

Board Independence and Firm Financial Performance: Evidence from Nigeria

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Abstract

Developing countries require resources to achieve and maintain economic growth as a veritable means of fighting poverty. Yet, for many countries, although the need for developing sound corporate (as well as country-level) governance has been recognized, research has been rather scanty on the links between firm-level governance structures and corporate financial performance. In this paper, we explore this issue, paying particular attention on the relationship between corporate board independence and firm financial performance in Nigeria. Using data for varying sample size (ranging from 89 firms for regression to 205 firms for descriptive analysis) obtained from the Nigerian Stock Exchange for the period 1996 through 2004, certain aspects of board independence are examined and their possible effects on firm performance investigated. The key results are that share ownership is highly concentrated in Nigeria, with this structure tending to engender board structures with close family affiliations and in which the CEO tends to take an active part in membership of audit committees. While family affiliation of board members is found to support firm growth, we find evidence that audit committee membership of chief executives hurts firm performance. We also find that foreign chief executive perform better than their local counterparts. These results suggest the need for Nigerian firms to adopt better corporate governance mechanisms in order to make the boards of directors more independent, avoid unnecessary intervention of CEOs in important committees, and in that aid financial performance of Nigerian firms. We caution, though, that our results are based on a narrow range of firms and the conclusions arising from this study should therefore be interpreted against the backdrop of this limitation.

1 Background to the Study

The board of directors has long been recognised as an important corporate governance mechanism for aligning the interests of managers and all stakeholders to a firm. The need to adopt the right corporate governance mechanisms for the purpose of such alignment is driven by the agency problem and the associated free-rider problem that makes it difficult for any single investor or stakeholder to bear the cost of monitoring managers. The central role of board of directors in this process has therefore been recognized and in recent years has gained significant attraction for at least a couple of reasons. One, both transition countries and other developing countries are struggling to attract resources for investment in an increasingly competitive global environment. Two, events at Enron and several other large corporations suggest the need for policies to promote board independence and other aspects of corporate governance.

Both Oman *et al.* (2003) and Morck and Yeung (2004) argue that different forms of ownership structures are associated with different sets of agency problems. In countries such as US and the UK where share ownership is widely diffused, agency problem is more common between managers and shareholders. In contrast, in developing countries characterized with concentrated equity ownership, agency problem is most predominant between controlling shareholders and minority shareholders. As discussed later in this paper, controlling shareholders acquire and maintain effective control over firms beyond what can be justified by their equity interest, and that they often take advantage of that control to expropriate resources from minority shareholders. Developing countries could ill afford to maintain structures that perpetuate expropriation of minority shareholders since such countries are in need of additional, especially outside, resources to support investment and growth. Foreign investors may be scared of such expropriation and they might well argue for an effective control of the firms themselves, but the political backlash that this will unleash could cause political resistance to such levels of foreign control. Thus, strengthening board

independence and other forms of firm-level governance is important, and particularly so in developing countries with weak institutions but are yearning to attract foreign resources.

Beyond helping to resolve agency problems between managers and other stakeholders, corporate governance is important to the economy (Levine, 2004; and Oman *et al.*, 2003). In developing countries with weak legal institutions it is sometimes difficult for foreign investors to seek legal redress when the developing country partner violates a contractual agreement (Collier, 2006). Since there are no global law enforcement agencies to deal with the concomitant problems (Collier, 2006), it could be argued that strengthening board independence and other firm-level mechanisms of corporate governance could serve as a means of ameliorating the weakness of legal institutions and hence aid the attraction of foreign investment, with significant ramifications to the economy.

Levine (2004) also sees a link between corporate governance and the economy, arguing that it has the capacity to foster economic growth. According to him sound corporate governance makes it more likely for owners of capital to monitor the activities of managers either directly through voting on crucial matters or indirectly through the board of directors. This helps to protect shareholder interest, promote savings, investment and economic growth. Oman *et al.* (2003) argue along similar lines, but see the importance of corporate governance on growth through a different channel. For them, well-governed firms are better able to raise productivity and aid economic growth.

The prevailing wave of economic reforms offers another twist to the argument for the need to strengthen corporate governance. In Nigeria, economic and political reforms have been at the heart of policy: the pension system has been reformed, with a switch from non-contributory to a contributory system; the process of bank consolidation has gathered pace, with a new capitalization requirement for banks forcing many of them to merge and reducing their number from 89 before the reforms to 24 by October 2007; the Fiscal Responsibility Bill has been passed into law by the national assembly; and the Central Bank of Nigeria has recently adopted inflation targeting as the main framework of monetary policy, with price stability being the overarching goal. Admittedly, these reforms are designed to facilitate economic and social progress in Nigeria as well as promote the integration of the country into the global economy. However, it could be argued that for the reforms to achieve the desired objectives, the private sector must institute sound firm-level practices that include measures to strengthen board effectiveness as well as encourage the development of other aspects of corporate governance.

The issue of board independence and corporate governance in general has long been neglected in Nigeria. It was not until in November 2003 that a code of corporate governance was developed, which, as discussed in a subsequent section of this paper, makes a specific set of recommendations on how to promote board independence and corporate governance in general. The relative neglect of corporate governance in Nigeria's public policy is perhaps a reflection of the paucity of research in the area of corporate governance in Nigeria. We know of a few empirical works in this area of corporate governance in Nigeria: an unpublished work by Adenikinju and Ayonrinde (2001) and a study by the authors of this paper, Sanda, Mikailu and Garba, (2005) (hereafter, SMG). Both of these studies have important limitations. While Adenikinju and Ayonrinde (2001) make no attempt to examine the relationship between board independence and corporate performance, SMG employ a narrow set of measures of board independence, reporting no significant relationship between the

proportion of outside directors on the board and firm performance. By employing a wider set of variables serving as measures of board independence and using newer Nigerian data set, this paper hopes to extend our understanding of the relationship between board independence and firm performance in Nigeria. In order to enable us accomplish this task, the rest of the paper is organised into eight sections. In section two, we present the objectives and hypotheses of the study while section three provides an overview of the regulatory framework. After providing a sketch of the theoretical framework in section four, we proceed to provide a survey of literature in section five. The methodology of the study is given in section six followed by a presentation of descriptive results in section seven. Fixed-effects regression results are presented in section eight while the final section offers some policy implications of the study.

