American Journal of
Finance
(AJF)

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AJP

American Journal of Finance
ISSN 2520-0445 (Online)
Vol.5, Issue 1, pp 1-15, 2020

www.ajpojournals.org

EFFECT OF MANAGING FINANCIAL RISK ON THE FINANCIAL PERFORMANCE OF LISTED BANKS IN KENYA

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Abstract

Purpose: Management of financial risk is a fundamental management task that commercial banks have incorporated to help shield the commercial banks from losses. However, listed commercial banks have, in recent times gone through challenging times from a performance perspective. This research assessed the correlation between financial results of commercial banks on Nairobi Stock Exchange from a perspective of managing financial risk.

Methodology: A descriptive research design was used along with quantitative research data by collecting panel data for the period 2009-2018 from annual supervision of banks reports along with audited accounts for the concerned entities. Accordingly, an analysis of collected data followed using SPSS 24, which employed descriptive analysis, correlation and regression testing.

Results: Results further indicate that credit risk results in (β) = -1.066; liquidity risk (β) = -.326 and interest rate risk (β) =.603 changes on the banks financial results. Research findings are expected to enhance policy and practice within the banking industry in Kenya.

Contribution of Study: To the regulator the study advocates for new guidelines to ensure that banks have better monitoring mechanisms to avoid breaching their capital reserve requirements. Listed banks should design more robust credit analysis policies and loan administration. This will allow the commercial banks to expand their lending activities to individuals and small businesses overcoming the challenges experienced due to the interest rate caps.

Keywords: *Financial performance, credit risks, liquidity risk, interest rate risks*

1.0 Introduction

Commercial banking institutions have a key intermediation responsibility in any country's financial transformation. The operating environment for banks has been subjected to many changes in terms of operations, structures and the general performance in the last two decades (Saunders & Cornett, 2014). The main aim of commercial banks is to register better performance through sustained profitability and growth (Abebea & Aberab, 2019). However, attempts to realize the growth of the firms are often affected by multiple operating market conditions such as the level of competition, stakeholder's management, political landscape, business and legal regime, the cost of doing business, new innovative products, internal organizational structure, emerging technologies, and effects of globalization (Kotler & Armstrong, 2013).

Banks' core business is managing risks. Their strategies and business models should therefore be centred on risk management (Crouhy, Galai, & Mark, 2014), and like any other business, the core reason of their existence is to maximize shareholders' return. Sustainable financial performance is key indicator of attractive company returns (Waweru & Kalani, 2009). Accordingly, over the last two decades, great focus has been given on financial performance in numerous banks in Africa. Notably, many bank managers undertake a primary transformation of their business with an aim to improving performance.

Bank performance is affected by various risks inherent in their environment. Risk are classified as either systematic (market) or unsystematic risk or financial and non-financial risk. More specifically these classes contain distinct risks pursuant to cause such as credit risk (mirror of asset quality), liquidity risk-Mirror of level of funding, operation risk-Mirror of actions and decisions on operational activities, market risk, political risk, currency risk, strategic risk among others (Imane, 2014). The most common risks in banking includes; credit risks, liquidity risk, market risk, operational risks, strategic risks and compliance risks though the strategic and compliance risks may be as result of operational activities and therefore can be included in operational risks (Saunders & Cornett, 2014).

According to Laas and Siegel (2017) in a comparative review of Basel III versus Solvency II indicates that banks have been faced by higher market and credit risk following a switch to Base III implementation. Burchi and Martelli (2016) measured market risks considering Basel III and concluded that the new regulations can strengthen the market position of an institution. Noor and Abdalla (2017) found out that the link among risk variables (credit, liquidity and market risk) and financial performance was significant. Despite various researchers acknowledging soundness of commercial banks is premised on financial risk management there has been inconclusive and somehow conflicting evidence on how strongly financial risk can be used to explain performance of institutions under study hence current research relied on available market data and contribute to the available empirical knowledge.

