risk, and firm size had a positive significant relationship with financial performance. Eneyew (2020) carried out a study on the influence of financial risks including interest rate risks, credit risk and liquidity risks on profitability of commercial banks in Ethiopia. The population of the study was eight commercial banks for a period of twelve years between the years 2000-2011. It was found that interest rate risk had a positive insignificant relationship with profitability. The study found that the relationship between liquidity risks and credit risk was negative and statistically significant to profitability.

According to Muinde (2018), liquidity risk has a positive significant relationship with financial performance of banks which is related to firm size and ROA. A negative insignificant link between credit risk and performance of firms was also evident. Muriithi (2016) in a research on financial risk and financial performance of commercial banks in Kenya noted that credit and liquidity risks have significant negative relation to ROE. The other outcome of the research was that the relationship between financial risks and banks' performance in Kenya was inverse. This study focused on the environmental risk and financial performance of commercial banks as a whole as opposed to financial risks and financial performance only where Muriithi, (2016) focused on liquidity and credit risks only.

Wickramasinghe and Gunawardana (2017) conducted a survey on the effect of cash flow risk management methods on long term financial performance in Sri Lanka. Secondary data was collected from 65 firms in Colombo stock exchange. It was observed that there was a relationship between cash flow risk management techniques and financial performance. This study focused on cashflows only and was conducted from a global perspective while the current study concentrated on the relationship between environmental risk and commercial bank financial performance in Kenya. Therefore, a gap exists in the above contexts.



Ashraf, Yazid and Remli (2021) did a research that sought to show the relationship that exists between economic risk management operations of Islamic banks and their performance in Pakistan where a descriptive research design was employed and both primary and secondary data was used. Twenty-two Islamic banks were targeted using census method. Correlation analysis and multiple regression were used. It was established that the operations of Islamic banks in Pakistan expressed a better economic risk management leading to better financial performance. However, a gap exists given that the study was done in a global context and restricted to Islamic banks and economic risk management, unlike the current study which was concentrated on the relationship between environmental risk and financial performance of commercial banks in Kenya as moderated by firm size.

A research that was carried out by Muriithi (2016) which looked at the effect of financial risk on the performance of 43 commercial banks in Kenya and adopted a quantitative research approach using regression and correlation models to analyze panel data concluded that there exists an inverse relationship between economic risk and financial performance of commercial banks in Kenya. From the results of the study it was noted that liquidity and credit have a negative relationship with return on equity. However, there is a gap since the past study focused on the effect of financial risk on financial performance, concentrating on market risk, liquidity risk, credit risk and operational risks unlike the study at hand which sought to examine the relationship between economic risk and the financial performance of Kenyan commercial banks.

Kagunda (2018) researched on the effect of liquidity risk management techniques on deposit-taking SACCOs' financial performance in Nairobi, Kenya. Descriptive research design with a target population of 41 SACCOs was used. Secondary data was analyzed using descriptive and inferential statistics. Panel regression analysis model with SPSS version 24 was used. From the findings it was clear that quality management operations, capital leverage, capital adequacy practice influenced on the financial performance. The study by Kagunda was restricted to liquidity risk management and dwelled on deposit taking SACCOs but the current study examined the relationship between environmental risk and financial performance of commercial banks in Kenya as moderated by firm size.

Mwangi (2014) did a study aimed to evaluate how liquidity risk management influences the financial performance of commercial banks in Kenya, using a descriptive study design and analyzing data spanning from 2010 to 2013 for the 43 listed commercial banks in the country. Their findings indicated that an increase in the ratio of liquid assets to total assets by one unit corresponds to a 1% decrease in return on assets (ROA), while a similar increase in the ratio of liquid assets to total deposits leads to a 2.2% decrease in ROA (Mwangi 2014).

Mohamed and Onyiego (2018) investigated the relationship between risk management and commercial bank financial performance in Kenya, using commercial banks in Mombasa County. Descriptive research design was used with thirteen commercial banks being sampled for the study. A multiple regression model, ANOVA and correlation analysis was used to analyse the data. Interest rate risk operational, credit and liquidity risks all had a substantial effect on financial performance of commercial banks. There is a gap that exist due to the scope of the above study which was only on commercial banks in Mombasa County and the use of primary data. The current study sampled all commercial banks in Kenya and used secondary data.

