

**BANK SIZE AS A MODERATING FACTOR ON THE RELATIONSHIP BETWEEN
BANK RESTRUCTURING AND FINANCIAL PERFORMANCE OF COMMERCIAL
BANKS IN KENYA**

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ABSTRACT

The main goal of this research was to examine how bank size moderates the relationship between bank restructuring and financial performance of commercial banks in Kenya. This study employed descriptive research design. The study was a census of all the 44 commercial banks in Kenya which were in operation as at 31st December 2014. This research collected secondary data gotten from banks annual report for the period of ranging from 2002 to 2014. The regression analysis model was used to estimate the moderating effect of size on the relationship between bank restructuring and profitability. The study established that moderation of the relationship between bank restructuring and financial performance using bank size was not significantly influenced by financial restructuring, operational restructuring and asset restructuring on financial performance of commercial banks. However, when bank restructuring variables were interacted with bank size the findings are that only capital restructuring had a significant interaction. It was therefore, concluded that bank size therefore moderates the relationship between bank restructuring and financial performance. The study recommends that there is need to institute policy reforms geared towards increasing the size of banks either internally by increasing their asset size or through mergers to expand their size. The regulator can also embark on setting a minimum size threshold with a view to significantly reducing the number of banks which would translate into the remaining ones becoming larger. Furthermore, there is need for commercial banks to strike a balance between enhancing their operations through operational restructuring or improving profits by focusing on aspects that have a direct positive effect on profits.

Keyword: Bank Size, Bank Restructuring, Financial Performance, Commercial Banks

INTRODUCTION

Bank restructuring, financial services and firm characteristics are important concepts to commercial banks because of their role in the financial intermediation. Intervention through financial innovations, increasing the capital base to address the aspect of size and legal and regulatory framework review are important to ensure successful bank restructuring to record increased financial performance (Kwaning, Churchill & Opuku, 2014). The financial sector in many economies is the main intermediary between savers who are interested in safe-keeping of their deposits and earning of interest income and borrowers who obtain loans at market rates of interest to finance profitable activities (Suehiro, 2002). The sector is an important link between firm specific factors, such as size (total assets and capitalization), profitability, ownership, years

in banking and access to financial services.

Barako, Ross and Brown (2013) states that larger banks tend to have proportionately more branches both in the urban and in the rural areas than small banks implying that access to financial services can best be championed by larger banks. Firm specific factors such as size and capitalization have been known to have an effect on the ability of commercial banks to provide financial services in Kenya. The mergers and acquisitions of the mid 1980's and late 1990's gave rise to bigger and more complex banking institutions which was aimed at improving profitability of the merged banks (Ithiri, 2013). Demircug-kunt and Peria (2000) investigated barriers to access to bank services and concludes that bank size and bank infrastructure are the most robust predictors of barriers.

Bank Characteristics

Bank characteristics are aspects that uniquely distinguish banking institution such as bank size, structure, ownership and the length of time they have been in business (Ferreira, Li & Serra, 2008). Bauwhede and Willekens (2008) identify the most common firm attributes as size and leverage because business organizations such as commercial banks need to have the requisite asset levels as well as the optimal level of debt. Firm characteristics are not identical between organisations and may be influenced by different aspects depending on products and services offered by these firms (Nor, et. al., 2009). Mudambi and Nicosia (1998) contend that ownership of shares in a firm by management leads to conflicting interests on managerial behaviour, namely, encompassing the convergence of interest effect and the entrenchment effect. Eng and Mak (2003) identify growth opportunities, stock volatility, audit fee, equity, market liquidity and stock price performance as the main aspects that determine firm performance.

Most large banks dominate the banking system, this results to a market structure which is oligopolistic instead of being competitive. For regulation purposes, the Central Bank takes upon itself to protect specific banks from the rigors of market discipline, and the close involvement of the government in the determination of interest rates for loans and deposits which may mean that small banks are competed out and therefore end up being less profitable (Williams & Nguyen, 2005). The banking sector in many economies have expanded significantly from fully government owned and multinational banks to privately owned banks, to privatized banks as an aspect of financial sector reforms (Boateng, et. al., 2015). Mergers and acquisitions give rise to bigger and more complex banking institutions which may expose the bank to higher levels of risk and higher profits (Caprio, et. al., 1998; Bonish & Monte-Negret, 1998).

