

Effect of Risk Management Practices on Financial Performance in Kenya Commercial Banks

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Abstract

The purpose of this study was to investigate the effect of risk management practices on Commercial Banks performance. Mixed method of research design was used and data was collected using questionnaires and interview schedules. Target population was 43 licensed Commercial Banks in Kenya from which one hundred and thirty three (133) managers were randomly selected to form sample size. Cronbach test of 0.874 was obtained and validity of the research instruments was ensured through content, criterion and construct validity testing. Data was analyzed using descriptive statistics and inferential statistics which included correlation analysis, bivariate regression analysis and multiple regression analysis. The study established a positive statistically significant relationship between risk management practices and financial performance. The risk management practices explained 62.2% of the changes in the financial performance in commercial banks in Kenya. It's recommended that, risk management framework should be adopted in financial institutions to enable them proactively mitigate risks.

Keywords: Risk management practices, financial performance, Commercial Banks

1.0 Introduction

In the recent decade both macro and micro finance institutions have emerged in the banking industry limiting chances of survival to non performing institutions. It has become critical for bank managers, academic researchers and other stakeholders to understand the current determinants of financial performance towards attaining high profitability and good performance which ensures survival in business. Poor bank performance may lead to banking failure and crisis, which have negative consequence on the economic growth Ongore and Kusa (2013). Many studies examined the determinants of banks' financial performance in many countries around the world considering the bank specific factors derived from Capital adequacy Asset quality Management efficient Earnings ability Liquidity (CAMEL) Ezra, (2013) for SSA banks, (2012) for China banks, Sarita, (2012) for Indonesian banks Dietrich, (2009) for Switzerland banks, Sufian (2011) for Korean banks, Sufian (2009) for Bangladesh banks, Mohana and Tekeste (2012) for Ethiopian banks, Yadollahzadeh, (2013) for Iran banks. In Kenya research was done by Maina and Muturi (2013) studied on financial structure, banks liquidity and operational efficiency on financial performance of commercial banks in Kenya and the moderating influence of ownership structure (foreign or local) on which a significant effect was established on financial structure and operational efficiency while an insignificant relationship on ownership structure and banks liquidity. Ongore and Kusa (2013) found a significant effect on Capital adequacy, Asset quality, Market efficiency, Earnings ability and Liquidity as bank specific factors and macroeconomic variables as external factors on financial performance of commercial banks in Kenya. Moderating role of ownership identity was found insignificant relationship on financial performance of commercial banks in Kenya and Onjala (2012) contradicted with the findings of other scholars that there was insignificant relationship on all the independent variables: operational efficiency, financial structure and liquidity on financial performance of commercial banks in Kenya despite of the model accounting for 95.6% of variance in financial performance. Olweny & Shipho (2011), found a statistically significant impact on bank specific factors: Capital adequacy, Asset quality, Liquidity, operational cost efficiency and Income diversification on banks profitability and insignificant impact on market structure factors: foreign ownership and market concentration on banks profitability. However, they did not consider the effect of risk management Practices on Commercial banks financial performance.

2.0 Findings

The findings of the study were presented in two headings: descriptive consists the testing of the variable on risk management whether is significant and justifies further statistical testing the tests included sampling adequacy and factor analysis after which descriptive results are obtained followed by establishing the strength of relationship between the independent and dependent variable in the study. The second heading was inferential statistics, which contained hypothesis testing using bivariate regression.

2.1 Descriptive Statistics

2.1.1 Sampling adequacy

The data is regarded appropriate for statistical analysis if the value of KMO is greater than 0.5 (Field, 2000) and (Linyiru, karanja and Gichira, 2015).