Economic risks measured by credit risk, exchange rate risk, liquidity risk and interest rate risks has a significant negative effect on financial performance of financial institutions like SACCOs and commercial banks in Kenya (Kioko, Olweny and Ochieng 2019, and Gweyi 2018) the variation is that Gweyi (2018) did a study in SACCOs while Kioko *et al* (2019) used descriptive research design. This study will address these gaps.

The study of economic risks and financial performance in Kenyan commercial banks from 2016 to 2021 stands out for its specific focus on credit, exchange rate, interest rate, and liquidity risks within Kenya. This contrasts with previous research, which has yielded mixed findings across various regions and banking sectors. Supporting studies by Muriithi and Waweru (2017), James & Kepha (2020), Abdirahman (2020), Cuong (2019), Patarai & Mohamad (2016), Eneyew (2020), Chipa and Wamiori (2020), and Kioko, Olweny, and Ochieng (2019) explore various economic risks but report varied results, while studies such as Hunjra *et al.* (2021), Javid *et al.* (2020), Arif and Showket (2019), Onsongo, Muathe, and Mwangi (2020), Mohamed and Onyiego (2018), and Kachumbo (2020) offer differing perspectives on financial risks in different contexts. The uniqueness of this study lies in its detailed examination of economic risks in Kenyan commercial banks, thereby filling gaps in existing literature and providing new insights into economic risk management in emerging markets' financial sector.



4. METHODOLOGY

Cross-sectional and longitudinal research designs that utilized panel data was employed. The study was carried out in all the forty-two registered and licensed commercial banks operating in Kenya in the years between 2016 and 2021 allowing an understanding of the degree and direction of economic risk change over the period and how it affected financial performance of the commercial banks. The study used time series 2016-2021 owing to the challenges that had faced the industry resulting into some banks going under, others being merged and some put under receivership a clear indication of a threat of survival even as others continually posted excellent financial performance. The study used purposive sampling where only 34 commercial banks that met the threshold requirements were picked. The study utilized secondary data collected using a data extraction tool and analyzed the data using inferential statistics and descriptive statistics with the help of R statistical software version 4.3.2.

5. RESULTS

Table 5.1
Distribution of Economic Risk Factors From 2016 to 2021

Economic risk factor	Year						Overall (N=204)
	2016 (N=34)	2017 (N=34)	2018 (N=34)	2019 (N=34)	2020 (N=34)	2021 (N=34)	
Liquidity risk							
Mean (SD)	0.396 (0.179)	0.428 (0.171)	0.492 (0.215)	0.436 (0.206)	0.517 (0.214)	0.454 (0.177)	0.455 (0.197)
Median [Min, Max]	0.363 [0.144, 0.948]	0.392 [0, 0.854]	0.499 [0, 0.812]	0.440 [0, 0.793]	0.500 [0.170, 0.855]	0.440 [0.170, 0.850]	0.429 [0, 0.948]
Credit risk							
Mean (SD)	23.10 (7.77)	21.00 (8.11)	19.90 (8.56)	19.40 (8.86)	18.10 (7.55)	3.63 (11.10)	17.60 (10.70)
Median [Min, Max]	20.9 [7.90, 45.70]	19.60 [1.00, 37.30]	18.90 [0.70, 36.00]	18.80 [3.80, 50.90]	17.70 [4.40, 38.61]	4.10 [-16.21, 49.60]	18.40 [-16.20, 50.90]
Exchange rate risk							
Mean (SD)	101.5 (0.328)	103.41 (0)	101 (0)	101 (0)	106.5 (1.11)	110 (0)	104 (3.25)
Median [Min, Max]	102 (102, 103)	103 (103, 103)	101 (101, 101)	101 (101, 01)	107 (107, 110)	110 (110, 110)	103 (101, 110)
Interest rate risk							
Mean (SD)	8.62 (0)	8.37 (0)	13.20 (0)	12.50 (0)	12.00 (0)	12.10(0)	11.10 (1.91)
Median [Min, Max]	8.62 (8.62, 8.62)	8.37 (8.37, 8.37)	13.20 (13.2, 13.2)	12.50 (12.5, 12.5)	12.0 (12.0, 12.0)	12.1 (12.1, 12.1)	12.1 (8.37, 13.2)

Mixed effects regression was used to determine the relationship and the results were as presented in table 5.2.