2 Objectives and hypotheses of the Study

The main objective of this paper is to examine the relationship between measures of board independence and the financial performance of firms listed in the Nigerian Stock Exchange (NSE). This broad objective can be divided into five specific objectives, one each for the five measures of board independence:

- To examine whether performance is affected by the extent of family affiliation on the board of directors;
- To ascertain the extent to which firm performance is influenced by the tenure of CEO;
- To investigate whether or not there is a significant relationship between the proportion of outside directors on the board and firm performance;
- To assess the influence of audit committee structure on firm performance.
- To examine the relationship between interlocking directorship and firm financial performance.

In line with the above objectives, five hypotheses will be tested. Thus, the hypotheses propose that there is no significant relationship between firm performance and

- Family affiliation of board of directors
- CEO tenure
- Proportion of outside directors on the board
- Audit committee structure
- Interlocking directorship.

Addressing the aforementioned objectives is motivated by certain methodological issues commonly adopted in earlier research in other countries on the link between board independence and corporate performance. Lasfer (2002), Coles *et al.* (2004) and Pass (2004) argue that the size of the firm tends to affect the extent to which board independence may influence corporate performance. According to them in small firms it is more likely for board independence to have significant effect on performance. Large firms tend to be more complex and for them, the influence of board independence on performance may be blurred.

3 Regulatory Environment

As mentioned earlier on, the subject of corporate governance and the more specific issue of board independence have suffered neglect both in the academia and public policy in Nigeria. Before the introduction of a code of corporate governance, there were three main legislations that influenced the operations of enterprises: The Companies and Allied Matters Act 1990 prescribes the duties and responsibilities of managers of all limited liability companies; the Investment and Securities Act (ISA) 1999 requires Securities and Exchange Commission to regulate and develop the capital market, maintain orderly conduct, transparency and sanity in the market in order to protect investors; the Banks and other Financial Institutions Act 1991 empowers the Central Bank of Nigeria to register and regulate Banks and other Financial Institutions.

These legislations had evident gaps and they were by no means comprehensive in terms of corporate governance provisions. Taking note of the deficiencies of the existing legislations, the Securities and Exchange Commission in partnership with the Corporate Affairs Commission set up in June 2002 a Committee to develop a draft code of corporate governance. The code, launched in November 2003 (Ndanusa, 2004) makes a number of recommendations for improving corporate governance in general, but gives a more detailed account of ways to promote board independence. Amongst other recommendations of the code is that the Audit Committee should comprise at most one executive and at least three non-executive directors (NED). Members of that committee must be able to read and understand financial reports. There is a recommendation that the post of CEO should be separated from that of the Chair, unless it is absolutely necessary for the two to be combined, in which case the Code recommends that a strong, non-executive director should serve as Vice-chair of the board. Other provisions of the code related to strengthening board independence include the recommendation that NED should chair the audit committee, in addition to the requirement that a non executive director should have no business relationship with the firm. They also include a recommendation that provides that the non-executive directors should be in the majority, and that a non-executive director should chair the remuneration committee, the membership of which should comprise wholly or mainly of outside directors. However, it is observed that the code is silent about other equally important committee – appointment committee – for gauging board independence. Moreover the code lacks legal authority, as there is no enforcement mechanism and its observance is entirely voluntary (Nmehielle and Nwauche, 2004). Recognising the potential problem to effective governance that family affiliation of board members could cause, the committee recommended that in order for the board to be “truly independent, (outside) directors should not be connected with the immediate family of the members of the management”.

As mentioned above, by excluding certain vital means of strengthening board independence it would appear that Nigeria’s code of corporate governance does not take full account of such provisions in codes of corporate governance developed much earlier on in other countries such as the United Kingdom and USA. In the United States, the Sarbanes-Oxley Act 2002 has come into being, heralding the start of new far-reaching measures aimed at strengthening corporate governance and restoring investor confidence (Jensen and Fuller, 2002). Building on the progress made in the reports by Cadbury (1992); Greenbury (1995); and Hempel (1998), the United Kingdom in 2003 started to implement the New Combined Code, an outcome of the Company Law review and a report by the Higgs Committee. In both countries the new set of regulations have recognized the importance of non-executive

directors and made special provisions aimed at promoting their independence and corporate governance.

4 Theoretical Framework

Agency theory provides the theoretical framework for this study. The theory states that in the presence of information asymmetry the agent is likely to pursue interests that may hurt the principal, or shareholder (Ross, 1973; Fama, 1980). Within the context of the stakeholder theory, the problem of agency has been widened to allow for multiple principals. Thus, instead of treating shareholders as the sole group whose interest the agent should protect, the stakeholder theory sees other groups such as employees of the firm, creditors, government etc. also as having equally vital stakes in the performance of the firm, a fact amply demonstrated by the thousands of job losses, reduced tax revenues, high costs of litigation etc that came in the wake of such high-profile corporate frauds that occurred at Enron, Global Crossing, Parmalat, Worldcom to name but a few. Since there are many stakeholders, the agent is sometimes confronted with the difficult choice of meeting competing stakeholder interests. Extending the stakeholder theory, Jensen (2001) proposes the enlightened stakeholder theory and goes further to suggest that by pursuing the goal of maximizing long-term value of the firm, managers could serve the interests of all stakeholders. In an earlier AERC-sponsored paper by the authors of this paper, SMG (2005) note that this criterion has not been subjected to empirical verification.

In a review of the stakeholder theory, John and Senbet (1998) note that the multiplicity of principals tends to give rise to conflicting interests. The authors note the vitality of board independence and committee structure as means of overcoming the agency problem. They also emphasize the importance of board size, noting that after a point the size of the board could be detrimental to firm performance.

5 Literature Review

The literature on the relation between board independence (as a corporate governance device) and firm performance has registered significant growth, buoyed mainly by studies from developed, and to a lesser extent some developing, countries. The rapid growth in the literature is perhaps motivated by the realization that left to itself, the market system does not have the capacity to address the problems of agency. However, it are in order to present an overview of what the literature says about the main ways in which the market mechanism might help alleviate the agency problem. As Fama (1980) argues, the managerial labour market does recognize the current and previous performance of every manager and therefore has the capacity to encourage good-performing managers and punish poor-performing ones. This market mechanism provides an incentive for managers to promote shareholder wealth and to deter the pursuit of interests that may be injurious to the health of the firm. Another market mechanism for dealing with agency problem is through the market for corporate takeover. Managers of poor performing firms run the risk of losing their jobs once the firm is acquired by other firms. Fearing this prospect, managers act as a team, each one realizing that their job security is dependent on performance of every manager in the team. This gives each manager an incentive to monitor the behaviour of other managers in the team.