Honohan & King (2009) investigated the relationship between firm factors, namely size (total assets and capitalization), profitability, ownership, years in banking and access to financial services. The authors further stated that firm size, ownership and years in banking determine whether banks undertake financial, capital, asset or operational restructuring. Locally owned banks, privately owned banks and small banks generally tend to undertake capital restructuring to increase the capital base to meet the regulatory requirements or to increase the banks safety

net (Barako et. al., 2013; Honohan & King, 2009). Foreign owned banks on the other hand majorly embrace operational restructuring to increase their branch and ATM networks so as to provide financial services to more clients and tend to be more profitable. Large banks tend to be more capitalized, are more efficient and are more profitable. Government owned banks tend to rely more on parastatal deposits which are usually pegged to low-interest loans explaining why most government banks are less profitable (Al-Obaidan, 2008).

Bank Restructuring and Bank Size

Banks restructuring has its usefulness which is brought about by investments whose evaluation can be done through the trend and pattern of profitability (Aladwan, 2015). According to Nor, et. al. (2008) corporate restructuring was not found to be justifiable in the case of all firms since there was no consistency in post restructuring outcomes in terms of the argument that corporate restructuring should be more focused, should lead to improved corporate governance through insider ownership, lead to better debt management ratio and an increase in profitability. Demirguc-Kunt & Huizinga (1999) collected and analyzed bank data for 80 countries for the period 1988-1995 and showed that differences in interest margins and bank profitability reflect the determinants of bank characteristics, macroeconomic conditions, explicit and implicit bank taxes, regulation of deposit insurance, general financial structure, and several underlying legal and institutional indicators. The authors also found out that in countries that are developing, banks that have a foreign orientation have greater margins and profits than banks that are local. It is however important to find out how long the positive profits are sustained before a bank needs to be taken through another restructuring process.

Kwaning, Churchill and Opuku (2014) uses a study of cases to explore the motivators of restructuring banks and the effects of bank restructuring on financial performance of one of Ghana's largest bank, Agricultural Development Bank (ADB). The findings of the study of ADB as an institution on restructuring shows that the factors that motivated ADB's restructuring were changes in the business environment, weak governance, poor strategic control, and poor performance. The impacts on the ADB's corporate governance, organizational structure and strategic control, performance, and employee costs lead to improved governance, a modified organizational structure, increased employee costs and a decrease in ADB's profitability. The study by Demirguc-Kunt & Huizinga (1999) was cross country study while the study by Kwaning, Churchill and Opuku (2014) was the case of Ghana's ADB. The current study uses panel data from the Kenya banking sector.

De Young & Rice (2003) establish a number of research links between noninterest income of banks, business strategies, market conditions, technological change, and financial performance of banks for the period 1989 and 2001. Diversification into non-interest activities enabled the financial institution to increase its profitability. The results indicate that banks that are managed properly expand more slowly into noninterest activities to diversify their profits, and that increases in noninterest income marginally is associated with poorer risk-return tradeoffs on average. These findings suggest that the co-existence of noninterest income does not replace

interest income from the intermediation activities that remain the core financial services function of banks.

Nor, et. al. (2008) used event-study method to examine whether corporate restructuring announcements made by selected firms on their stock prices in Malaysia has any effect on bank activities. The effect of the restructuring announcements made by companies on stock prices was found to be significant while the average two years of return on total assets and return on operating cash flow in the post restructuring period were mixed. The firms also showed some changes in firm specific characteristics in terms of financial leverage measured using debt ratio and revealed changes in firms' activities. The study by De Young and Rice (2003) focused on interest incomes as an aspect for diversifying incomes and therefore used nonmarket data while the study by Nor, et. al. (2008) was an event study and therefore used market data. The findings by De Young and Rice (2003) recognized the importance of non-interest incomes in complementing interest incomes while the study by Nor, et. al. (2008) emphasized on the importance of restructuring announcements on stock prices.

Commercial banks in Kenya have undertaken restructuring to be more competitive, to improve bank solvency, to increase the banking sector capacity for financial intermediation and to improve performance. From the reviewed literature, the studies reveal conflicting results on the effect of bank restructuring on bank financial performance. The incorporation of moderation effect of bank size on the relationship between bank restructuring and financial performance had not been researched on in Kenya and that necessitated the need for this study.