Table 2.1 Risk Management Practices KMO sampling adequacy Bartlett's Sphericity

Test	Coefficient
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.885
Bartlett's Test Chi-Square	283.715
Bartlett's Test df	21
Bartlett's Test Sig	0

Findings of Table 2.1 indicates that KMO test was 0.885 which was significantly high that is greater than the critical level of significance of the test which was set at 0.5 (field, 2000). Besides to the KMO test, the Battlers test of sphericity was also highly significant with 283.715 at 21 degree of freedom and $P < 0.05$. These results were in agreement with Kothari (2014) who lauded that the test of KMO and Bartlett's test should be at a significance level of less than 0.05 to be acceptable. Therefore, these results provide justification for further statistical analysis to be conducted.

2.1.2 Factor analysis

The extraction of the factors followed the Kaiser criterion where an Eigen value of 1 or more indicates a unique factor (Linyiru, Karanja and Gichira, 2015). Total variance analysis indicates that the seven (7) statements on risk management practices and financial performance can be factored into one (1) factor.

Table 2.2 Risk Management Practices and Total Variance Explained

Items	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.998	57.118	57.118	3.998	57.118	57.118
2	0.672	9.603	66.721			
3	0.577	8.248	74.968			
4	0.554	7.914	82.883			
5	0.505	7.217	90.100			
6	0.375	5.356	95.456			
7	0.318	4.544	100.000			

Extraction Method: Principal Component Analysis.

Total variance explained by the extracted factor is 57.12% as shown in table 2.2. This findings were consistent with Kothari (2014) who stated that factor analysis results through principal component analysis method, should be closer to 1 to indicate acceptability.

Table 2.3 Factor loading for Risk management practices

Items	Factor loading
1 Central Bank Kenya (CBK) regulates interest rates used by banks	0.717
2 Our bank ensures proper management of resources	0.712
3 Our bank maintains contingent plans for any eventualities for quick recovery	0.742
4 Our bank adopts the appropriate promotional activities to preserve its image	0.797
5 Our bank identifies all risks (liquidity, credit) and mitigates	0.758
6 Our bank complies with an effective human resource policy	0.769
7 Our bank uses of updated credit policy	0.791

Extraction Method: Principal Component Analysis.

Table 2.3 findings of factor loading for items of risk management practices indicated that items attracted coefficients of more than 0.5 therefore all were retained for analysis. This is supported by (Linyiru, Karanja and Gichira (2015), Rahn (2010) and Kothari (2014) who lauded that a factor loading equal to or greater than 0.5 has good stability and leads to desirable solutions.

2.1.3 Descriptive results

The objective was to examine the influence of risk management practices on commercial banks financial performance in Kenya.

Table 2.5 Descriptive results on Risk Management Practices

	Items	SD%	D%	U%	A%	SA%	Mean	STDV
1	CBK regulates interest rates used by banks	11%	13%	12%	37%	27%	3.5600	1.3129
2	Our bank ensures proper management of resources	10%	18%	5%	40%	27%	3.5600	1.3282
3	Our bank maintains contingent plans for any eventualities for quick recovery	10%	11%	25%	34%	20%	3.4300	1.2165
4	Our bank adopt the appropriate promotional activities to preserve its image	10%	17%	7%	35%	31%	3.6000	1.3484
5	Our bank identifies all risks (liquidity, credit) and mitigates	6%	16%	19%	39%	20%	3.5100	1.1590
6	Our bank complies with an effective human resource policy	9%	16%	10%	24%	41%	3.7200	1.3786
7	Our bank uses of updated credit policy	12%	17%	11%	30%	30%	3.4900	1.3890
8	Average						3.5529	1.3047

Table 2.5 shows that 64% of the respondents agreed that Central Bank of Kenya (CBK) regulates interest rates used by banks, 67% of the respondents agreed that banks ensure proper management of resources to increase their financial performance, 54% of the respondents agreed that the banks maintains contingent plans for any eventualities for quick recovery, 66% of the respondents agreed that banks adopts the appropriate promotional activities to preserve its image, 59% of the respondents agreed that the bank identifies all risks, records in the risk register assess risks and mitigates them on priority basis, 65% of the respondents agreed that the bank complies with an effective human resource policy to advance in its financial performance, 60% of the respondents agreed that the bank uses updated credit policy in order to enhance its financial performance. The mean score for responses for this section was 3.5529 which indicates that majority of the respondents were in agreement that risk management practices is a key driver of financial performance.