1.1 Statement of the Problem

The driver behind initiatives taken in managing risks for banks is improvement of bank performance which aligns to maximization of shareholders returns. This objective is met at the expense of increased risk which is not always accompanied with the high returns and hence may sometime lead to underperformance (Olawale, Tomola, Ayodele, & Ademola, 2015). Risk management is essential to finding better performance because banking is centred around

managing risks (Alshatti, 2015). Available empirical evidence has not exhaustively addressed the local banking industry; the listed banks hence, the thesis sought to consolidate data and solve this research gap.

From the CBK report of 2015, the Imperial Bank and Chase Bank, neither had the required liquidity ratio of 20% nor the required capital adequacy ratio of 14%. This indicates the numerous financial risks that have been facing the institutions in the country (CBK, 2016). Despite this, there has been inconclusive empirical evidence examining how management of financial risks influences the financial performance of entities under consideration hence this thesis aims to fulfil this knowledge gap. Further increasing inflationary pressure and exposure to currency risks accumulating from the volatile political environment have added to the challenges in profitability of Kenya's commercial banks (Juma & Atheru, 2018). Despite the resilience and soundness of the Kenyan banking industry, several Tier II and Tier III commercial banks have experienced increasing financial instability. In the last four years, at least three Kenyan banks have been put under receivership. The banks were put under receivership because they could not provide adequate provisions for non-performing loans, poor liquidity and deteriorating earnings (CBK, 2015). Charter house for instance was placed under statutory management due to increased financial risk (CBK, 2016). The current study examined the effect of financial risks on the financial performance of commercial banks in Kenya.

2.0 Literature Review

Irawati and Maksum (2018) examined how management of risk and size of bank affects commercial banking results in Indonesia between 2010-2015. The research employed an explanatory study considering 30 listed banks. The study concluded that non-performing loans negatively but insignificantly affected ROA of commercial banks. The current findings incorporated a descriptive research design based on a quantitative methodology. Annor and Obeng (2017) studied profitability to credit risk interaction. The research sampled six listed commercial banks. Profitability was analyzed with reference to ROE meanwhile current studies were based on both ROE and ROA. The results confirmed the role of managing credit risk in determining banks profitability. Amin et al. (2018) studied banks in Tanzania to explore whether financial risk affected progress in commercial banking. The research utilized unbalanced panel data regression for the years 2003-2015 and concluded on robust connection between managing financial risk and performance as defined in ROA and ROE for the commercial banks studied. These findings were for studies conducted in Tanzania which could not be exactly the case for the Kenyan scope under review. Overall, the study was premised on the notion that well managed risk should reflect in increased performance of banks and specifically, a well-structured and executed risk reward equation.

Ndoka et al. (2017) analysed liquidity risk and performance impact on Albanian Commercial Banks, applying a quantitative research design utilizing secondary data obtained between 2005 and 2015. From the panel data regression, liquidity risk positively affected commercial bank profitability. The researcher indicated that enhanced financial risk management is key to enhancing performance of firms studied. Kim (2015) evaluated how liquidity risk impacts results of EU panel

banking institutions, sampling data across three years to 2009 and found that the link between ratios of liquidity and financial results was negative.

Muriithi and Waweru (2017) analysed how liquidity risk affects returns of the Kenyan banks between 2005 and 2014. The analysis considered liquidity risk as mirrored in ratios reflecting on liquidity cover in addition to net stable funding ratio. The dependent variable for performance was return on equity (ROE). Findings indicated that net stable funding ratio and bank profitability both for longer and shorter period poses negative relationship with performance, accordingly, liquidity coverage ratio has insignificant effects on the level of profitability of Kenyan banks. On a similar note, liquidity risk posed negative effects to financial performance of studied Kenyan banks (Maaka, 2013).

Ahmed et al. (2018) carried a study on performance in 20 Pakistani banks from 2007-2014 focusing on interest rates. Their findings pointed to a positive link between profitability and interest rates. The study however was conducted within Pakistan banks while the current research was based on Kenyan banks. Hussain, Ihsan and Hussain et al. (2016) explored whether bank risk practices resulted into performance in Pakistan. The research applied a quantitative research methodology with panel data collected for the period 2005-2014. The collected research data reflected that risk management positively affected financial performance. The research further confirmed the positive influence of interest rate risk on bank financial results. Aykut (2016) researched how financial risk influence the returns from stock market and banking index in Turkey. The study sampled 49 banks and found out that bank results are negatively and significantly influenced as a result of interest rate risk.