Conceptual Framework

The knowledge gap highlighted lead to the development of the conceptual framework which guides the empirical research in filling the gaps identified from the review of empirical literature. From the model illustration in Figure 1, bank restructuring is the independent variable, which was measured using financial, capital, operational and asset restructuring; while financial performance is the dependent variable. Bank restructuring is expected to lead to an increase in financial performance.

The review of literature further shows that research has been conducted on individual variables. Other studies have established the relationships between the independent and moderating variables with the dependent variable. The relationship between bank restructuring and financial performance has been established by scholars. The conceptual model proposes that the relationship between bank restructuring and financial performance is moderated by bank characteristics. This was the relationship that had not been established by other researchers which this study sought to investigate. The expected relationship is that bank restructuring moderated by bank size lead to positive financial performance.

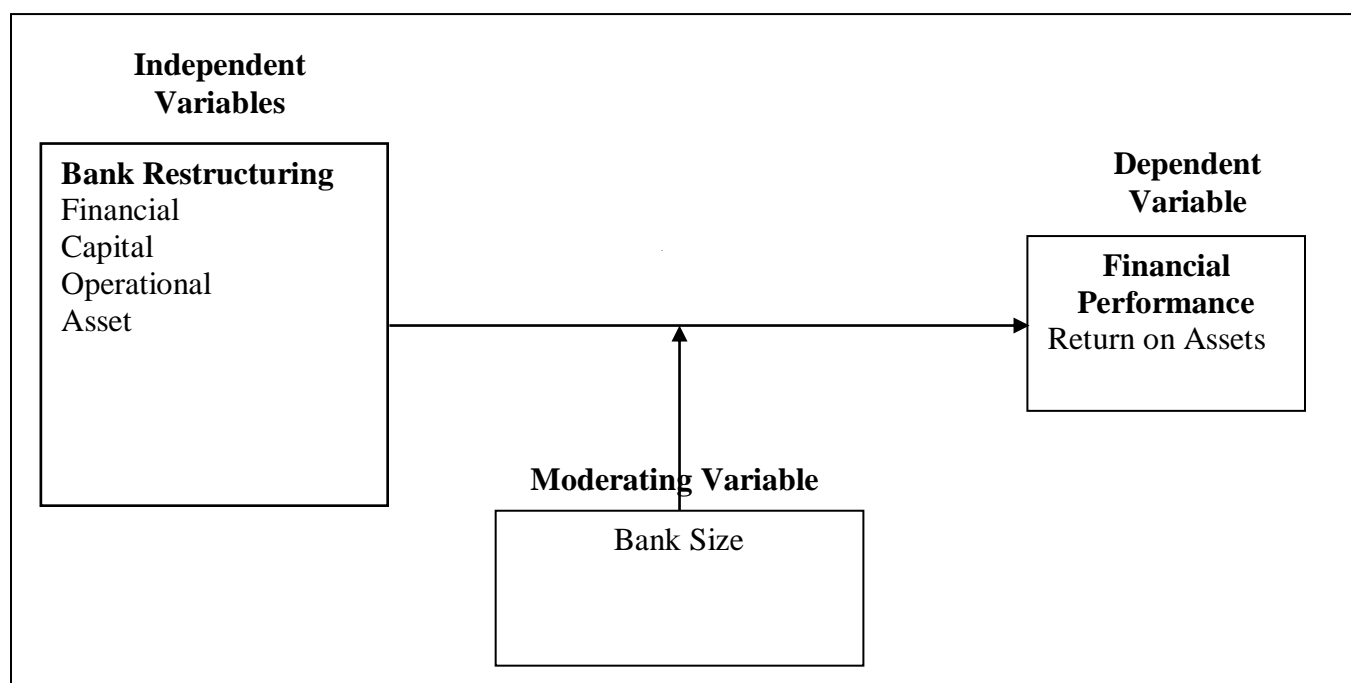


Figure 1: Conceptual Model

Source: Author (2018)

MATERIALS AND METHODS

This study relied on descriptive research design. The study was a census of all the 44 entities carrying out banking business in Kenya as at 31st December 2014. This research focused on secondary data gotten from banks annual report for the period 2002 to 2014. This period was selected because this is the period when the Kenyan economy implemented the multiparty system of Government. There was banking crisis due to economic decline that occurred from 1998 to 2001 inclusive. The thirteen year study period for the 44 banks provides sufficient data to be used in the analysis.

