Journal of Applied Economics and Business

OPEN ACCESS ARTICLE

DOES BOARD SIZE SPUR BANK PERFORMANCE IN NIGERIA? EVIDENCE FROM PANEL DATA ANALYSIS

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Abstract

This paper examines how board size affects the performance of Deposit Money Banks (DMBs) in Nigeria. To achieve the objectives of the study, data on return on equity (ROE) board size, executive and non-executive board members and interest rate margin (lending rate less deposit rate) of 15 DMBs were sourced from the NDIC and CBN records and analyzed using panel approach. The result of the analysis revealed that board size has negative implication on the performance of banks in Nigeria. This implies that banks are likely to perform better with reduced board size. Based on this finding, the paper concludes that, there is no significant relationship between board size and the performance of banks in Nigeria. It also suggests the reduction in board size and banks adherence to prudential guideline by the regulatory agencies as ways of improving their performance in Nigeria.

Key words: *Return on equity; Board size; Interest rate margin.*

INTRODUCTION

Corporate governance plays a critical role in the wellbeing of a firm because its determine the success or failure of an organization (Ogbechie, 2006: 6). Corporate governance therefore refers to the processes and structures by which the business and affairs of institutions are directed and managed, in order to improve long term, share holders' value by enhancing corporate performance and accountability, while taking into account the interest of other stakeholders (Jenkinson & Mayer, 1992). Corporate governance is therefore, about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that will foster good corporate performance. The critical role of corporate governance in the performance of a firm could be deciphered in the work of Akingunola et al., (2013) which argued that the bitter experiences of Asian financial crisis of the 1990s underscore the importance of effective corporate governance procedures to the survival of banks and the economy at large. The Asian financial crisis, they argued, demonstrated in no unmistakable terms that "even strong economies, lacking transparent control, responsible corporate boards and shareholder right can collapse quite quickly as investor's confidence collapse.

The banking industry in Nigeria in recent years has undergone major changes arising from the reforms from the monetary authorities which stimulates that banks increase their capital base (share) to a minimum level of twenty-five billion naira (₦25B), (Ogbeche, 2006: 1). This development led to merging among banks to meet up the monetary authority's guideline thereby reducing the number of banks from 89 banks to 25 banks as at 2006 till date. (Kama, 2006: 66). Consequently, merger and acquisition of banks increase the size of bank and also widen the span of control. This brought a serious challenge on corporate governance issue and some bank became illiquid due to their inability to manage challenges emanating from their internal and external environment. The global economic crisis and the decline in the value of investment collections of deposit money banks particularly in Nigeria are due to distorted credit management and this problem is associated with poor corporate governance.

One critical factor in corporate governance is board size. The agency theory argues that superior firm financial performance may be linked to smaller board size. Smaller boards are less likely to have difficulty in coordinating and communicating. Also, a smaller board is probably more effective at monitoring management's activities because it cannot be easily influenced by the CEO and thus smaller board size may cause better firm financial performance than larger board size due to the problem of span of control (Lipton & Lorsch, 1992; Jensen, 1993). The agency theory strongly emphasises the importance of smaller boards, whereas resource dependence approach is in favour of large boards. The resource dependence theory on the other hand, posited that boards with a large number of directors may be advantageous in reducing dependency on external resources because larger boards may provide greater opportunity for more environmental linkages than smaller boards (Pfeffer & Salancik, 1978; Goodstein et al., 1994). The Nigerian financial sector had recognised the critical role board size plays in the performance of banks and has periodically review its composition and size in order to enhance the efficiency of the banking sector. This study seeks to examine how board size affects the performance of banks in Nigeria. We continue our discussion by reviewing relevant literature that are related to the study, explain the methodology employed to achieve the objectives, provide the results, findings and finally, the concluding remarks and recommendations.

LITERATURE REVIEW

The agency theory states that better corporate governance should lead to higher stock prices or better long-term performance, because when managers are better supervised, agency costs are decreased (Albanese, et al., 1997). However, as Gompers, et al., (2003) suggest, the evidence of a positive association between corporate governance and firm performance may be traced to the agency explanation. In connection with the relationship between corporate governance and firm performance, the most studied governance practices include board composition, size and shareholder activities.

