Examination of the Dynamic Interactions among Ownership Structure, Corporate Governance, Risk Management and Performance of Nigerian Banks

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Abstract
This study examined the dynamic interactions among ownership structure, corporate governance, risk management and performance of Nigerian banks. Secondary data were sourced from 20 out of 22 post-consolidation Deposit Money Banks listed on the Nigerian Stock Exchange for a period of seven years from 2005-2011. The data were on Return on Equity (Bank Performance); Capital Adequacy Ratio (Corporate governance); proportion of the board members’ share capital to total bank capital (Ownership structure) and Bank Risk Behaviour (Risk Management Practices). The data were regressed firstly without interaction with ownership structure and later with ownership structure. The results of the analysis showed that without interacting ownership structure with corporate governance and bank risk behaviour, corporate governance has positive and significant effect on bank performance (p < 0.05), but bank risk behaviour has negative but insignificant effect on bank performance (p > 0.05). Ownership structure has positive and significant effect like corporate governance (p < 0.05). However when the ownership structure was interacted with corporate governance and risk behaviour, the results and significance of the variable changed remarkably. The study concluded that good risk management policies and proper ownership structure enhance improved corporate performance.

Key words: Ownership Structure, Corporate Governance, Risk Management, Performance, Dynamic Relationship

Introduction
Corporate governance is virtually operating a business in a way that guarantees that its owners or stockholders obtain a reasonable income on their assets and at the same time meet the expectations different stakeholders (Magdi & Nedareh, 2002 in Duke II & Kankpang, 2011).
This addresses the need for organizational executives to do things in the overall benefit of the business core stakeholders, particularly, minority shareholders or investors, by making sure that only actions that facilitate delivery of maximum returns and other beneficial outcomes are taken at all times. This is certainly typically facilitated by creating an operating milieu which encourages the observance of codes of conduct that espouse accountability, transparency, fairness, honest behaviour, responsibility and other values designed to work as safeguards against institutional problem and the mismanagement of scarce organizational resources (Duke II & Kankpang, 2011).

Risk management involves discovering risks, assessing their effects, selecting a series of processes, and evaluating the results. It is the determination, classification, and prioritization of risks followed by unified and efficient utilisation of resources to lessen, monitor, and manipulate the quantity and/or effect of disastrous events. Risks can arise from uncertainness in business markets, projection flops, statutory liabilities, credit risk, accidents, physical causes and disasters as well as wilful attacks from an antagonist. Risk management helps to assure that an organization identifies and understands the risks to which it is unprotected (Ironkwe & Oglekuru, 2016). It introduces the thought of the probability of how an unpleasant situation can be minimized, or its consequences greatly reduced. Efficient risk management seeks to increase the benefits related with a venture commonly a reduction in the period or outlay while decreasing the risk itself.

The goals of risk management include: to reduce international return failures, limit the variations in foreign returns, protect income variations, improve on profits, and guarantee success of the business (Fatemi & Glaum, 2000). To ensure that financial institutions are managed in a well-organized risk control environments, where there is reduction in doubts and possible failures, supervisors must measure risks and invest in projects with the best risk/rewards. They need reports of the degree of possible failures to be within boundaries set through persistent internal situations and by authorities. They also need systems to observe roles and create rewards for sensible high risks undertaken by sections and individuals.

The Nigerian banking industry experienced a watershed in late 2004/2005 following the bank consolidation exercise introduced by the Central bank of Nigeria (CBN) that required an increase in capital base (shareholders’ funds) to ₦25billion. This consequently shrank the numbers of players in the sector from 89 to 22 in separate merger and acquisition processes while 13 banks were liquidated, (Elumilade, 2010). The merger of strange bed fellows affected corporate governance, risk management strategies and performance of most of the emerging banks as observed by Adeyeni (2016). Performance, as described by Lusser (1996 in Adeyeni, 2016) is a mean of analyzing how successfully companies use sources to achieve goals.

The discourse on why corporate governance matters are crucial in bank risk management has been a topic of discussion in literature. The debate is that the most preferable governance should intensify bank activities and curb bank risks through improved mechanism of bank management. Nevertheless, the discourse of whether corporate governance has an effect on the management of bank risks has resulted into divergent answers from researchers as evidenced in the works of Greuning & Bratanovic, 2004, Simpson & Gleason, 1999; Prowse, 1997; Jansen, 1993.