Table 5.2
Mixed effects regression model fitted to determine the relationship between economic risk and financial performance

Predictors	Return on Equity			Return on Assets		
	Estimates	CI	P	Estimates	CI	P
(Intercept)	61.36	12.11 – 110.60	0.015	11.52	-0.95 – 23.98	0.070
Liquidity risk	-10.36	-18.45 – -2.27	0.012	0.42	-1.59 – 2.43	0.680
Credit risk	-0.29	-0.46 – -0.13	0.001	-0.03	-0.07 – 0.01	0.172
Exchange rate	-0.38	-0.82 – 0.07	0.100	-0.08	-0.19 – 0.03	0.164
Interest rate risk	-0.13	-0.79 – 0.53	0.695	-0.11	-0.28 – 0.06	0.208

ROE model Interclass correlation (ICC)-0.69

ROA model ICC- 0.51

As seen in Table 5.2 for ROE, the intercept is 61.36 with a 95% confidence interval (CI) ranging from 12.11 to 110.60. This suggests that, on average, the expected ROE is 61.36% for the banks included in the analysis when other factors are not considered. For ROA, the intercept is 11.52 with a 95% CI ranging from -0.95 to 23.98, although the p-value is 0.070, indicating marginal statistical significance. This means that when other predictors are held constant, the expected ROA is 11.52%. The first economic risk factor examined is liquidity risk. For ROE, the estimate for liquidity risk is -10.36 with a 95% CI ranging from -18.45 to -2.27. The associated p-value of 0.012 demonstrates a statistically significant negative relationship between liquidity risk and ROE. In practical terms, this implies that higher liquidity risk is associated with lower ROE. Conversely, for ROA, the estimate for liquidity risk is 0.42 with a wide 95% CI ranging from -1.59 to 2.43, and a p-value of 0.680, which is not statistically significant. This suggests that liquidity risk does not appear to have a significant impact on ROA.

Credit risk which is an element of economic risk factor was also analyzed. For ROE, the estimate for credit risk was -0.29 with a 95% CI ranging from -0.46 to -0.13, and a highly significant p-value of 0.001. This showed a robust and statistically significant negative relationship between credit risk and ROE. In other words, higher credit risk was strongly associated with lower ROE. For ROA, the estimate for credit risk was -0.03 with a 95% CI ranging from -0.07 to 0.01 and a p-value of 0.172. While this result did not reach the conventional threshold for statistical significance ($p < 0.05$), but still suggested a negative association between credit risk and ROA.

Analysis of exchange rate risk showed that for ROE, the estimate for exchange rate risk was -0.38 with a 95% CI ranging from -0.82 to 0.07, and a p-value of 0.100, indicating no statistically significant relationship with ROE. Similarly, for ROA, the estimate is -0.08 with a 95% CI ranging from -0.19 to 0.03, and a p-value of 0.164, again suggesting no statistically significant relationship with ROA. These results revealed that exchange rate risk does not have a significant impact either on ROE or ROA in the model. The final economic risk factor considered was interest rate risk. For ROE, the estimate for interest rate risk was -0.13 with a 95% CI ranging from -0.79 to 0.53 and a p-value of 0.695. This result showed no statistical significance on the relationship between interest rate risk and ROE. Similarly, for ROA, the estimate for interest rate risk was -0.11 with a 95% CI ranging from -0.28 to 0.06, and a p-value of 0.208, implying no statistically significant relationship with ROA. These findings suggest that interest rate risk does not appear to significantly influence either ROE or ROA in the model. The fitted model was therefore was:

$$\text{ROE} = 61.36 - 10.36X_1 - 0.29X_2 - 0.38X_3 - 0.13X_4 + \mu_j + e_{jt} \dots\dots\dots(5.1)$$

$$\text{ROA} = 11.52 - 0.42X_1 - 0.03X_2 - 0.08X_3 - 0.11X_4 + \mu_j + e_{jt} \dots\dots\dots(5.2)$$

