



# MODERATING EFFECT OF BOARD SIZE ON THE RELATIONSHIP BETWEEN RISK COMMITTEE AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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## **Abstract**

*Commercial banks have put in place mechanisms to reduce and eliminate the risk exposures. However, there is limited knowledge on the moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. This study therefore sought to investigate the moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. The study adopted longitudinal research design for the year 2013-2017. The target population being all 42 commercial banks regulated by the Central Bank of Kenya. The study extracted secondary data from published annual financial reports. The study found a regression coefficient of  $R=0.299$  between risk committee and financial performance, a coefficient of  $R=0.303$  between board size and financial performance and when the moderator was introduced, the regression coefficient changed to  $R= 0.328$ . It was also established that when the moderator was introduced, the  $R^2$  changed from a coefficient of 0.090 to 0.143. The study concludes that there is a moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. The study recommends that commercial banks should adopt risk committees and also larger boards to enhance financial performance.*

*Keywords: Board size, Risk committee, Financial performance, Commercial banks, Kenya*

## INTRODUCTION

In Kenya, 22 commercial banks have collapsed since independence (InfoHub Kenya, 2016). Since 2014, three banks namely Dubai Bank, Imperial Bank and Chase Bank have been placed under receivership. The trend of collapse of banks is worrying despite the role they play in the economy. The collapse of banks in Kenya has been attributed to failed financial obligations, financial malpractices and failure to meet the required financial ratios and undisclosed insider loans respectively (Gathaiya, 2017). In general, the risk issues affecting commercial banks range from insider dealings, weak corporate governance practices, weak regulatory and supervision systems, poor risk management strategies and lack of strong internal controls (Gathaiya, 2017). In particular Cooperman, Mills and Gardner (2000), classified these forms of risks as due to credit, interest, operational, political, foreign exchange, market and liquidity risks. Credit risk is the major determinant of the financial performance of commercial banks (Poudel, 2012). The defaults by the borrowers lead to slow growth or even collapsing of the institutions and is the major problem facing commercial banks in Kenya (Waweru & Kalani, 2009). This trend is worrying and it is for this reason that commercial banks have put in place mechanisms to enhance their controls. This include risk committees and enhanced governance mechanisms.

### Statement of the problem

There has been growth and expansion of commercial banks in Kenya over time. Despite this growth and expansion, commercial banks are exposed to risks hence reporting poor financial performance and subsequently collapse (Labie, 2011). Banks have put in place various mechanisms and controls in a bid to manage the risk exposures that result in poor performance and collapse of this banks. This includes some banks adopting the use of risk committees while others enhance the board oversight by increasing the board size. However, with the implementation of this mechanisms and controls, some banks still report poor financial performance and some are being placed under receivership. Owing to limited study the relationship between risk committee and financial performance is not clear more so the moderating role of the board size on the relationship between risk committee and financial performance of commercial banks is not clear.

This study therefore sought to investigate the moderating role of board size on the relationship between risk committee and financial performance of commercial banks in Kenya.

## LITERATURE REVIEW

Different commercial banks have different committees formed by the board of governance as a mechanism of risk management. The board committee reports are presented to board of governance for discussion, approval and adoption.

Nganga (2017), found that board independence, gender diversity, board size and board-director duality affect the financial performance of commercial banks in Kenya. On contrary, according to Makokha (2014), financial performance of insurance companies is not significantly influenced by board size, however, the findings may be different for commercial banks.

According to Mamatzakis, Zhang and Wang (2017), companies with higher board sizes are associated with a higher risk taking. This studies, however, failed to link the board size with the financial performance. Indeed, Shkendije (2014) found that companies with large board size are associated with dismal performance because of challenges in coordinating a large size. All these studies were done in outside Kenya and the findings may not be similar if a similar study was conducted in Kenya.

Olayinka, Osariemen, Olojede, Opeyemi and Usman (2018) found that risk governance negatively impacts on the financial performance of commercial banks. Muchemwa and Padia (2016), found that there is no relationship between board size and performance of the firm. The study used cross-sectional research design and multiple regression analysis to analyse data.

A study by Topal and Dogan (2014) on the impact of board size on the performance of firms that found a positive relationship between board size and firm performance. This contradicts previous study done by Muchemwa and Padia, (2016). Ogada, Achoki and Njuguna (2016) found a positive relationship between board size and financial performance. This study focused on merged institutions and used mixed methodology research design and purposive sampling method. The results cannot be generalised to the banking sector since it was limited only to merged institutions.

### Bank risk management theory

This study was guided by the Bank risk management theory developed by (Pyle, 1997). This theory focuses on the need for commercial banks to manage risks to ensure their survival. Mwiya (2010), argued that without an efficient credit risk management the banks profitability, the liquidity and solvency are affected negatively.

There are financial models that creditors can use to analyze default risk, these include Altman Z-score model (1968), the structural model of default by Robert C Merton (1976), Jarrow-Turnbull model (1995), the enterprise risk management and credit information sharing. However, the bank staff can manipulate these models to award loans to their friends and

relatives. This then requires that a bank adopt a risk governance mechanism to oversee the performance and compliance to risk management policies. This theory is appropriate because risk governance mechanisms will help in management of risks in commercial banks.