The following empirical model state the relationship variables discussed in the conceptual model that were subjected to statistical significance tests. The regression analysis model facilitated the analysis of the data in this study. The dependent variable was profitability while the independent variable was bank restructuring with financial services and bank size being the moderating variables. The moderating effect of size on the relationship between bank restructuring and profitability was carried out using the model stated below:

$$ROA_{it} = \alpha_{r22} + \beta_{rf22}FR_{rit} + \beta_{rc22}CR_{rit} + \beta_{ro22}OR_{rit} + \beta_{ra22}AR_{rit} + \beta_{rz22}SZ_{rit} + \beta_{rfz} (FR_{fit}SZ_{fit}) + \beta_{rcz} (CR_{fit}SZ_{fit}) + \beta_{rom} (OR_{fit}SZ_{fit}) + \beta_{raz} (AR_{fit}SZ_{fit}) + \epsilon_{r22}$$

Research Findings

The study determined the moderating effect of size and ownership on the relationship between bank restructuring and profitability. The study resolved to test the effect of each moderating variable separately before estimating their overall effect on the influence of bank restructuring and financial performance of commercial banks in Kenya. Table 1 portrays the effectiveness of the model in measuring the influence of size. The coefficient of determination (R Square) of 0.257 indicates that the financial performance in the regression model can be explained by 25.7.0% of the variations in size, operational restructuring, capital restructuring, asset restructuring, and financial restructuring of commercial banks in Kenya. This is an indication that the size of commercial banks is an important moderator of the relationship between bank restructuring and financial performance and is therefore an important factor in influencing banks profitability.

Table 1: The Effects of Size, Bank Restructuring on Financial Performance

Model Summary								
Model	R	R Square		Adjusted R Square		Std. Error of the Estimate		
1	0.520 ^a	0.270		0.257		0.02066		
ANOVA^a								
Model		Sum of Squares	Df	Mean Square	F	Sig.		
1	Regression	0.079	9	0.009	20.453	0.000 ^b		
	Residual	0.212	497	0.000				
	Total	0.291	506					
Coefficients^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	0.003	0.006		0.515	0.607	-0.009	0.015
	Financial restructuring	-0.069	0.062	-0.453	-1.118	0.264	-0.190	0.052
	Capital restructuring	-0.135	0.076	-0.416	-1.779	0.076	-0.285	0.014
	Operational restructuring	-0.302	0.144	-0.523	-2.101	0.036	-0.584	-0.020
	Asset restructuring	0.000	0.012	-0.001	-0.020	0.984	-0.024	0.023
	Bank Size	0.002	0.002	0.060	1.088	0.277	-0.001	0.005
	FR*SZ	0.020	0.015	0.526	1.300	0.194	-0.010	0.050
CR*SZ	0.066	0.020	0.777	3.341	0.001	0.027	0.105	

	OR*SZ	0.063	0.036	0.442	1.739	0.083	-0.008	0.135
	AR*SZ	-0.002	0.002	-0.046	-0.953	0.341	-0.005	0.002

a. Dependent Variable: Financial Performance

Source: Research Findings

The ANOVA results indicate that the regression had a sum square of 0.079 and a model residual's of 0.212 with a mean square of 0.009 for the regression and 0.000 for the residuals. The ANOVA produced an *F*-statistic of 20.453 and a *p* – value of 0.000. From the results given, it is evident that size of the bank alone is not significant in moderating the effect of bank restructuring and financial performance. All the variables used in this model except operational restructuring and the moderation of capital using size were found not to be significant.

At a confidence level of significance of 0.05, operational restructuring provided a significant negative effect on profitability of the commercial banks in Kenya with a coefficient value of -30.2 % (*t* = 2.101) and a strong *p* – value of 0.036. Capital and size of banks combined had a significant positive coefficient value of 6.6% (*t* = 3.341) and a *p* – value of 0.001.