Wambari and Mwangi (2017) studied interest rates to determine their impact on financial results of Kenyan banks. The study involved 43 banks and conducted using an explanatory research design relying on a multiple linear regression analysis. Study results reflected that ratio of lending and commercial banking performances had positive relationships. Study results also showed that deposit interest ratio negatively affected commercial bank performance. This result need to further be interpreted in the context of the interest rate capping by the regulator in Kenya hence scope for further study in the area. Maigua and Mouni (2016) examined 26 Kenyan banks to assess the way in which interest rate elements influence performance of banks in Kenya. They concluded on a negative link between reserve requirement ratio and performance whereas a positive link was observed with reference to discount rates and inflation rates. The question would be how inflation rates would positively reflect performance pointing to banks passing the cost to customers in a bid to be profitable.

2.1 Research Gaps

The studies so far took different focus geographically or from a financial risk component perspective. Whereas these studies focused on specific aspects of commercial bank risks, not many studies have been done to focus on financial risk in totality. The results though conflicting points to the fact that if not properly managed, financial risk will result into poor results. The cases where there was contrary finding would somehow indicate a possibility where banks compensated their tolerance for risk by a mark-up on profitability hence increasing their returns despite poor asset quality. Further, financial risk focus should include assessment of all its components as defined earlier to give more meaningful result. The contribution that these studies have made in

the literature has expanded the need of exploring financial risk factors along with effects on progress of commercial banks. Nevertheless, a gap remains where the authors have become unsuccessful in recognizing the elements that create increased risk.

3.0 Research Methods

This research was grounded on positivism research philosophy. This kind of philosophy calls for the research problem to be structured around a methodology that enables the research to generate quantifiable observations and undertake manipulation of the data by use of statistical methods. Specifically, performance data of the banks in the period under review was analyzed to understand the effect of managing risks outside the quality reports often seen in the financial reports and more so understanding from different banks over several years ensured objectivity of conclusions. Descriptive survey design was applied in this research. A descriptive study further allows for the phenomena to be studied in its present environment and supports the testing of hypothesis. The design is relevant in this study as it sought to establish a relationship of performance and risks over time, and over several institutions.

The research population targeted was the commercial banks institutions on the Nairobi Stock Exchange (NSE). The population consists of 12 listed banks, while the current research. The study conducted a census of the 11-listed commercial banks in Kenya. The dominant research instrument was the data extraction form that collected secondary data and utilized it in answering the research question. Secondary research data from supervision reports from Kenya's central bank website, NSE reports where necessary and Financial reports of the banks were reviewed for the period 2009-2018. After extraction of the secondary data the study coded the collected data into SPSS 24 for both descriptive and inferential statistics.

4.0 Results

Descriptive Analysis

As outlined in the previous section, this analysis uses data extracted from audited statements for the banking institutions for 2009 to 2018. The research sought to determine how managing of financial risk impacts the financial results of the chosen listed banks. The study relied on a descriptive analysis in the examination of the variables using maximum, means, minimum, standard deviation and sum.

Credit Risk Analysis

The first variable in this study was the examination of managing credit risks. The research measured the non-performing loans of the listed banks as presented below.

Table 1 Credit Risk Descriptive

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Credit Risk 09	11	1.46	8.25	54.63	4.9664	2.40707
Credit Risk 10	11	1.29	8.14	45.12	4.1018	2.25264
Credit Risk 11	11	1.00	6.00	33.20	3.0182	1.97069
Credit Risk 12	11	.00	8.00	32.79	2.9809	2.76333
Credit Risk 13	11	1.00	9.00	41.40	3.7636	3.06179
Credit Risk 14	11	1.00	11.00	56.25	5.1136	2.82702
Credit Risk 15	11	1.00	11.00	66.00	6.0000	3.31662
Credit Risk 16	11	3.20	12.80	80.40	7.3091	3.42387
Credit Risk 17	11	6.20	40.60	136.10	12.3727	9.85770
Credit Risk 18	11	6.70	47.60	167.50	15.2273	12.35363