Where : X_1 , X_2 , X_3 and X_4 represent Liquidity risk, Credit risk, Exchange rate and Interest rate risk respectively
 From the results presented, economic risk factors, liquidity risk exhibited a dynamic trend with a slight decrease in 2021, while credit risk showed a substantial decline, indicating improved creditworthiness. Despite the slight decrease



in 2021, liquidity risk had generally increased over the six-year period suggesting that while liquidity risk increased over the years, it remained within a manageable range, and thus warranting close monitoring to ensure financial stability. On the other hand, credit risk exhibited a consistent decline over the period indicating a decrease in the likelihood of defaulting in loans. Finally, exchange rates remained within a narrow range, fluctuating from 101 to 110. This stability suggests that despite global economic uncertainties and geopolitical events, exchange rates did not experience significant volatility during this time frame. Such stability can provide businesses with a predictable environment for international trade and investment.

The findings of this study are similar to global trends on the financial performance of commercial banks over the period. According to Clinichi et. al. (2021), commercial banks were performing better from 2016 to early 2021 when Covid-19 hit the world. Banks started reducing the lending practices and people sold their forex shares. However, there are mixed findings as individual banks in different countries reacted differently to the pandemic. The findings of this study are also similar those of Mathias, (2021). According to the study, which was descriptively evaluating how the covid 19 pandemic affected the performance of commercial banks in Kenya, there was an increase in mean deposits to banks indicating that people were able to repay their loans on time.

There were four key indicators of economic risk and the first was liquidity risk in relation to financial performance of commercial banks in Kenya. The economic risk analysis in Table 5.1 for Kenya's commercial banking sector from 2016 to 2021 revealed an increasing level of risk, peaking in 2020 but falling slightly in 2021, perhaps indicating a turnaround developed in the process. This is similar to what was found by Mathias (2021) where many banks saw increasing risks in the face of the COVID 19 pandemic. The findings underline the ongoing financial condition of Kenyan banks. Consistently higher economic risk through 2020 suggests a fiscal challenge, while a slight deflation in 2021 could indicate a reaction to increased growth, possibly due to market developments or legislative changes.

These factors emphasize the importance of sound liquidity management for banks and emphasize the need for careful management and adaptation to economic changes especially during natural calamities. Maintaining adequate liquidity is essential for banks to be able to navigate volatile situations and meet their financial commitments without undue stress. While declining standards indicate manageable levels of risk, challenges continue to require continued vigilance and proactive measures for economic recovery. The findings from the mixed effects regression model indicate that liquidity risk has significant negative associations with ROE which is similar to what Mwangi *et al* (2014) found.

The second indicator of economic risk was credit risk and financial performance of commercial banks in Kenya. From the results, the credit risk assessment of Kenya's commercial banking sector from 2016 to 2021 provides an encouraging case. There was a remarkable improvement from a high credit risk score of 23.10 in 2016 to a score of 3.63 in 2021, indicating that this decline in credit conditions and risk management measures adopted by banks reflects loan practices and improved borrower risk management (Muinde, 2018). In contrast to the presence of credit risk, an analysis of the exchange rate for the same period shows remarkable stability, between 101 and 110. This level creates a favorable environment for international trade, enabling businesses to forecast cross-border transactions in the face of global uncertainty. When exchange rates appreciate, interest rate risk prices exhibit stability, with low volatility averaging about 8.5 basis points over six years. In essence, it reflects effective risk management strategies adopted by banks to mitigate the potential negative impact of interest rate changes (Central Bank of Kenya, 2016). The mixed effects regression analysis (Table 5.2) aims to reveal the complex relationship between various economic risk factors and financial performance indicators such as asset returns and investments. These findings provide a deeper understanding of how risk factors interact with financial performance metrics and provide valuable insights for strategic decision-making in the banking industry.