The key that was used to rate the mean response was as follows.

- 1 strongly Disagree= Never ever exhibited (mean value of 1 – 1.80)
- 2 Disagreed = rarely exhibited (mean value of 1.81 - 2.60)
- 3 Neutral = frequently exhibited (mean value of 2.61 – 3.40)
- 4 Agree = Always exhibited (mean value of 3.41 – 4.20)
- 5 Strongly Agree = never ever exhibited (mean value of 4.21 – 5.0)

The standard deviation gives the variations of the responses from the mean. It provides an indication of how far the individual response to each factor varies from the mean. Linyiru (2015) stated that a standard deviation of more than one (1) indicates that responses are moderately distributed while less than one (1) means there was no consensus on the responses obtained. The average of 1.3047 on all the statements indicates that the responses were moderately distributed. These study findings were consistent with the findings of Otworu (2013) who lauded that several types of risks example credit risks, liquidity, operational influences profitability and hence performance. According Mwiya (2010), without proper risk management framework in the institutions profitability is unthinkable. These findings are also consistent with the corporate risk management theory developed by David Pyle in 1975. He lauded that to ensure survival of a financial institution there should be a proper risk management framework. Arunkumar and Kotreshwar (2005) lauded that bank with efficient risk management systems survived financial crisis and had competitive edge in the market in the long run.

The findings were further supported by Shafiq and Nasr (2010) who postulated that managing a risk in advance is far better than waiting for its occurrence: prevention is better than cure. This follows that the financial institutions should proactively identify the risks, assess them, mitigate, communicate and monitor. According to Rudhumburu (2014) five categories of risks noted are: strategic risk, financial risk, human resource risk, operational risk and reputation risk. These risks did not include competition as a risk. The risk of competition within an industry has made the organizations not to achieve their targets, therefore for an institution to excel it has to identify all risks including competition and find the appropriate measures and strategies to mitigate them (Porter, 1956). The findings are aligned with the stakeholder theory that was advanced by Freeman (1989) where he focused on people who can affect the firm or be affected by the firm.

According to the theory, all stakeholders will be involved in the risk management so as to earn a high reward (Klimczak, 2005). These findings are consisted with the Sang'alo Institute of Science and Technology (2016) strategic plan where it was noted that risk management practices is every person's responsibility. This implies that for institution to realize its mission and vision, strategic objectives have to be clearly outlined, risks proactively identified, assessed and mitigated. IPPF (2012) recommended four steps in which risks can be managed: risk assessment, risk treatment, monitoring and reviewing and communication among departments and other stakeholders. This supported Hussein and Al Mazrooei (2007) who indicated that efficient management of risk, risk identification, and analysis are critical factors of risk management practices

2.1.4 Relationship between risk management practices and performance

Correlation analysis showed the relationship between the dependent and independent variables (Jahangir & Begum, 2008).

Table 2.6: Relationship between risk management practices and Financial performance

Variable		Financial Performance (FP)	Risk Management Practices (RMP)
Financial Performance (FP)	Pearson Correlation	1.00	
	Sig. (2-tailed)		
Risk Management Practices (RMP)	Pearson Correlation	0.789**	1.00
	Sig. (2-tailed)	0.000	

** Correlation is significant at the 0.01 level (2-tailed).

Table 2.6 findings showed a strong positive correlation of 0.789 between risk management practices and financial performance. The P value was 0.000 at 1 % (0.01) level of significance. This means risk management practices is a strong determinant of financial performance in Commercial banks in Kenya. This was consistent with the findings of Ngumi and Namusonge (2013) who lauded that when significance level is very small (less than 0.01) then the correlation is significant between the two variables.