Source: Research Data (2020)

Results show the highest credit risk within the listed commercial banks was 15.2273 with a standard deviation of 12.35363 indicating high volatility in the credit risk. The summary statistics for non-performing loans indicate that between 2009-2013, NPL levels were <5% indicating a strong position in regard to the asset quality of the banks. This could be in line with risk management practices enhanced after global crisis. Within the period 2014-2016 the level of nonperforming loans ranged between 5%<8% indicating that there is a satisfactory level of credit risk. The results reveal a fair and marginal level of nonperforming loans as indicated by mean values between 8%<15% and 15%<25% respectively as shown above. This is in line with the BASEL standards on the CAMEL metrics benchmark rates. The final 2 years are likely a reflection of implementation of IFRS 9 and its effect on asset quality of banks. The averages are high indicating a fast deteriorating asset book which would call for assessment of credit risk policies and practices.

Liquidity Risk Analysis

The second variable examined the liquidity risk of the listed commercial banks. The basis for assessing liquidity risk was the proportion of liquid assets in the total assets.

Table 2 Liquidity Risks Descriptive

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Liquidity Risk 09	11	19.00	151.00	530.81	48.2555	36.76372
Liquidity Risk 10	11	4.50	71.00	441.44	40.1309	17.87256
Liquidity Risk 11	11	27.00	54.00	421.10	38.2818	8.60428
Liquidity Risk 12	11	32.00	86.00	563.80	51.2545	17.75367
Liquidity Risk 13	11	29.00	96.00	578.12	52.5564	20.39130
Liquidity Risk 14	11	30.76	78.00	447.76	40.7055	13.77281
Liquidity Risk 15	11	28.04	74.00	470.04	42.7309	13.59781
Liquidity Risk 16	11	17.00	69.00	451.95	41.0864	15.44076
Liquidity Risk 17	11	20.00	57.00	437.27	39.7518	13.49328
Liquidity Risk 18	11	21.00	74.00	514.00	46.7273	14.86560

Source: Research Data (2020)

The results above indicate that the highest liquidity risk level within the listed commercial banks in Kenya was attained in 2013 at 52.5564 with deviation at 20.39130, an indicator of high variability in the mean results. Findings further show that the listed commercial banks had a strong liquidity level as indicated by the liquidity risk which was above 30%. This is in line with the BASEL standards on the CAMEL metrics benchmark rates. The results also show a high variation in the liquidity risk as indicated by the high standard deviation which indicates increased dispersion within the listed commercial banks. CBK (2018) notes that registered banks have faced widening liquidity gap that has affected their operational efficiency however, most of the firms still maintain the required liquidity levels as a result of excess reserves, increased payments and increased competition calling for quick service delivery for approved loans.

Interest Rate Risk Analysis

The research further assessed the level of interest rate risk within Kenyan banks. This was assessed by using the net interest margin between 2009-2018. The study derived NIM as reported in the annual audited financial results of the commercial banks.

Table 3 Interest Rate Risk Descriptive

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Interest Risk 09	11	5.08	9.10	74.22	6.7473	1.46625
Interest Risk 10	11	4.40	10.20	73.14	6.6491	1.81713
Interest Risk 11	11	6.98	13.20	107.16	9.7418	1.92685
Interest Risk 12	11	6.60	17.00	116.91	10.6282	3.18958
Interest Risk 13	11	6.00	19.74	164.76	14.9782	4.19256
Interest Risk 14	11	4.80	11.00	94.59	8.5991	2.10108
Interest Risk 15	11	2.00	10.00	68.30	6.2091	2.63835
Interest Risk 16	11	5.50	10.80	91.90	8.3545	1.68782
Interest Risk 17	11	5.10	9.70	83.10	7.5545	1.66635
Interest Risk 18	11	4.40	9.50	78.80	7.1636	1.66989