Despite the presumed ability of the market to help align the interests of all parties interested in the wellbeing of the firm, sporadic cases of corporate malfeasance have continued unabated, promoted either by the managers hired to protect the firm, or orchestrated by the controlling shareholders. A number of reasons have been given for the inability of the

market to serve as an effective disciplining device. One, insiders know about the enterprise better than outsiders do. Therefore managers will not allow a takeover bid to succeed unless the buyer is ready to pay more than the value of the firm. Should a potential bidder research the ailing firm and discover the need for and takes action to raise the bidding, other suitors will observe this behaviour and raise their own bidding for it. Thus, the market for corporate takeover, designed to solve the agency problem, is itself afflicted with the very problem it is intended to solve. Second, the market for corporate takeover may fail to work because managers could take actions such as poison pills to deter takeover. Third, managers could develop incestuous relationship with the board of directors, a relationship that could cause the market system to fail to discipline them.

Given the weakness of the market system to handle the problem of agency, a broad spectrum of corporate governance measures have been suggested as effective mechanisms for promoting corporate performance. As a more detailed review of some of such mechanisms is given in SMG, we provide below an overview, with more detailed presentation of the aspects of board independence that are either ignored in SMG or mentioned only in passing. The literature surveyed below is divided into two categories, the first concerning board characteristics, and the second on other control variables affecting firm performance.

5.1 Board Characteristics

The first element of board characteristics is concerning its composition. A board comprising a reasonable proportion of inside and outside directors is more likely to be independent of management than one dominated by inside directors, and therefore more likely to protect the interests of other stakeholders. As mentioned in this paper, the importance of outside directors has been recognized even at the level of policy, with codes of corporate governance giving a special attention to the need to have a reasonable proportion of them on the board of listed firms. Empirical evidence has shown that properly constituted boards with the right mix of non-executive directors tend to contribute more to performance than boards with a predominance of inside directors (See for example Weisbach, 1988; Hermalin and Weisbach, 1991; Bhagat and Black 2001; Mehran, 1995; John and Senbet, 1998; Fosberg, 1989; Yermack, 1996). A closely related issue is the participation of non-executive directors on the main committees of the board. John and Senbet (1998) argue in favour of a committee structure that gives the non-executive directors a key role especially in the audit, remuneration and appointment committees. This recommendation seems to go down well with the policy makers. In Nigeria for example, the new code of corporate governance provides that the non-executive directors should be in the majority, and that a non-executive director should chair the remuneration committee, the membership of which should comprise wholly or mainly of outside directors. In a recent empirical work, Hayes *et al.* (2004) reported no relationship between the fraction of outside directors serving on a committee and the performance of the firm, a finding that runs counter to that of Klein (1998) that John and Senbet (1998) noted to have been in support of greater participation of outside directors on the major committees of the board.

The second aspect of board characteristics is the size of the board of directors. A reasonably sized board is expected to be more effective in its statutory function of monitoring the management. Thus, within a certain range the larger the size of the board the better the performance of the firm. While there may be no one-size-fits-all recommendation for the optimal size of board, empirical works from the United States and the United Kingdom

(Monks and Minow, 1995; Lipton and Lorsh, 1992) have suggested a board size of ten. Recent evidence by the authors (SMG) is consistent with this recommendation.

The third element of board characteristics commonly discussed in the literature is concerned with the prevalence of family relations on the board itself. Boards with several members of the same family are less likely to be effective at replacing a CEO in the event of poor performance especially when such CEO is a family relation [Shleifer and Vishny (1997, 1998)]. However, some scholars (such as Tsai *et al.*, 2006) take exception to the argument that family-controlled boards could engender CEO entrenchment and therefore serve as a setback to other classes of shareholders. Tsai *et al.* (2006) see the impact of family-controlled boards through a more positive light. Their argument is that in a family-controlled board, a member of the family is often motivated by the bond of family ties to promote organizational, rather than individual, goals, since the success and continuity of the family business is of paramount importance. Thus, they reason, family controlled boards could in fact be more effective than other boards in mitigating the agency problem and thus aligning the interests of the managers and shareholders.

However, like other scholars on the subject, Tsai *et al.* (2006) are not oblivious of the possibility of family-controlled boards to protect interests of the family even when such interests may run counter to those of other shareholders, such as the tendency for such boards to use family connection, rather than performance, as a basis for elongation of the tenure of a chief executive. The novelty of Tsai *et al.*'s argument is that it presents a more balanced view of the impact of family-dominated boards. Indeed, the authors test the two hypotheses using data drawn from listed firms in Taiwan. They report evidence in favour of their thesis that compared to other boards, family-dominated boards tend to be more effective in relating CEO turnover with performance.

Despite Tsai *et al.*'s (2006) finding of a positive contribution of family domination of boards of directors, some researchers cast a less positive view of it. Morck and Yeung (2003) have advanced a reason why one should expect family controlled boards to pursue interests that may hurt minority shareholders. Their argument runs as follows. In boards without the influence of family connections, share ownership tends to be more diffused, limiting each shareholder's risk to the relatively small investment they have made in the shares of the firm. Thus, boards of firms with diffused ownership are better able to pursue risky, high return projects, since each shareholder's risk exposure is comparatively small. In contrast, family-dominated boards are not characterized by such diffused ownership – the interest of the family is often significant. Thus, in order not to expose the family to significant levels of risk, such boards will pursue low-return, less risky projects, an objective that may hurt small shareholders. Thus, the conflict of interests between families with significant investment and the small shareholders will continue to prevail, the authors argue. Indeed, Morck and Yeung (2003) buttress this argument by referring to the work of Johnson *et al.* (1985) who report that stock prices tend to rise on the news of death of a long-tenured CEO (presumably of a family-controlled board).