Lipton and Lorsch (1992) and Jensen (1993) in their studies also confirmed that; limiting board size is believed to improve firm performance because the benefits by larger boards of increased monitoring are outweighed by the poorer communication and decision-making of larger groups. A large board is likely to be less effective in substantive discussion of major issues and to suffer from free-rider problems among directors in their supervision of management (Hermalin & Weisbach, 1999). Mak and Li (2001) conducted an empirical analysis of firms listed on the Stock Exchange of Singapore. They stated that the sign and significance of the relationship between board size and performance, is sensitive to the estimation method. They concluded that the board characteristics are endogenous and failing to take endogeneity into account may yield a significant relationship with performance, which in reality does not exist.

Mak and Kusnadi (2002) also asserted an inverse relationship between board size and firm value. Their observation is based on a comparative study done on the firms listed on Singapore Stock Exchange (SGX) and Kuala Lumpur Stock Exchange (KLSE). Board effect was found in both countries. They further supported Healey (2003) that large groups are less effective than small groups in decision-making. Dwedi and Jain (2002) conducted a study on 340 large, listed Indian firms for the period 1997-2001. This study found a weak positive relation between board size and performance of the firm.

Beiner, et al., (2003) conducted a study over companies listed on the Swiss Stock Exchange (SWX). Study did not find a significant relationship between board size and firm valuation, as measured by Tobin's Q. Authors suggested that Swiss firms, on average, choose their number of board members just optimally.

Mak and Yuanto (2003) echo the above findings in firms listed in Singapore and Malaysia when they found that firm valuation is highest when board has five directors. Bennedsen, et al., (2006) studied the relationship between board size and performance of 500 Danish firms. Their study also supported a negative relation between the two variables. Adams and Mehran (2002) accessed the relationship between banking firms' performance (represented by Tobin's Q) and board size and found a non-negative relationship between board size and Tobin's Q. They further argued that M and A activity and features of the bank holding company organizational form might make a larger board more desirable for these firms.

In Manas and Saravanan (2006) it was concluded that the absence of a relationship between board size and corporate governance exists in Indian banks. In Ghana, it has been identified that small board sizes enhances the performance of MFIs (Coleman & Nicholas-Biekpe, 2006). While in a study conducted in Nigeria, Sanda et al., (2005) found that, firm performance is positively related with small size as opposed to large boards. In their study, Klein (1998), Booth and Deli (1999) and Anderson et al., (2004) tried to find out the relation between board size and ratio of debt to assets (book leverage). They presented a different result that firms with bigger boards have lower cost of debt. On contrary to the theory that larger boards are ineffective monitors, they stated that board plays an important advisory role that enables firms to gain access to low-cost debt. They observed that the board will be larger in firms with high leverage.

Klein (1998), Agrawal and Knoeber (1996), Adams and Ferreira (2003), and Adams and Mehran (2003) also tried to access the applicability of same board size for all classes of firms. Klein (1998) argued that the CEO's need for advice will increase with the complexity of the organization.

Baysinger and Butler (1985) found little evidence that corporate governance resolutions initiated by shareholders lead to better firm performance. Smith and Watts (1992), reported a positive performance effects for the Shareholder's activities of the California Public Employees' Retirement System. Huson et al., (2004) showed that financial institutions could be fairly effective in pushing target companies to take steps to comply with their corporate governance proposals. They also find that any short-term valuation effects resulting from activities are dependent on the specific type of governance issue targeted. Gillan (2006) find that shareholder proposals by individuals have small, positive announcement effects, while proposals by institutional investors have a small but significant negative effect on stock prices. Overall, the empirical literature on shareholder's activities in the United States seems to indicate that it has a negligible impact on corporate performance (Black et al., 2003).

In other studies, Frankel et al., (2002) showed a negative relationship between earnings and auditor's independence, but Ashbaugh et al., (2003) and Larcker and Richardson (2004) dispute their evidence arguing that the study dwelt more on intrinsic factors. Agrawal and Chadha (2005) find no relation between either audit committee independence nor the extent auditors provide non-audit services with the probability a firm restates its earnings.

Furthermore, several studies have examined the separation of CEO and chairman, positing that agency problems are higher when the same person holds both positions. Using a sample of 452 firms in the annual Forbes magazine rankings of the 500 largest U.S. public firms between 1984 and 1991, Yermack (1996) shows that firms are more valuable when the CEO and board chair positions are separate. Larcker (2004) also find out that CEO compensation is lower when the CEO and board chair positions are separate.