Source: Research Data (2020)

The findings show that the listed commercial banks had a high average as indicated by the positive mean values. The highest return was achieved between 2012 and 2013 with NIM levels of 10.6282 and 14.9782 respectively. This indicated that the investment strategies being adopted by commercial banks had better returns than the cost. The high NIM further indicates that commercial banks received more returns from the loans given out than the interest paid to the customer deposits held by the listed banks. The banks had the least net interest margin of 6.2091 in the year 2015 as shown above. CBK (2018) report indicates that a number of commercial banks have been experiencing deteriorating profit margins and revenue generation as a result of the introduction of interest capping which has limited the growth in their gains from lending activities. Banks are moving towards non interest business models capitalising on fee income and increasing off balance sheet financing.

Financial Performance Analysis

This section examines the annual financial results of the listed commercial banks, which was analyzed using both ROA and ROE of the banks.

Table 4 Return on Assets Descriptive

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
ROA09	11	1.35	5.66	37.64	3.4218	1.35282
ROA10	11	1.91	6.95	49.81	4.5282	1.56324
ROA11	11	2.23	6.84	47.46	4.3145	1.27169
ROA12	11	1.70	7.40	45.90	4.1727	1.62363
ROA13	11	1.90	7.70	52.00	4.7273	1.61189
ROA14	11	1.80	7.26	50.95	4.6318	1.69042
ROA15	11	-1.34	6.52	44.04	4.0036	2.25352
ROA16	11	.14	6.00	44.21	4.0191	1.73602
ROA17	11	.63	5.68	40.95	3.7227	1.85284
ROA18	11	-.90	3.80	28.30	2.5727	1.34171

Source: Research Data (2020)

The highest ROA of the banks stood at 4.7273 in 2013 and was at its lowest in 2018 at 2.5727. This conforms to earlier observations by Cytonn Investments (2019) which showed there was a marginal improvement in the financial results of ccommercial banks however changes in the regulatory environment had limited banks' revenue generation. Further, this reflects on the effect of implementation of IFRS 9 which has a forward-looking perspective of credit losses and has seen banks increase their credit loss provisions. Furthermore, banks have moved more towards collateralised lending to manage provision levels, which has resulted into a move away from some SMEs as well as some seemingly risky businesses without proper collateral. Asset levels are therefore dropping in a clean-up initiative impacting returns of the institutions.

Table 5 Return on Equity Descriptive

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
ROE09	11	15.20	48.71	281.09	25.5536	9.03369
ROE10	11	13.12	37.94	311.48	28.3164	7.22063
ROE11	11	20.40	40.11	336.36	30.5782	5.54682
ROE12	11	11.00	37.60	305.20	27.7455	7.96773
ROE13	11	15.00	37.00	318.60	28.9636	6.64910
ROE14	11	15.70	49.40	322.10	29.2818	8.97171
ROE15	11	-15.40	47.20	265.71	24.1555	15.18489
ROE16	11	1.50	43.50	273.40	24.8545	10.88525
ROE17	11	3.90	37.30	228.20	20.7455	8.95884
ROE18	11	-5.50	22.50	172.80	15.7091	7.79929

Source: Research Data (2020)

The findings extracted from the data show the banks had attained high ROE through the period of the analysis as indicated by the high mean values. The highest ROE was achieved in 2011 at a value of 30.5782. Findings further indicate that the minimal ROE was 15.7091 as recorded in the year 2018. The CBK (2018) report indicates that the profitability of the banking industry faced a slight decrease as a result of the decline in the lending initiatives, increased cost of deposits and the unfavorable business climate within the country. Again, the effects of IFRS9 can be seen here calling for some further study in the area. The erratic behaviour in the ROE can be a signal indicator

of the listed banks not generating enough income which can be attributed to limited lending capacity.

Inferential Analysis

The research examined the magnitude of the interaction of research variables. Cooper and Schindler (2014) indicate that regression modelling is a statistical technique of establishing whether two or more variables are related. The regression testing allows for the examination of the magnitude of the association between the predictor variable and the dependent variable.