Although they recognize the importance of devising ways to address the problem of agency between managers and other stakeholders, Oman *et al.* (2003) however argue that agency problem tends to manifest itself in different ways, depending on the pattern of ownership structure. In countries such as the UK and the US where shares are widely diffused, the traditional manager-owner agency problem tends to be most visible. In contrast, in many

other countries where share ownership is highly concentrated, the most relevant manifestation of agency problem is the tendency for controlling shareholders to expropriate minority shareholders, using a number of strategies such as multiple classes of shares and pyramidal ownership structures. Such mechanisms enable the controlling shareholders to have effective control over the firms in which they have vested interest. What is more, such schemes enable them to have more control over the firms than can be justified by their ownership control.

The results so far have been mixed. As a measure of board independence, the ratio of outside directors sitting on the board has been found to be closely related to firm performance (Rosenstein and Wyatt, 1990; Zahra and Stanton, 1988; and Wade *et al.*, 1990). In stark contrast to the above, evidence of a negative relation has also been reported [Agrawal and Knoeber (1996), Weir and Laing (2001) and Daily and Johnson (1997)], while some studies have reported no significant relation [Hermalin and Weisbach (1991) and Bhagat and Black (2000)].

A number of reasons have been advanced explaining the disparate findings. A key explanation, perhaps, is the difficulty often encountered in the measurement of board independence and the concomitant differences in the measures of such independence. While some studies have relied upon CEO turnover following poor performance as a measure of board independence [Shivdasani and Yermack (1999), Liang and Li (1999) and Udueni (1998)], some have attempted to gauge it using multiple, or interlocking directorships [Kaplan and Reishus (1990), Gilson (1990), and Shivdasani (1993)], and yet another group has used the number of outside directors appointed during the tenure of the CEO as a proxy for board independence [Core *et al.*, 1999, Ghosh and Sirmans, 2003]. Other researchers such as Klein (1998) and Hayes *et al.* (2004) have undertaken studies using as their measure of board independence the fraction of outside directors serving on each committee.

Each of these measures of board independence is fraught with a number of pitfalls. Take the case of multiple directorships, for example. While persons with track record of performance as independent directors might get appointed in several other boards, such multiple appointments could thin out the director's available time for monitoring, reducing the effectiveness of the board in its monitoring role. Thus the link between multiple directorship and corporate performance could be a tenuous one.

A second methodological issue believed to have contributed to the lack of a coherent picture is the sampling technique. According to Pass (2004) and Lasfer (2002) most studies on board independence have been conducted on the basis of data from large publicly held firms. According to them, for this category of firms, the link between independence and firm performance is not very clear, in contrast to small firms, for which the link is more straightforward. Independent outside board members tend to be ineffective in monitoring complex firms with high growth potential (Coles *et al.*, 2004).

Despite the absence of a coherent picture, a number of stylized facts seem to emerge from the literature. One possible conclusion is that a CEO who performs poorly is more likely to be replaced than one who performs well. A second empirical tendency is for CEO turnover to be more sensitive to performance when the board is independent. Finally, the probability of independent directors being added to the board to tend to rise following poor firm

performance, just as board independence has the tendency to decline over the course of a CEO's tenure.

5.2 Other control variables

Investigating the effects of the above characteristics of the board of directors requires controlling for certain other variables such as firm size. First, the size of the firm is an important variable that needs to be controlled for in any reduced form regression involving board characteristics and corporate performance. In fact this variable has been controlled for even under different model specifications. The use of the number of employees as a control for firm size and a number of other studies has been reported in the literature (Bigsten *et al.* (1997), Mayers *et al.*, 1997; SMG, Sivdasani and Yermack (1999)).

The second control variable is concerned with director equity ownership of the firm. There is the argument both in the literature and in policy that one of the ways in which the board of directors could be motivated to take performance-improving measures and to protect the interests of the shareholders, is for the directors themselves to take part in the ownership of the firm. The argument is that this will enable the managers have more interest in the value of shares of the firm and that they will take measures to improve firm performance (DeAngelo and DeAngelo, 1985; McConnell and Servaes, 1990; Loderer and Martin, 1997; Nor *et al.*, 1999; Yeboah-Duah, 1993). Within a certain range, a positive relation is predicted between director equity interest and firm performance. However, when they own a large proportion of shares of the firm, directors could pose other agency problems, especially those associated with conflicts between large and small shareholders.

A third element of board characteristics often cited in the literature is the extent to which the largest shareholders are in control of equity ownership of the firm. Ownership concentration is believed to enable the controlling shareholders to bear the personal costs of monitoring, and hence to contribute towards solving the agency problem. However, two problems are associated with this. It is often the case that members of the same family might take control of a significant proportion of equity, and even make this control very visible through their participation as board members. Levine (2004) points out that this could have adverse consequences not only for the firm but for the entire economy as well. Where the family members constitute an important influence on the board, they can translate their equity control into actual power. Where such control is spread through their participation in an array of firms, their influence could be so overwhelming as to cause the government to adopt policies that negate the spirit and letter of private entrepreneurship. The adoption of policies to protect local industry, the introduction or maintenance of subsidies are some of the ways in which such equity control could produce power and cause the adoption of inappropriate policies.

6 Methodology

6.1 Sources of Data

Data for the period 1996 through 2004 were obtained from the Abuja and Lagos offices of the Nigerian Stock Exchange, the Abuja Office of the Security and Exchange Commission and the a Lagos-based stock-broking firm. For each of the nine years of our study, the Factbook published by the Nigerian Stock Exchange was obtained from Abuja Office of the NSE. Annual reports and accounts of listed firms were obtained from the Lagos office of the NSE.

The annual reports were the source of information on some important variables of interest such as director shareholding, board composition, audit committee structure, equity ownership concentration and CEO nationality. A major problem encountered in obtaining this sort of information from Lagos was that for many years of our study, the office has got no past annual reports for many of the firms in listed in the stock exchange. As a result, data required for regression analysis was obtained only for 89 firms. To make matters worse, some annual reports were unavailable for some years for some of the 89 firms. These limitations limited the scope of the sample used for regression analysis. One source of consolation, however, is that the 89 firms covered nearly all the sectors of the stock exchange, and the major players in the market are visibly represented in the sample. Appendix 1 shows the list of the 89 firm. The stock broking firm based in Lagos provided daily stock prices for all listed firms over the period of study. The data were then used to compute annual stock returns. The Securities and Exchange Commission in Abuja provided access to its annual reports, from which data on PE ratios for all listed firms were obtained.