Most prior studies on corporate governance and performance make use of the market based performance measure and not accounting performance measures. In order to cover the lapses in prior studies, this study will build on the studies by Brown and Caylor (2004), Sanda et al., (2005), Coleman and Nicholas-Biekpe (2006), to analyze the relationship between corporate governance and financial performance of banks in Nigeria. This study used the CBN code of best practice and also made use of the specific governance index as provided by the Institutional Shareholder Services and as adopted in Brown and Caylor (2004), to create a summary index of firm- specific governance i.e. "Gov- Score". This will be an improvement over the index as used in Gomper et al., (2003) (i.e. the GIM index), which focused only on anti- takeover measures.

The hallmark of banking is the observance of high degree of professionalism, transparency and accountability, which are essential for building strong public confidence. Due to the systemic distress witnessed in the nation's banking system and its unpleasant consequences on all stakeholders as a result of inadequacies in corporate governance of banks in recent times, series of initiatives had been taken by the nation's regulatory/supervisory authorities to encourage sound corporate governance in the system. Some of the initiatives included enhancing the legal framework; enhancing the surveillance activities of the financial system; strengthening the roles of internal and external auditors; developing of a code of best practices of corporate governance in the system; issuance of guidelines and circulars on matters such as pre-qualification for appointment to board and top management positions in banks, insider related credits, etc. While all the above-mentioned efforts are in the right direction, it is equally important to indicate some imperatives of good corporate governance for banks so as to ensure the safety and soundness of emerging bigger banks in the post-consolidation era with a view to enhancing public confidence in the nation's banking system.

METHODOLOGY

In order to achieve the objectives of this study, data on return on Return on Equity (ROE), board composition, board size and lending rate of 15 Deposit Money Banks in Nigeria were sourced from the records of the banks and the Central bank of Nigeria. The data was analyzed using the panel approach. The purposes of our analysis are: to examine the impact of board size on performance of the banking sector and to find out if the impact of board size on performance (ROE) varies across the banks in Nigeria or not.

This study employs a modified version of the econometric model of Miyajima et al., (2003) as adopted by Coleman and Nicholas-Biekpe (2006**)**. These studies used the CBN code of best practice and also made use of the specific governance index as provided by the Institutional Shareholder Services. The CBN prudential guideline specifies the number of directors (executive and non-executive) that a given bank should have. Deposit money banks are expected to comply with such guideline in order to enhance stability of the bank and ensure efficient management and performance. In this study, performance is measured by return on equity (ROE). The rationale for the use of this variable as a measure of performance is that banks in Nigeria are privately owned firms financed by individual/group of individuals whose interest is to maximize profit. Return of equity captures the proportion of profit earned that goes to the shareholders of the bank. The higher the proportion of profit to shareholders' fund, the more attractive a firm (bank) is to the shareholders and other potential investors.

Board size is critical for performance of a firm and the banking sector in particular. This is because the composition (size) of board is key in decision making and management of the business. Board size also has serious role in running cost of the bank while directly affect ROE/performance. Based on this illustration, the paper specifies a bank performance function thus:

$$ROE_{it} = f\left(BOS_{it},\ BOC_{it},\ BRN_{it},\ INTR_{it}\right) \qquad \text{(I)}$$

In order to estimate the functional relationship between banks' performance and the components of board size using econometric technique, equation 1 could be expressed in mathematical form as follows:

$$ROE_{it} = \alpha_0 + \alpha_1 BOS_{it} + \alpha_2 BOC_{it} + \alpha_3 BRN_{it} + \alpha_4 INTR + U_{it} \qquad \text{(II)}$$

Where; ROE_{it}= Return on Equity; BOS_{it} = Board size; BOC_{it}= Executive Board Composition;BRN_{it}= Non executive Board Composition; $INTR_{it}$= Bank charges proxy by interest rate margin and U_{it}= Error term.

RESULTS AND FINDINGS

TABLE 1. DESCRIPTIVE STATISTICS

Variable	Mean	Standard Deviation	Minimum	Maximum
Roe	0.56	0.91	0.02	12.34
Bos	13.20	3.28	6	22
Bed	4.57	1.98	1	11
Bnd	8.79	2.21	4	16
Intr	19.88	3.39	14.82	26.04

The descriptive statistics reported in Table 1 indicates that there exists a high deviation in the variables investigated in this study. The high degree of deviation in return of equity, board size, executive board composition, non-executive board size and interest rate margin show that the variables experienced very high level of fluctuation during the period under study. This wide fluctuation in the variables could be attributed to the continuous reforms that take place in the Nigeria's banking sector.