Effect of Credit Risk on Financial Performance

The first research hypothesis indicated;

H_{O1} Credit risk and the financial performance of listed commercial banks are not significantly related.

Table 6 Regression for Credit Risk and Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.941[a]	.885	.871	1.84399

a. Predictors: (Constant), Credit Risk

Source: Research Data (2020)

The findings point to a positive interaction of credit risk and the financial performance of the listed banks. The findings show that holding other factors constant credit risk contributes to 88.5% variations (R^2=*.885*) in the financial results of banks. The results resonate with Anjichi (2014) in concluding that credit risk positively impacts financial results of banks. Annor and Obeng (2017) also indicate positive interaction of credit risks and results of banks.

Table 7 ANOVA Results for Credit Risk and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	209.485	1	209.485	61.608	.000[b]
	Residual	27.202	8	3.400		
	Total	236.688	9			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Credit Risk

Source: Research Data (2020)

The study utilized the F-statistic results as the basis of testing the null hypothesis. The ANOVA results showed an F value of 61.068 which is greater than F- (critical f; 1.162); with a significance value of 0.000 which is less than 0.05 hence the null hypothesis of the study is rejected. The above results are significant in establishing that credit risks have a statistically significant association with the financial results of listed banks.

Table 8 Regression Coefficients for Credit Risk and Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	37.176	1.128		32.972	.000
	Credit R	-1.168	.149	-.941	-7.849	.000

a. Dependent Variable: Financial Performance

Source: Research Data (2020)

The beta value *(β) = -.1.168* is significantly different from 0 since the p-value 0.000<0.05. This indicates a statistically significant negative effect of credit risk on the profitability of listed banks. Change in credit risk will result in a -1.168-unit change in the financial results of listed banks in Kenya. Musyoki and Kadubo (2012) also indicates an inverse effect of credit risk on financial results of Kenyan banks. Mercylynne and Omagwa (2017) similarly conclude that credit risk has a negative effect on financial results of banks.

Effect of Liquidity Risk on Financial Performance

The second research hypothesis specified:

H_{O2} Liquidity risk and financial results of listed commercial banks in Kenya have no significant effect

Table 9 Regression for Liquidity Risk and Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.550[a]	.303	-.122	5.43114

a. Predictors: (Constant), Liquidity Risk

Source: Research Data (2020)

The findings show that other factors held constant, liquidity risk contributes to 30.3% variations (R^2=*.303*) in the financial results of banks. Ndoka, Islami and Shima (2017) also points out that liquidity risk positively affects banks' profitability. In another research study Virginie (2015) indicates that liquidity risk positively impacts performance of banks.

Table 10 ANOVA for Liquidity Risk and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.710	1	.710	.024	.017[b]
	Residual	235.978	8	29.497		
	Total	236.688	9			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Liquidity Risk

Source: Research Data (2020)

The research further conducted ANOVA tests to examine the statistical significance of the model adopted. The ANOVA results showed an F value of .024 which is less than F- (critical f; 1.162); with a significance value of 0.001 which is less than 0.05 hence the null hypothesis of the study is rejected. This indicates that there is a statistically significant association between liquidity risk and the financial performance of commercial banks.

Table 11 Regression Coefficients for Liquidity Risk and Financial Performance

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	32.013	15.642		2.047	.075
	Liquidity Risk	-.055	.352	-.055	-.155	.017

a. Dependent Variable: Financial Performance

Source: Research Data (2020)

The beta value *(β)* = -*.055* is significantly different from 0 since the p-value 0.017<0.05. This indicates a statistically significant negative effect of liquidity risk on financial results of listed banks. A unit change in liquidity risk will result in a -.055-unit change in the financial performance of commercial banks in Kenya. Maaka (2013) also found out that liquidity gap has a negative effect on financial results. Mwangi (2014) also points that liquidity negatively influences profitability.