6.2 Variable measurements

There are basically two categories of variables for this study. On the one hand are measures of firm performance: ROA, ROE, PE ratio and stock return. On the other hand are measures of board independence along with some control variables. The measures of board independence are:

- ❑ CEO tenure
- ❑ Proportion of outside directors on the board
- ❑ Audit committee structure
- ❑ Interlocking directorship.
- ❑ Family affiliation of board of directors

CEO tenure is measured as the number of years the CEO has served on the board. We therefore expect to include dummy variable to capture the effect of CEO tenure and the method of creation of this dummy is given in Table 1 below.

Another measure of board independence is the proportion of outside directors on the board. Also important in the measurement of board independence is the audit committee structure. To get a proxy for this variable, a dummy variable was created, and the method of its generation is given in Table 1. Interlocking directorship is another feature of the independence of the board of directors. We obtain a proxy for this variable by creating a dummy that takes a value of 1 if a firm has a CEO serving on board of another firm, and zero otherwise. A board engaged in an interlocking relationship is predicted to be less independent than one that is not engaged in this kind of relationship.

A number of control variables such as board size, size of the firm, foreign CEO status, and ownership concentration are also included in the analysis and the method of their computation is given in Table 1. In summary, the variables and method of their measurement are given in Table 1 below:

Table 1: Variables and their measurement

ROA	Obtained by expressing net profit as a proportion of total assets.
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Table 1: Variables and their measurement

ROE	Obtained by computing net profit as a proportion of equity value.
PE ratio	Data obtained directly from the Securities and Exchange Commission so no calculation was performed.
Return	For each firm in the sample, year-on-year percentage change in stock prices are calculated and used as proxy for stock return.
Board Size	The number of directors sitting on the board of a firm in a particular financial year.
Board Size Squared	A variable created by taking the squares of board size mentioned above.
Firm Size	Two measures of firm size are used. One, the total number of employees in the firm is used as a control variable in all regressions. However, for some other purposes, we used total assets to define small firms as those with total assets below the average for the market, and large firms as those with assets above the average. A dummy variable was therefore created, taking a value of 0 for large firms and 1 for small ones.
Family Dummy	Some firms in the Nigerian Stock Exchange have members of the same family sitting on their boards. A dummy variable was therefore created, taking a value of 1 for such category of firms, and 0 otherwise.
Interlocking directorship	A firm is considered as having an interlocking directorship if the CEO is sitting in other firms as a non executive director.
Busy directorship	The number of boardrooms in which in a given year a director appears as a member.
Tenure Dummy of CEO	From the Factbook that gives summary of financial reports of firms, every CEO makes one or more appearances, ranging from 1 to 9 in our data. By computing the average number of such appearances, we created a dummy variable, taking a value of 0 for CEOs with a tenure of less than the average, and 1 otherwise.
CEO foreign Dummy	A dummy variable taking a value of 1 if the CEO is foreign and 0 otherwise.
Ownership Concentration Dummy	The number of controlling shareholders varies from one firm to another. To obtain a proxy for ownership concentration, we divided the proportion of shares owned by the controlling shareholders by the number of controlling shareholders.

Table 1: Variables and their measurement

	Taking the average for all firms, we obtained a dummy variable taking a value of 1 for a firm falling above the average, and 0 otherwise.
CEO Audit membership Dummy	A dummy variable taking a value of 1 if the CEO is a member of audit committee and 0 otherwise.
Board Composition	Defined as the number of outside directors as a proportion of board size.

6.4 Methods of Analysis

Two methods of data analysis are employed and the results are therefore divided into two to reflect this categorisation. The first type of analysis is descriptive analysis, which provides some frequencies and averages of relevant variables. Section 7 of this paper presents results based on this method of analysis. The second method of analysis is regression analysis. This in turn is divided into two, the first based on OLS regression and the second on the fixed-effect methods. While Tables 5 through 8 provide results based on OLS regression, the fixed-effect results are given in Tables 9 through 11 of the paper.

6.3 Model specification

The basic model, given in Equation (1) is estimated using the fixed effects approach. The results are given in Tables 5 through 7.

$$Y_{it} = \alpha_0 + \beta_1 X_{it} + \epsilon_t + \mu_i + e_{it} \quad (1)$$

Where:

- Y_{it} = a measure of performance (ROA, ROE, PERATIO, RETURN) for firm i in year t.
- α = The intercept term
- \mathbf{B} = The vector of parameters for estimation.
- \mathbf{X} = The vector of explanatory variables comprising measures of board independence as well as relevant control variables as given in Table 1.
- E = Time dummy
- μ = Sectoral dummy¹
- E = Error term

¹ A suggestion was made at the AERC meetings that a dummy variable be created, taking a value of 1 for financial firms, and 0 otherwise to take account of sector-specific effects. However, the dummy variable appeared not to be significant in all the regressions and was therefore dropped from the analysis.

7 Descriptive Results

In this section, six aspects of corporate governance and board independence are presented, since the literature survey suggests that they are important aspects of board independence that have a bearing on firm performance. The first aspect of our descriptive results presents basic frequencies of board size. In the second section, we describe the pattern of family affiliations in the boardrooms. Getting an overview of family connections in the Nigerian boardrooms might offer some insight into the sort of governance mechanisms that operate to make or break the independence of boards of directors in Nigeria. In the third section of the descriptive results, we examine the issue of CEO tenure. In the fourth section, we go further to provide some descriptive statistics on the extent to which directors of firms listed on the Nigerian Stock Exchange are busy with functions outside the firms in which they are employed as executive directors. A related issue discussed in the section is interlocking directorships. As seen in the literature review, both busy and interlocking directorships are important measures of board independence. In the fifth section, we present the descriptive evidence on ownership concentration, and find that controlling shareholders exert significant control of shares of Nigerian listed firms. The sixth and final section on descriptive results is concerned with audit committee structure. Understanding the structure of audit committee helps to provide some indications of whether the right mechanism has been instituted and maintained for the promotion of board independence and performance.

7.1 Board Size

Data on the board of directors from the NSE were fairly large. A total of 13,267 directorships were obtained from the data collection exercise, and listed out in a 394-page appendix which is available from the authors. From this database, the directorship list was sorted by the surname of directors and a comprehensive list of 2805 directors was obtained. The list is provided in a 56-page appendix, not included here but is available from the authors. Table 2 gives a summary of the features of the data.