TABLE 2. PAIRWISE CORRELATION RESULT: ROE BOS BED BNDINTR, STAR(5)

Variable	Roe	Bos	Bed	Bnd	Intr
Roe	1.000				
Bos	-0.1528*	1.000			
Bed	-0.1020	0.6995*	1.000		
Bnd	-0.1255	0.7752*	0.2080*	1.000	
Intr	-0.1139	-0.0231	-0.0567	0.0214	1.000

The pairwise correlation result in Table 2 revealed a negative and weak correlation between board size, executive board composition, non-executive board composition, interest rate margin and return on equity. This implies that components of board size have very weak relationship with bank performance (ROE).

TABLE 3. PANEL RESULT

Random Effect (RE) Model				Fixed Effect (FE) Model		
Variable	Coefficient	T-statistic	Prob	Coefficient	T-statistic	Prob
Bos	-0.039	-0.63	0.531	-0.029	-0.43	0.665
Bed	-0.0038	-0.05	0.958	0.022	0.32	0.747
Bnd	-0.0053	-0.15	0.881	-0.023	-0.30	0.766
Intr	-0.032	-1.68	0.092	-0.037	-1.66	0.098
Cons	1.759	3.87	0.000	1.75	3.34	0.001
$R^2 = 0.037$				FE test F(14,191) = 0.83; F-Prob = 0.63; $R^2 = 0.032$		

The panel result reported in Table 3 indicates that board size is negatively and insignificantly related to return on equity both in the random and fixed effects models. This implies that an increase in board size (Bos) retarded bank performance proxy by return on equity. This result is in consonance with earlier studies by Lipton and Lorsch (1992) and Jensen (1993) which revealed that limiting board size improve firm performance because the benefits by larger boards of increased monitoring are outweighed by the poorer communication and decision-making of larger groups. Smaller board size tends to reduce cost and span of control which has direct bearing on the performance of a firm (bank).

Executive board size also has negative and insignificant relationship with return on equity in the random effect model but has positive impact on performance in the fixed effect model. This implies that reduction in the number on executive board members of banks increases their performance (return on equity). This result conforms to the work of Coleman and Nicholas-Biekpe, (2006) which shows that smaller executive relative to large members have direct impact on the performance of bank in Ghana. The fixed effect result implies that large executive board size is performance friendly. This result is in tandem with the works of Dwedi and Jain (2002) which found a weak positive relation between board size and performance of the firm in a study conducted on 340 large, listed Indian firms for the period 1997- 2001.

The negative and insignificant relationship between non-executive board member size and performance in both the random and fixed effects models also indicates that smaller number of non-executive board members improve the performance of deposit money banks in Nigeria. This result aligned with earlier study by Sanda et al., (2005) which found that, firm performance is positively related with small size as opposed to large boards. The Central bank and other financial regulatory agencies in Nigeria have in their policy reforms tried to stipulate smaller board members for the bank. This was aimed that curtailing cost and unhealthy rivalries that may arise from large board size.

Interest rate margin measured by the difference between lending rate and deposit rate also has negative relationship with bank performance. This implies that increase in bank charges reduced the performance of banks in Nigeria. From the theoretical view point higher interest rate is necessary for improve performance of bank since such charge has influence of the bottom line of banks. However, Trujillo-Ponce, (2010) found that macroeconomic and financial environment of low interest rates coupled with tense competition among banks could reduce the possibilities for banks to establish appropriate prices for their loans and deposits, thereby putting pressure on the cost of operation and negatively affecting banks' performance. It should be noted that Interest rate has serious implication on volume of liquidity banks give out as loan and the income earned from such loans.

The panel result further shows that the effect of board size on the performance of bank is the same across the banks in Nigeria. This implies that board size has similar impact on all the banks operating in Nigeria over the period of this study.

CONCLUDING REMARKS AND RECOMMENDATIONS

This paper examine how board size affects the performance of deposit money banks in Nigeria. The result of our investigation revealed that board size has negative implication on the performance of banks in Nigeria. This implies that banks are likely to perform better with reduced board size. This result is in tandem with earlier studies by Lipton and Lorsch (1992), Jensen (1993), Coleman and Nicholas-Biekpe, (2006) and Sanda et al., (2005). Hence the paper concludes that there is no significant relationship between board size and the performance of banks in Nigeria. Based on the finding, the paper suggests reduction in board size and banks adherence to prudential guideline by the regulatory agencies as ways of improving their performance in Nigeria.

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