Financial restructuring on the other hand did not have a significant effect on financial performance with a coefficient value of -6.9% (*t* = 1.118) and a *p* – value of 0.264. Capital restructuring on its own did not appear to have a significant effect on financial performance with a coefficient of -13.5% (*t* = 1.779) and a *p* – value of 0.076. However when capital restructuring was moderated by size (CR*SZ) the interaction between capital restructuring and size reveals a significant positive effect. Asset restructuring also had an insignificant effect on financial performance as indicated by the coefficient of 0.00% (*t* = 0.020) and a *p* – value of 0.984.

Moderating the relationship between bank restructuring and financial performance using size shows that it is only interaction of capital restructuring and bank size which is significant with a positive coefficient value of 6.6% (*t* = 3.341) and a *p* – value of 0.001. Bank size alone did not appear to have a significant effect on the relationship as denoted by a coefficient value of 0.2% (*t* = 1.088) and a *p* – value of 0.277. After moderation of the relationship between bank restructuring and financial performance using bank size, financial restructuring, operational restructuring and asset restructuring did not have a significant effect on financial performance. When bank restructuring variables were interacted with bank size the findings are that only capital restructuring had an interaction is significant. At the confidence of 0.05, the interaction effect of financial restructuring and size was not significant as shown by the coefficient of coefficients of 2.0% (*t* = 1.300) and a *p* – value of 0.194, the interaction of operational restructuring and bank size was not significant 6.3% (*t* = 1.739) and a *p* – value of 0.083 and the interaction of asset restructuring and bank size was not significant because the coefficient was -0.2% (*t* = 0.953) with a *p* – value of 0.341 respectively.

However if the confidence level was to be raised to 0.10, then operational restructuring and interaction between bank size and capital restructuring become significant. Interaction of asset restructuring and bank size would not however not be significant at 0.05 level neither would it be

significant at 0.10 level. This therefore implies that capital restructuring and bank size are significant variables which if managed well can influence the profitability of commercial banks in Kenya. However bank size has to be managed together with bank capital to realize an increase in bank profitability. On the other hand, financial restructuring, operational restructuring and operational restructuring were found to have the ability of reducing the profitability of the banks. Financial restructuring focuses on the borrowing levels of banks which increases costs in form of interest expense. Additionally, operational restructuring is usually accompanied by increasing operational costs which reduces the profits of a bank. Asset restructuring calls for providing for non-performing loans which is an expense and reduces bank profits.

CONCLUSION

The study concludes that bank restructuring do not affect financial performance of commercial banks in Kenya. Moderating the relationship between bank restructuring and financial performance using bank size brings out capital restructuring as the only significant variable in influencing financial performance. Bank size therefore moderates the relationship between bank restructuring and financial performance. Operational restructuring is therefore important in influencing profitability of large banks. Costs associated with enhancing bank operations to improve access to financial services should be properly managed to minimize the negative effect on bank profits

Moderating bank restructuring and financial performance using bank size further emphasizes on the importance of bank restructuring (financial restructuring, capital restructuring, operational restructuring and asset restructuring), bank size as important variables that affect bank profitability. Therefore bank profitability is affected by the level of debt, capital levels, costs of bank operations, nonperforming loans, and bank size. This emphasizes the fact that large banks, medium size banks and small banks can record high performance.

This concurs with practice in Kenya where not only large banks, but small and medium size banks also report high profits. Therefore bank size as indicators of firm characteristics do not interfere with the ability of restructured banks to generate profits especially if banks are well capitalized. The empirical findings contributes to knowledge in that it tends to support the aspect of the theory of financial intermediation that argues that financial institutions, like banks, must focus on transaction cost minimization.

RECOMMENDATIONS

The implications for policy in Kenya and other countries with banks are that as size is positively related to bank restructuring and profitability, then there would be need to institute policy reforms geared towards increasing the size of banks either internally by increasing their asset size or through mergers to expand their size. The regulator can also embark on setting a minimum size threshold with a view to significantly reducing the number of banks which would translate into the remaining ones becoming larger. The few larger banks will through bank restructuring increase their scope of provision of financial services and improve stability of the banking sector.

Bank restructuring is a current practice in the Kenya banking sector. Bank restructuring is however expected to increase the level of outreach while contributing to profits. If banks

concentrate more on outreach at the expense of financial performance then the benefits that are expected to be realized from bank restructuring are compromised. Banks therefore need to strike a balance between enhancing their operations through operational restructuring or improving profits by focusing on aspects that have a direct positive effect on profits.

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