Table 2: Yearly distribution of directors and average size of board of directors

Year	Number of directorships	Number of firms	Average size of board
1996	1173	139	8.4
1997	1428	168	8.5
1998	1423	170	8.4
1999	1412	164	8.6
2000	1382	162	8.5
2001	1532	182	8.4
2002	1574	187	8.4
2003	1618	193	8.4
2004	1716	204	8.4

It can be seen from the table that the number of directorships and that of the firms in the sample have tended to rise over time. In 1996, there were a total of 1,173 directorships amongst a sample of 139 firms, compared to a total of 1,716 amongst a set of 204 firms in 2004. Although both the number of firms as well as the number of directors have tended to rise over time, the average size of board of directors has remained little changed, hovering within a narrow range of 8.4 for most of the years and a peak of 8.6 in 1999. Analysis of variance test shows no significant difference in board size across the nine years of study. The distribution of directorship across the 27 sectors of the exchange was also examined. Table 3 reports the sectoral distributions of firms, directorships, and average board size.

As can be seen from Table 3, average size of board has varied rather widely across the different sectors, ranging from a minimum of 6.0 in the maritime sector to a peak of 10.6 amongst firms in the breweries sector. An analysis of variance confirms that compared to other sectors, the breweries, banking, food/beverages, conglomerates, petroleum, building, textile, engineering, construction, and packaging sectors have significantly higher mean size of board of directors. This difference can be attributed to the larger size of firms in these sectors compared to others.

It is of interest to examine the characteristics of directors of firms in the NSE for the period under investigation. The boards of directors of Nigerian quoted firms are predominantly male with women accounting for 4.9%, 1.8% and 1.8% of all directorships, Chairs, and CEOs respectively.

Sector	Number of directorships	No of firms in 2004	Average board size
Agriculture	385	5	8
Airlines	57	2	6.3
Automobiles	407	6	7.7
Banking	2002	36	9.8
Breweries	603	7	10.6
Building Materials	653	8	9.1
Chemicals & Paints	461	7	7.3
Commercial/Services	82	1	9.1
Computer & Office Equipment	390	6	7.2
Conglomerates	718	9	9.2
Construction	389	5	8.4
Emerging Markets	796	17	7.4
Engineering Technology	222	3	8.9
Food/Beverages & Tobacco	1069	13	9.2
Footwear	119	2	7.4
Healthcare	716	11	7.5
Hotel	7	1	7
Industrial/Domestic	797	12	7.8
Insurance	1191	21	7.6
Machinery (Marketing)	180	3	6.7
Managed Funds	57	1	7.1
Maritime	6	1	6
Packaging	537	8	8.4
Petroleum (Marketing)	635	8	9.1
Printing & Publishing	243	4	7.1
Real Estate	49	1	7
Textiles	487	6	9

7.2 Family Affiliations

The effectiveness of the board of directors in checking the affairs of the management and protecting stakeholder interest is argued in the literature to depend on the ability of the board members to exercise a degree of independence from the chief executive. A board replete with members closely aligned to the CEO may not create the necessary environment for it to exercise the required level of independence. There are several ways in which the independence of the board from the CEO may be gauged, and one such measure is whether or not the board members are related to the CEO through family or marriage relationships. In 2004 alone, 53 of the 204 firms had boardrooms with two or more members of the same family. The list of such firms as well as the family-related board members is available from the authors. A closer look at the data also revealed that 39 of the 53 firms have two members of the board that are of the same family. Eight of the firms have three board members with this kind of relationship. Two of the firms each reported having six family members on the same board. The results also show that of the 53 firms in which the board of directors contained family relations, 30 of them were related either to the MD (7), Chairperson (19) or both (4). These results, although tentative, argue for the recurring observation that corporate governance in developing countries may be weakened by the prevalence of relationship-based, rather than rules-based procedures (Oman et. al., 2003, Bates, 2006). While the proportion of family relations in the Nigerian boardrooms may appear to be high as suggested by these results, two points of caution are in order. Although family relationships could be strong and often mar progress towards effective corporate governance, it is not impossible for other forms of relationships (friendship, intermarriage amongst the board members etc) to be just as powerful in cementing the bond of relationships amongst them. However, the absence of data to capture such non-family relationships makes it imperative for one to make do with the available data.

7.3 CEO Tenure

The length of CEO tenure was also examined. From the data set of the directors, a subset comprising only the CEOs and MDs was extracted, giving a total of 410 observations. For each of the CEOs, we computed the number of years they have stayed in that position. Table 4 shows the distribution of CEO tenure. From the results in Table 4 it can be seen that most of the CEOs (157, or 38.3%) have spent only a year in the boardroom. Whether those in this category have abdicated this post is unclear. What is certain is that there are a good number of CEOs that have retained their positions for a fairly long period of time, with about 33% of them having been on that post for a period of four years or longer.

Table 4: CEO Tenure

CEO Tenure (Years)	Number of CEOs	Percent
1	157	38.3
2	63	15.4
3	55	13.4
4	32	7.8
5	28	6.8
6	21	5.1
7	22	5.4
8	18	4.4
9	14	3.4
Total	410	100
Average CEO tenure in the sample		3.09years

It will be of interest to know whether CEOs with long tenure are associated with better-performing firms, or with some other characteristics of the board itself. This question was investigated further by separating the CEOs into two groups, the first with boardrooms having family-related members and the second with no evidence of such family relations. An independent t-test easily suggested significant differences in CEO tenure of the two categories of firms. In particular CEOs in the midst of family relations have spent an average of 3.9 years, compared to the average of 2.91 years for those without a family relation on their board.

Do short-tenure CEOs perform better than the long-tenure ones? This question was investigated using three measures of performance (ROE, ROA and PE ratio). In each case an independent t-test suggested no significant difference in performance of the two categories of CEO-tenure firms. Thus, these results, based though they are on simple independent t-tests, seem to indicate that although family connections might contribute towards the elongation of CEO tenure, there is no evidence to suggest that such elongation is adding any value by way of better performance.