The third and fourth indicators of economic risk was the exchange rate and interest rate risk. These two were also studied in their relation to financial performance of commercial banks in Kenya the results show that exposure to exchange rate and interest rate risk in Kenya's commercial banks for six years signals a favorable environment for industry and improved risk management. Muriithi, (2016) affirms that this stability in the midst of global economic uncertainty increases confidence and facilitates policy implementation. Moreover, the mixed effects regression analysis in Table 5.2 provides the necessary framework to understand the complex relationship between economic risk and business decisions, which contributes to informed decision-making in the banking industry.



The intercept analysis reveals the initial values of ROE (61.36%) and ROA (11.52%), which reflect the expected profitability when no other predictors are considered (Mwangi, 2018); (Central Bank of Kenya, 2016). Still, although the ROE intercept is fixed, the confidence interval of the ROA intercept includes zero, indicating some uncertainty. Indicators of economic risk exhibit interesting associations with financial performance. Currency risk reveals a significant negative relationship with ROE (-10.36), indicating that higher equity risk is associated with lower ROE. Conversely, credit risk demonstrates a strong negative relationship with ROE and a negative relationship with ROA, emphasizing its impact on bank profitability. However, volatility and interest rate risk do not show a statistically significant association with Return on Equity or ROA, indicating that these factors do not significantly influence financial performance in the model. Mwangi (2018) elucidates that the study highlights the considerable impact of economic and credit risks on ROE, emphasizing their importance for a bank's profitability. However, this study results suggests that exposure to currency risk and interest rate risk do not show any significant relationship with ROE or ROA, providing insights into the marginal relationships between currency risk and the performance of Kenyan commercial banks.

From the results presented on the relationship between economic risk and financial performance of commercial banks in Kenya as informed by liquidity risk, credit risk, interest rate risk and exchange rate risk, commercial bank managers should incorporate risk mitigation measures into their strategic decisions, including liquidity, improved lending practices, and revised lending policies to reduce risk exposure. Muriithi (2016) and Ouma, Sang, & Kinoti, (2020) posit that reducing liquidity and credit risk can strengthen a bank's financial health, build investor confidence, and potentially attract more investment opportunities. The findings highlight the importance of complying with risk management policies established by governing bodies to ensure industry stability and resilience. Recognizing potential limitations, the study may not include macroeconomic variables affecting overall performance. Muinde (2018) ascertained that further research could examine multiple risk factors' outcomes beyond ROE and assess the long-term sustainability of relationships. The significant association found between liquidity, credit risk, and ROE in Kenyan commercial banks reinforces the evidence against the null hypothesis and highlights the importance of tightly managing risk to ensure the continued profitability and stability of the industry.

CONCLUSION

The study concludes that there exists a statistically significant relationship between economic risk and financial performance of commercial banks in Kenya. This was exhibited by the fact that economic risk, measured using liquidity risk and credit risk of commercial banks in Kenya had a significant impact on financial performance of financial banks.

Credit risk showed a fluctuating trend, decreasing slightly in 2021. In contrast, credit risk still showed a significant decrease, indicating that credit risk increased over time. Exchange rates remained stable, providing a predictable environment for international trade, while interest rate risk exhibited stability, reflecting effective risk management. Liquidity and credit risk had a significant relationship on financial performance (ROE and ROA) of commercial banks, while exchange rate and interest rate risk did not show a significant relationship on financial performance of commercial banks in Kenya based on the available data. This study clearly showed that economic risk influences financial performance of commercial banks and if it is not properly managed it may lead to enormous losses.

RECOMMENDATIONS

The study recommends enhancement of risk management strategies focusing on credit risk and macroeconomic factors to improve financial performance. Secondly there is need to investigate the specific impact of macroeconomic variables and credit risk on banking outcomes to refine risk mitigation measures.

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