## RESEARCH METHODOLOGY

The study adopted longitudinal research design. Data for the financial years 2013-2017 was used. The financial year 2013-2017 was the latest published financial reports as at the date the study was done. The study targeted all the 42 active commercial banks regulated and licensed by the Central Bank of Kenya (CBK, Annual report and Financial Statements, 2017). Secondary data from published annual financial statements and consolidated reports published by the banks each financial year was extracted. Data was analyzed and presented in tables as per the tiers where Tier I represent banks with a market share of over 5%, Tier II represents banks with a market share of between (1-5) % and Tier III represent banks with market share of below 1%.

## ANALYSIS AND FINDINGS

### Board Size of Commercial Banks in Kenya

This study aimed at establishing the moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. First the relationship between the risk committee and financial performance was established, the relationship between board size and financial performance was also established and finally the relationship between risk committee and financial performance was established, this relationship being moderated by board size.

### Moderating effect of board size on risk committee and financial performance

To establish the moderating effect of board size on the relationship between risk governance mechanisms and financial performance, board size was used as a predictor. First, data on board size for each commercial bank was extracted, recorded and analyzed and the results categorized according to the different bank tiers (2013-2017). The results for the tiers analyzed are presented in Table 1.

Table 1 Board size of commercial banks in Kenya

Tier	2017	2016	2015	2014	2013	Mean
I	10.88	11.00	10.50	11.43	10.86	10.93
II	11.38	9.67	11.22	11.78	10.25	10.86
III	8.22	9.88	9.64	9.86	10.36	9.59
<b>Mean</b>	<b>10.16</b>	<b>10.18</b>	<b>10.46</b>	<b>11.02</b>	<b>10.49</b>	

Tier I commercial banks had the highest number of board members (Mean of 10.93) followed by Tier II and the least is Tier III (with a mean of 9.59). There was a decrease in the mean size of the board from 10.49 in 2013 to 10.16 in 2017. The results indicate that Commercial banks in Kenya have adopted large board size as a way of enhancing the board oversight with the ultimate aim of reducing risk and increasing the financial performance. To establish the moderating effect of board size on the relationship between risk committee and financial performance, the hypothesis that there is no significant moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya was tested. To test this, a linear regression analysis was done between risk committee and financial performance with board size being the moderator (2013-2017). The regression results are presented in Table 2.

Table 2 Regression of moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya

	Model 1		Model 2			Model 3			
	$\beta$	SE <sub><math>\beta</math></sub>	$\beta$	$\beta$	SE <sub><math>\beta</math></sub>	$\beta$	SE <sub><math>\beta</math></sub>	$\beta$	
Constant	-0.048	0.579		0.320	0.795		-7.832	2.649	
<b>Step 1</b>									
Risk committee	2.598 <sup>**</sup>	0.625 <sup>**</sup>		2.701 <sup>**</sup>	0.644 <sup>**</sup>	0.311 <sup>**</sup>	11.309 <sup>**</sup>	2.748 <sup>**</sup>	1.302 <sup>**</sup>
<b>Step 2</b>									
Board size				-0.045	0.67	-0.050	0.954 <sup>**</sup>	0.371 <sup>**</sup>	1.062 <sup>**</sup>
<b>Step 3</b>									
RC*BS							-1.043 <sup>**</sup>	0.324 <sup>**</sup>	-1.671 <sup>**</sup>
R			0.299			0.303			0.378
R Square			0.090			0.092			0.143
Adjusted R Square			0.084			0.081			0.128
R Square Change			0.000			0.002			0.051
Model F Change			17.301			0.456			10.365
Model Summary df			1			1			1
Sig. F Change			0.000			0.500			0.002

Note: Dependent variable, Risk committee,  
The significance levels \*p<0.05; \*\*<0.02

From the regression analysis, the regression coefficient for the relationship between risk committee and financial performance was R=0.299 and R=0.378, before and after the introduction of the moderator respectively. At the same time R<sup>2</sup> changed from 0.084 to R<sup>2</sup>=0.128 before and after the moderator respectively. The initial change in R<sup>2</sup> was 0.090 in model 1, 0.002 in model 2 and 0.051 in model 3. This change was significant (p<0.05). It is therefore suggested that there is a significant moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya.

From the findings presented in Table 2 the regression equation will therefore be: -

$$Y = -0.048 + 2.598_{RC} + \varepsilon \dots \dots \dots \text{Model 1}$$

$$Y = 0.320 + 2.701_{RC} + \varepsilon \dots \dots \dots \text{Model 2}$$

Where:

Y- Financial performance indicated by RoA

RC- Risk committee existence

$\varepsilon$  - Error term

Model 1- Regression for risk committee and financial performance

Model 2- Regression for board size and financial performance

This confirms a study by Shunu *et al*, (2017) that found a significant positive relationship between board size and performance of firms. The study was working on the effect of board size on the firms performance of listed companies in Nairobi stock exchange using panel approach. In contrast, Muchemwa and Padia (2016) found no relation between board size and financial performance. This study used longitudinal research design while Muchemwa and Padia (2016) used cross sectional research design. This variation may therefore be due to difference in the research design.

## CONCLUSION

This study investigated the moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. On the moderating effect of board size on the relationship between risk committee and financial performance, the study concludes that there is a significant moderating effect of board size on the relationship between risk committee and financial performance of commercial banks in Kenya. Based on the findings, the study recommends that commercial banks in Kenya should adopt larger board size to enhance oversight and increase their financial performance.

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