7.4 Busy and interlocking directorships

The extent to which the board of directors may serve as an effective tool for the promotion of board independence depends in part on the extent to which the members are involved in other assignments. It is assumed that the greater the number of boards on which a person sits, the less time they will have on a single board. This assumption has a drawback in the sense that membership of other boards could enrich experience and widen exposure, both of which could have positive effects on firm performance. Despite the potential gains of multiple directorship, the literature considers as busy a director sitting on three or more boards (Ghosh and Sirmans, 2003; and Pass, 2004). Directors who are too busy will really be unable to pay attention to strategic issues for effective governance and discipline of the executives. In the United States, the phenomenon of multiple directorships has led the National Association of Pension Fund (NAPF) to call for a limitation on the number of non-executive directorships an individual can hold at the same time to not more than five (Pass, 2004). It is with these arguments in mind that we examine in the data for any evidence on the extent of multiple directorships of Nigerian quoted firms. Of the list of 2,805 directors, 2,406 (85.8%) of them sit on the board of just one company. A total of 297 of them (10.6%) serve on two different boards. Only a total of 102 (or 3.6%) of the board of directors are engaged in the service of three or more boards. The busiest of all the directors (in terms of having the greatest number of multiple directorship) are five in number, sitting on the boards of six different quoted firms. Although the literature has suggested the benchmark of 3 as an indication of crowded schedules, it is important to take this benchmark with caution. In Nigeria, there are many small unquoted companies, and the involvement of these directors in such companies is not captured by our data, which was drawn only from the listed firms. Thus, a director sitting on just one board may turn out to have a busier schedule than one with multiple directorship if the former is more deeply involved than the latter in the running of unquoted firms.

The use of family relations by the chairperson or chief executives may have deleterious consequences for the firm and its performance. In the face of poor performance it is likely that firms with family relations sitting on the board will find it harder to rid themselves of poor-performing chief executives. The network of friends and relations on the board could make it difficult for this to happen. The results obtained from the analysis of variance show

that family dominated boards are generally large in size, and the number of directors on their board tends to be large as well.

Another feature of modern corporations is the tendency for board members to exhibit an interlocking relationship. Strictly speaking, interlocking directorship arises when two boards each has an executive director sitting on the board of the other as a non-executive director. In this paper, we define an interlocking relationship as cases where a CEO sits as a non-executive director of another firm. This definition is based on the assumption that a CEO sitting as a non-executive director is likely to be sympathetic to the CEO of the other firm since they both belong to the CEO club. Based on this definition of interlocking directorship, the data revealed that over the period of study, 1996 to 2004, there was a total of 49 interlocking directorships. When classified by years, 2004 recorded the highest frequencies of 14. We also find that the frequency exhibited a declining trend from 1996 to 2000, and an upward trend afterwards. Interlocking directorships were classified also by sector, and the results show the banking sector having the largest frequency of 22 out of 49, followed by insurance industry, with 5. The frequencies for other sectors ranged from 1 to 4. However, these raw numbers say little about the frequencies of interlocking directorships if no reference is made to the board size. For each firm, we expressed the number of interlocking directorships as a proportion of board size and then used this proportion to obtain the average for each sector. A one-way analysis of variance showed the textile sector having the highest mean of 0.42, compared to the insurance sector with a mean of 0.118.

7.5 Ownership concentration

The literature on corporate governance has long regarded ownership concentration as an important mechanism for ameliorating the problem of agency (Jensen and Meckling, 1976 and Shleifer and Vishny, 1997). In many countries, with the notable exception of the United States of America and the United Kingdom, share ownership tends to concentrate in a few families, posing a new set of challenges for corporate governance. As we learn from Oman *et al.* (2003), Mork and Yeung (2003) and others, ownership concentration could instead be harmful to governance because managers may be hired to protect the interest of controlling shareholders, and they often pursue this with utter disregard to, or to the detriment of, the interest of minority, public shareholders. In view of the debate on the possible implications of ownership concentration on corporate governance and policy, we examine the patterns of such concentration in Nigeria.

In several important ways, this study finds significant concentration of shares in a few hands in Nigeria. To obtain a first measure of ownership concentration, the number of shareholders for each of the sample companies was obtained. Aggregation of these for all sample firms, gave an estimated total of 2.5million shareholders. Such an aggregation as undertaken here leads to overestimation of the actual number of shareholders since investors having shares in more than one company were counted as many times as the number of companies in which they had equity stakes. Yet, the total number of 2.5million shareholders is a far cry from Nigeria's population of 140million people. To look for other indicators of ownership concentration, the 90 firms in the sample were ranked by ownership concentration. A total of 38 firms with the most concentrated shareholding structure report that between 2 and 239 individuals control more than 70% of all equity. Wide variations were observed even amongst these firms. In particular, for eleven of the firms, no more than ten persons are in control of more than 70% of equity. In another category of firms with the next most highly concentrated patterns of share ownership are 14 companies in which more than 70% of equity

is controlled by between 11 and 40 persons. This compares with the remaining 13 firms in which between 41 and 239 individuals exhibit this level of ownership control.

We examine the pattern of director shareholding since this is important in its own right as a corporate governance tool, but also for its implications on ownership concentration. When they own shares, directors represent a small proportion of total shareholders even in countries with highly concentrated shareholding structures. Thus, one may consider director shareholding as a variable related to ownership concentration. Indeed, if directors owned a large proportion of shares, this would increase ownership concentration, a point further explained in SMG . This study finds that director shareholding is low, averaging 12%. Most firms report very low levels of director shareholding as a median of 3.3% was obtained. However, for a quarter of the firms in the sample, directors own more than 14.5% of shares.

What conclusion might one draw from the above patterns of ownership concentration and the related measure of director shareholding? Omal *et al.* discuss, as Mork and Yeung do, about the likely problem of expropriation of minority shareholders by the controlling shareholders. The evidence here points towards this as a possible outcome, but a more definitive conclusion should await further statistical tests in a subsequent section of this paper.

7.6 Audit Committee Structure

Corporate governance literature predicts that certain committee structures tend to enhance the quality of the independence of the board of directors. The audit, appointment and remuneration committees are typically examined in the literature for their impact on corporate governance and corporate performance. In the annual reports of Nigerian quoted firms (the source of data for this variable for this study), no information is provided on appointment and remuneration committees, hence the focus of this study on audit committees. This study finds that although most firms comply with the statutory requirement for the size of audit committee, the structure of membership seems to tilt towards a predominance of executive directors and their CEOs, calling into question the ability of such committee members to toe an independent line from that of their chief executive.