Empirical evidence on the association between corporate governance and financial performance is also inconclusive with inconsistent results/findings (Black, Drobetz, 2004; Jang, & Kim, 2003; Klapper& Love, 2003; La Porta, Lopez-de-Silanes, Shleifer, Vishny,
Findings from empirical researches on the relationship between ownership structure and performance are also somehow mixed. To some, the relationship is positive (Asma’a 2014; García-Meca & Sa’nchez-Ballesta, 2011; Dunstan and Karim, 2010; Ma, Naughton & Tian, 2010; Al-Farooque, Zijl, Silva & Majluf, 2008; Perrini, Rossi & Rovetta, 2008; Gedajlovic & Shapiro, 2002). To others, the relationship is negative (Boone, Colombage & Gunasekara, 2011; Jiang, Habib & Smallman, 2009; Mudambi & Nicoula, 1998). Yet others could not establish any relationship (Iannotta, Nocera & Suribi, 2007; Prowse, 1992; McConnell & Henri, 1990).

Additionally, analytical findings on the construct of corporate governance, ownership structure, risk management and financial performance of banks still provide no agreement on the type of aggressive interactions that exist amongst these four variables. While past studies are yet to provide an undisputable framework on a theory that agrees with previous casual direction amongst the four variables, majority of the empirical studies investigated the associations by assuming causality that flows from one end to the other. This, in reality is too narrow and can distort the credibility of findings from these works. The present study investigated the dynamic relationships among these variables by treating them as endogenous, and thus was able to identify the nature of the causal and feedback effects among the phenomenon of risk management, ownership structure, corporate governance and corporate performance in the Nigerian banking industry.

**Literature Review**

**Risk Management Theory**

Risk management theory is described as a collection of activities put in place to reduce the unfavourable effects of unforeseeable risks that may lead to losses (Schmidt & Roth, 1990). Redja (1998) also defined risk management as a set of organized activity for the determination and assessment of absolute loss faced by an entity or a body, and for the choice and implementation of the most appropriate techniques for treating such specified exposure. The activity involves: determination, measuring, and management of the risk.

**Empirical Review**

Tandelilin, Hermeindito, Anom and Supriyantna, (2007) examined the relationships among corporate governance, risk management, and bank performance in Indonesian banking sector. The research investigated whether ownership type has moderating effect on these relationships, and whether ownership structure is an important factor in corporate governance. The research made use of secondary and primary data using General Methods of Moments (GMM). Capital Adequacy Ratio (CAR) was used to proxy corporate practice (external), Value at Risk (VAR) measured risk management, Net Profit Margin and Return on Equity proxied bank performance. The research established that the association between corporate governance and risk management and between bank performance and corporate governance are sensitive to ownership type.

Kim and Rasiah (2010) examined the link between corporate governance and financial performance of banks in Malaysia before and after the economic crisis in Asia. The research highlighted the differences between two types of ownership in the banking sector. These are: domestic-owned and foreign owned in order to explain the connection between bank performance and corporate governance in the pre and post financial crisis in Asia. The research employed directors’ report and financial reports of four locally owned and seven
foreign-owned banks in Malaysia for the sample period from 1995 to 2005. Findings revealed that the relationship between company corporate governance and financial performance in banks is significant and positive in Malaysia. It was also established that domestic banks performed poorly in the area of corporate governance than their foreign owned counterparts.

Cheung, Stounis and Tan (2010) concluded that the worth of corporate governance differs significantly in explaining future earnings and risk. Good corporate governance is linked with high stock returns and with decrease unsystematic risk and vice versa (Ahmed, Tarek & Ehab, 2016).

Aebi, Sabato and Schmid (2011) canvassed that banks must significantly boost the quality and reputation of their risk management and corporate governance so as take care of possible financial crisis. Tarraf and Majeske (2011) examined the association between risk taking, corporate governance and financial performance of Bank Holding Companies (BHCs) during the 2008 financial crisis. Though the study did not establish any significant relationship between risk management and corporate governance, it gave evidence that BHCs with reduced risk outperformed BHCs with increased risks during the study period.

Stulz (2014) affirmed that the achievement of risk management in attaining its functions lies on the good corporate climate and its competency to manipulate that environment. Quaresma (2014) investigated the association between the quality of financial performance and corporate governance of quoted foreign banks. The study established a significant association between financial performance and best corporate governance practices in the studied banks.

Ahmed, Tarek and Ehab (2016) examined the relationship between risk management and corporate governance in GCC banks. The work utilized a sample of 900 observations drawn from banks in the Gulf countries. Panel data analysis, quintile and nonparametric regression were used for the analysis of data obtained from financial institutions in the Gulf countries for 2003 to 2012 period. Findings show a positive and significant association between the two variables.