2.2 Inferential statistics

2.2.1 Hypothesis test

The study hypothesis was stated as follows:

H₀₁ Risk management practices has no significant effect on financial performance

H₀₂ Risk management practices has significant effect on financial performance

Table 2.7 Risk management practices and financial performance model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.789	0.622	0.618	.66499

a. Predictors: (Constant), RMP

Regression analysis was run to test the above hypothesis and the results were presented in table 2.7. The findings showed that the coefficient of determination (R^2) was 0.622 meaning that the model explains 62.2% of the variance in the financial performance in commercial banks in Kenya and the correlation coefficient (r) 0.789 means that there is a positive and strong relationship between the risk management practices and financial performance of commercial banks in Kenya. The findings are aligned with those of PPF (2012) and Hussein and Al Mazrooei (2007) that risk management practices (risk identification, risk assessment and analysis, risk monitoring, risk communication and credit risk analysis) are critical factor on commercial banks financial performance. The t- statistic was used to test the hypothesis on the significance of slope coefficient (β) at 5 per cent level of significance.

Table 2.8 Risk management practices and financial performance regression coefficient

Coefficients					
Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.225	.250		0.901	.370
Risk Management practices	.861	.068	.789	12.705	.000

a. Dependent Variable: Financial Performance

The results of table 2.8 show that the t value was 12.705 and $P = 0.000$ indicating that β was statistically significant since the p value of the t-static obtained is sufficiently low ($P < 0.005$). The null hypothesis was rejected and alternative hypothesis accepted that risk management practices significantly determine financial performance among commercial banks in Kenya

The linear regression model of risk management practices and financial performance was $Y = \beta_0 + \beta_2 X_2 + \varepsilon$ which becomes $Y = 0.225 + 0.861 X_2$. The researcher further performed ANOVA (F-test) to test overall significance of the regression model (goodness of fit) at 5% level of significance.

Table 2.9 Risk management practices and financial performance ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	71.378	1	71.378	161.411	.000
Residual	43.337	98	.422		

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Risk management practices

Table 2.9 findings indicated that the value of computed F statistic was 161.411 with a P- value of 0.000 at the 5% level of significance. The null hypothesis was rejected since the probability value (P value) of obtained F was lower ($P < 0.05$). Thus, the model fit is acceptable implying that there is a significant positive linear relationship between risk management practices and financial performance among commercial banks in Kenya.

3.0 Conclusion

The study established that risk management practices had a statistically positive significant relationship on financial performance as indicated by $r = 0.789$ and $R^2 = 62.2\%$ $P = 0.000 < 0.05$ and a $t = 12.705$ $P = 0.000 < 0.05$. The results implied that for an organization to succeed in financial performance it should proactively manage the risks.

This means that the risks have to be identified, assessed and analyzed, communicated and monitored every time to replace the outdated risks (Rudhurumbu, 2014). Shafiq & Nasr (2010) postulated that risks should be managed in advance rather than wait for them to occur. According to IPPF (2012) risk identification, assessment and communication on relevant policies should be timely.

4.0 Recommendations

That all the commercial banks in Kenya should establish the risk management framework and ensure that all risk are identified and recorded in a register from departmental level to the institution at large. Assessment of risks enables managers know volatile areas and how much resources can be allocated and the best method to apply in risk mitigation. The institution should develop a culture of communicating the identified risks to all stakeholders of the institution because risk management is every person's responsibility. Thereafter continuous monitoring and evaluation of the risks should be done to update risk registers.

5.0 Areas of further research

Risk management practices being statistically significant determinant of financial performance of commercial banks in Kenya, further research should be conducted to establish the risk management practices influences financial performance in Commercial banks. Also research should be undertaken in other financial institutions to establish whether risk management practices is a significant factor of financial performance.

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