Effect of Interest Rate Risk and Financial Performance

The third research hypothesis indicated;

H_{O3} interest rate risk and the financial performance of listed banks have no significant interaction

Table 12 Regression for Interest Rate Risk and Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.469[a]	.220	.122	4.80431

a. Predictors: (Constant), Interest Rate Risk

Source: Research Data (2020)

Results of regression indicate that 22% variations in the financial results of listed banks are determined by the interest rate risk (R^2=*.220).* Again, this is in line with Ebenezer et. al (2017) who points out that interest rate spread positively affected the financial results of banks. Musah et al. (2018) also indicates that interest rates positively interact with commercial banks performance.

Table 13 ANOVA for Interest Rate Risk and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.037	1	52.037	2.254	.002[b]
	Residual	184.651	8	23.081		
	Total	236.688	9			

a. Dependent Variable: Financial Performance
b. Predictors: (Constant), Interest Rate Risk
Source: Research Data (2020)

The ANOVA results showed an F value of 2.254 which is greater than F- (critical f; 1.162); with a significance value of 0.002 which is less than 0.05 hence the null hypothesis of the study is rejected. The above results are significant in establishing that interest rate risks have a statistically significant relationship with the financial performance of listed banks.

Table 14 Regression Coefficients for Interest Rate Risk and Financial Performance

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	21.681	5.490		3.949	.004
	Interest Rate Risk	.914	.609	.469	1.501	.002

a. Dependent Variable: Financial Performance

Source: Research Data (2020)

The beta value *(β) = .914 is* significantly different from 0 since the p-value 0.002<0.05. This indicates a statistically significant positive effect of interest rate risk. A unit change in interest rate risk will result in a .914-unit change in the financial results of commercial banks in Kenya.

Wambari and Mwangi (2017) in their study also point out that lending ratio and financial results are positively related.

5.0 Conclusion and Recommendations

Summary of Findings

The study adopted a positivist research philosophy with descriptive research design being employed in the examination. The study focus was the 11 listed commercial banks in Kenya. The main aim of this research was to examine the effect of financial risks on the results of the listed banks between the period 2009-2018. The findings indicate that management of financial risk positively impacts the financial results of banks. Findings resonate with previous research work by Noor and Abdalla (2017) who also support that managing financial risks is instrumental in strengthening the profitability of banks. The study further independently sought to examine how credit risks, liquidity risk, interest rate risk influences the results of the banks.

Conclusions

Results of the analysis indicate that credit risk negatively impacts the financial results of the banks. Findings show a beta value (β) = -.1.168 which is significantly different from 0 since the p-value 0.000<0.05. The study concludes that commercial banks need to manage their non-performing loans levels and establish policies to mitigate loan recovery losses which enhance their credit risk level.

The findings also show a statistically significant negative impact of liquidity risk on financial results of banks as shown by results (β) = -.055; Sig=0.017<0.05. The implications of the study are that there is widening liquidity gap within commercial banks which has dampened the profitability of banks however, the study abides by the enterprise risk management theory which indicates that creation of a risk management culture is key to performance of institutions.

The study further highlights a significant connection of interest rate risk and performance from an interest rate perspective. Findings on show a beta value (β) = .914 which is significant as shown by Sig=0.002<0.05. It can be concluded that commercial banks have been able to leverage on their lending activities and investment strategies to strengthen their financial position. The research further concludes that the prevailing lending rates are adequate to sustain the performance of the listed banks.

Recommendations

Based on the findings of this study, Central Bank of Kenya should enhance the managerial capacity of the commercial banks by conducting seminars and workshops on the emerging financial risks management practices that can be instrumental in enhancing the bank's profitability. The study further recommends that the Capital Markets Authority should involve commercial banks more in the ongoing rollout of the derivatives markets as this will offer them channel for managing their financial risks. Listed banks should design more robust credit analysis policies and loan administration. This will allow the commercial banks to expand their lending activities to

individuals and small businesses overcoming the challenges experienced due to the interest rate caps. Furthermore, commercial banks should strengthen their loan monitoring practices as well as integrate digital applications in recovery processes. Further recommendation is for commercial banks to put in place measures for identifying and monitoring liquidity risks. The banks need to adopt a system that monitors cashflows in a comprehensive way to ensure that the liquidity gap is not breached.

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