Many studies, all over the world, had examined ownership structure and financial performance of banks. Auvray and Brossard (2008) in their study of seventy-seven European banks over an eight year period concluded that ownership concentration of 20% is a necessary for correct transmission of a shareholder’s monitoring into a distance – to default indicator. Kern (2004) researched on UK banks and reported that principal-agents problem, which is a main challenge in corporate governance is not in agreement with bank ownership. This is due to differences in operating performance occasioned by the risk taking ability of management and owners.

Love and Rachinsky (2006) focused on 50 banks in Ukraine and 107 banks in Russia. The research covered a four-year period of 2003 to 2006. They came up with the finding that ownership concentration is associated with lower rankings as far as corporate governance is concerned and that corporate governance is ranked second on financial performance in the two countries. Igor, Ana and Marina (2012) investigated on the relationship between ownership structure and bank performance in Croatia and discovered significant correlation between financial performance and ownership structure of the sampled bank.

In Nigeria, a pioneer investigation was done on risk management and performance by Akindele (2012). The work analyzed the aftermath of risk management and corporate governance on bank performance. The relationship between bank performance and risk management was positive.
Additionally, an investigation conducted by Eduardus, Hermeindito, Putu and Supriyatna (2007) in Indonesia which served as an inspiration for the one done by Akindele (2012) again confirmed that risk management positively affects bank performance. Nevertheless, the study utilized secondary and primary data for the analyses. The study utilized Generalized Methods of Moments (GMM), bootstrap method, factor analysis and 3-state least squares (3SLS). This work in addition found that the relationships between risk management and corporate governance in one hand and between corporate governance and bank performance on the other hand sensitive to the type of bank ownership.

Olusanmi, Uwuigbe and Uwuigbe (2015) investigated the effect of effective adequate risk management on financial performance of banks. The Ordinary least square Regression was applied in examining the association between risk management and financial performance of banks. Data was collected from financial statements of quoted Nigerian banks. The analysis showed that the association between risk management and banks’ performance is negative and not significant.

Methodology

The work took into account 20 carefully selected banks out of 22 post-consolidation Deposit Money Banks firms listed on the Nigerian Stock Exchange for a period of seven years from 2005-2011. This represents 90.9% of the total population.

This study used secondary data obtained from the annual financial statements of the sampled banks and the publications of the Nigerian Stock Exchange for the period 2005-2011. The choice of the base year was based on the fact that banking consolidation effectively took off in Nigeria in 2005 and the use of local accounting standards for preparation of financial reports ended in 2011.

Model Specification

In order to carry out a scholastic examination of the dynamic association between Bank Performance (proxied with Return on Equity – ROE); Corporate Governance (proxied with Capital Adequacy Ratio – CAR) ownership structure (OWN proxied by the proportion of the board member share capital to total bank capital) and Risk Management Practices (proxied with Bank Risk Behaviour – BRB) of banks, all the variables were changed into their natural logarithms and the following model was adopted:

\[ ROE_{it} = a_t + b_t CAR_{it} + c_t OWN + d_t BRB_{it} \]

Where:

b and c are coefficients of the long-run elasticity estimates of corporate governance and risk management/behaviour respectively.

An improvement on corporate governance is expected to enhance bank performance \((b > 0)\). Likewise, an improvement on risk management is linked with an improvement on bank performance \((c > 0)\).

The use of Capital Adequacy Ratio (CAR) is in line with the guidelines provided by The Central Bank of Nigeria (CBN) and also in line with the works of Adeyeni (2016), Supriyatna et al. (2007); Tandelilin et al, 2007.

The use of the proportion of the board members’ share capital to total bank capital as a measure of ownership structure is in agreement with the work of Adeyeni (2016).

The use of Return on Equity for bank performance follows the works of Adeyeni, 2016; Hoque et al, 2013; Tandelilin et al, 2007; Lusser, 1996.

**Findings and Discussion**

The results in Table 1 showed that without interacting ownership structure with corporate governance and bank risk behaviour, corporate governance has positive and significant effect on bank performance, but bank risk behaviour has negative but insignificant effect on bank performance. Ownership structure has positive and significant effect like corporate governance.

However when the ownership structure is interacted with corporate governance and risk behaviour, the results and significance of the variable changed remarkably. For instance, the introduction of ownership structure variable significantly alters the results obtained in the model estimated earlier. Though the effect of risk management and corporate governance individually still remains negative and positive respectively as observed in the previous model, corporate governance when interacted with ownership structure became insignificant while bank risk behaviour became significant and positive.

This suggests that the ownership structure of banks can dictate how corporate governance affects bank performance and could constitute a serious hindrance to effective implementation of corporate governance. In contrast, ownership structure was found to aid effective risk management practice as interaction of risk management practice variable with ownership yield positive and significant result.

To check whether the effects of individual variables are greater or equal to the joint effects of the variables when they are interacted, Wald significance test was conducted. The results are presented at the lower part of Table 1. From the result it is observed that the joint effects are significantly different from individual effect which implies that the interaction of the ownership has added value to the bank performance. This suggests that ownership plays a significant role in determining the effect of bank risk behaviour and corporate governance and CAR on bank performance (See table 1).

This finding negates the work of Ezugwu and Itodo (2014) which found a positive but an insignificant relationship between ownership structure and corporate performance of Nigerian banks. Robustness checks conducted to validate their findings provided undisputable evidence that ownership concentration has no significant influence on corporate performance of Nigerian banks. This is attributed to poor investor protection environment as most Nigerian firms are managed by entrenched insiders who allocate huge financial benefits to themselves at the expense of their companies. This greatly reduces operating profits. The finding also partly negates the work of Ahmed, et al (2016) whose work found a negative association between ownership structure (proxied with board size) and risk management. Findings also indicated a positive and significant relationship between government ownership (ownership structure) and risk management.
Table 1: Interactive Effects of Ownership Structure, Risk Management and Corporate Governance on Bank Performance

<table>
<thead>
<tr>
<th>Dependent Variable ROE</th>
<th>Model without ownership Interaction</th>
<th>Model with Ownership Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.0314 [-2.088] (0.039)</td>
<td>-0.016 [-1.015] (0.29)</td>
</tr>
<tr>
<td>BRB</td>
<td>-0.0043 [0.455] (0.649)</td>
<td>-0.018 [-1.202] (0.232)</td>
</tr>
<tr>
<td>CAR</td>
<td>0.367 [5.744] (0.000)</td>
<td>0.230 [3.678] (0.000)</td>
</tr>
<tr>
<td>OWN</td>
<td>-0.082 [-2.579] (0.0012)</td>
<td>-0.134 [-3.185] (0.0001)</td>
</tr>
<tr>
<td>CAR-OWN</td>
<td></td>
<td>0.0844 [1.282] (0.202)</td>
</tr>
<tr>
<td>BRB-OWN</td>
<td></td>
<td>0.589 [3.224] (0.0017)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>40.550</td>
<td>0.597</td>
</tr>
<tr>
<td>F-Statistics</td>
<td>4.752{0.000}</td>
<td>5.244{0.000}</td>
</tr>
</tbody>
</table>

Test for the Significance of the Interactive Terms

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>C(2) + C(6)</th>
<th>C(3)+C(5)</th>
<th>C(6)=C(2)</th>
<th>C(3)=(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.153903</td>
<td>0.739539</td>
<td>0.243601</td>
<td>0.261864</td>
</tr>
<tr>
<td>t-statistic(128)</td>
<td>3.237279</td>
<td>5.524891</td>
<td>3.732558</td>
<td>1.412497</td>
</tr>
<tr>
<td>F-statistic (1,128)</td>
<td>0.005</td>
<td>(0.000)</td>
<td>(0.0003)</td>
<td>(0.1602)</td>
</tr>
<tr>
<td>Chi-square (1)</td>
<td>10.47998</td>
<td>30.52442</td>
<td>13.93199</td>
<td>1.995148</td>
</tr>
<tr>
<td></td>
<td>0.0012</td>
<td>(0.000)</td>
<td>(0.0002)</td>
<td>(0.1602)</td>
</tr>
</tbody>
</table>

****Probability values are in the parenthesis

****C(2) represents the effect of BRB, C(3) represent effect of CAR while C(6) represent effect of BRB_OWN while C(5) represent effect of CAR_OWN.

The finding here is however consistent with the work of Claessens et al (2000) that affirmed that owners exert significant control over their firms. This is not strange in Nigeria as managers are real owners of their businesses in most cases (Ezugwu & Itodo, 2014). Concentrated ownership offers excellent monitoring incentives and outstanding performance (Leech & Leahy, 1991). They perform better than manager controlled firms (Ongove, 2011). Institutional investors invest in viable projects and play key roles in the management of firms they invest in. By this, conflict of interest and agency problems are minimized (Al-Najjar, 2010; Maug, 1998, Huddart, 1993). A high percentage of foreign holding in a firm usually sends a positive signal to the market that foreign investors have high
confidence in such firm and this will impact positive on the corporate performance of the firms (Bai, Liu, Song & Zhang, 2004; Haniffa& Cooke, 2002).

The conclusion from this study is that an efficient and good credit risk management can lead to improved corporate performance. This is very essential in order to safeguard assets and protect the interests of all stakeholders. Banks with good risk management policies and with proper ownership structure will surely have improved corporate performance.

References