The Companies and Allied Matters Act, 1990 requires a 4- or 6-member audit committee, depending on the category of firms. Although most firms (roughly 88% of them) comply with this statutory requirement pertaining to the size of the committee there is no evidence to suggest that such compliance is borne out of a commitment for improved corporate governance. Indeed, an examination of the composition of audit committee provides evidence to the contrary.

There are three elements of audit committee structure that seem to weaken the independence of such committees. One is that the chief executive officer is a member of the audit committee in nearly 30% of the firms. A second element is the finding that even in firms in which the CEO is not a member, there is a preponderance of executive directors (who typically may be subservient to the CEO) on audit committees. The data suggests that executive directors are in the majority in 47.5% of the firms, compared to 28.8% and 23.8% of cases in which they are in parity with or are outnumbered by other members of the committee respectively. Finally, we find that CEO membership of audit committee tends to increase the predominance of executive directors on such committees. An independent t-test, which groups firms into whether or not the CEO is a member of audit committee, shows that

at 1% level, firms in which CEO is a member, have significantly larger proportion of executive directors on the committee, compared to other firms.

In sum, CEOs and executive directors tend to dominate audit committees, and it would appear that other members of the board of directors do not make similar appearances on the committees. This suggests that audit committees as are commonly composed in Nigerian listed firms tend to exhibit a feature that may impede their independence from the management of the firms. Moreover, those features are not in conformity with the provisions of Cadbury, Greenbury or Higgs Report for the UK or the Sarbanes-Oxley Act for the USA.

8 Regression results - Fixed Effects Models

Given the nature of our data, the application of OLS may not provide efficient estimates. Indeed at the workshop in Tanzania where an earlier version of this paper was presented, suggestions to revise the paper included the need to apply the fixed effects approach in order to take account of the temporal and spatial nature of the data. This section therefore extends the analysis by applying the fixed-effects approach. One other respect in which the results in this section differ from the ones in the preceding section is that it takes account of a suggestion given in Tanzania that real GDP should be included into the set of regressors, since such a variable could have some influence on firm performance, regardless of the contribution of management or board of directors. A number of measures of board independence are expected to have significant effects on firm performance. In this section, we report robust linear regression results, paying particular attention to the relationship between board independence and performance.

9.1 Basic Regression Results

Table 5 presents regression results based on the whole sample. Four measures of firm performance were regressed against a set of ten regressors and eight time dummies. As can be seen in the table, coefficient estimates for the time dummies are reported only for one of the four measures of firm performance. For the other three, a test for joint significance of the time dummies produced insignificant F-ratios. Consequently, for the three measures of firm performance, results are shown in Table 5 (in the Appendix 2) based on a smaller model that excludes the time dummies.

Table 5 about here

A number of features emerge from the results given in Table 5. First, a look at the results on family connection dummy shows that the variable turns out with positive signs in all the four specifications, but is significant in two out of four cases. Since family connection is significant in half of the specifications, there is evidence to conclude that family affiliation of board members is good for Nigerian firms. Second, there is evidence linking CEO tenure with firm performance. Looking at the results in Table 5, one finds that this variable turns out with a significant positive sign in two of four specifications. There is reasonable ground therefore to conclude that CEO tenure does contribute towards improving performance of firms in Nigeria. A third point is in relation to CEO nationality and the influence of this on firm performance. A dummy variable taking a value of 1 for foreign CEOs and 0 otherwise, appears with a positive coefficient estimates in 3 specifications, and is significant in two of them. These results are in support of the proposition that foreign executives bring with them managerial and technical talents that aid performance of Nigerian firms. Fourth, CEO audit membership turns out with a negative coefficient estimate in all the four specifications and is

significant in one of them. There is some indication therefore that participation of chief executives in audit committees could do more harm to the firm and its stakeholders. Fifth, board composition (i.e. the ratio of outside directors on the board) enters the regression with positive signs in all the four specifications and is significant in one of them. Based on these results, one is inclined to conclude that outside directors help to bolster firm performance. Sixth, the results in Table 5 show no evidence to support the proposition that interlocking directorship is related to firm performance. Finally, where the time dummies appear as regressors, the results show that they turn out with significant negative sign. Since a dummy variable was created for each of the years 1996 through 2003, and none was created for 2004 (to avoid the well-known dummy-variable trap), negative coefficient estimates on the time dummies is indicative of the tendency for firms to register higher performance over time, a trend that could be attributed to several factors that helped to improve macroeconomic performance: rising crude oil prices over the period of study; the adoption of economic reforms; and the shift from military to civilian regimes. However, when real GDP per capita was included into the set of regressors, two things emerged: one it correlated with the year dummies and thus was automatically dropped by the regression procedure. Second, when the year dummies were dropped to allow for the real GDP per capita variable to remain, the coefficients were not significant in all specifications. Moreover, apart from producing no significant coefficient estimate, the inclusion of real GDP per capita into the set of regressors brought no observable changes in either the sign or significance levels of other regressors. What is worse, it was observed that real GDP per capita lessened the explanatory power of the model. On these grounds, it was felt that not much utility could be gained by the inclusion of real GDP per capita, and hence the results obtained from its inclusion are not reported in the paper.

9.2 Accounting for Firm Size

It is often suggested in the literature that the relation between measures of board independence and firm performance could be affected by the size of the firm. There are two possible approaches to handling this. One approach is to create a dummy variable for firm size and include this into the set of regressors. We choose not to adopt this approach since the dummy variable will only capture possible differences in intercept, but not the slope-coefficients. The second approach, which is adopted in this study, is to split the data into two, one group for small, and the other for large firms, and then apply separate regressions on the two data sets. Table 6, shown in the Appendix 2, presents the results for large firms and Table 7 (also in the Appendix 2) for small ones.

Table 6 about here

The results in the two tables share some similarities and differences as well. First, in both cases there is evidence that family connection in the boardrooms tends to support performance. Second, in each of the two tables, CEO tenure appears with positive signs in three out of four specifications, but turns out with a significant positive sign in two cases for large firms and one for small firms. Third, as above, foreign CEO dummy tends to show a positive coefficient estimate, although it is significant in one case in Table 6 and two in Table 7. Fourth, the time dummies appear with negative signs as they do in Table 5. Finally, board composition has a predominance of positive signs in both tables, although in each case it turns out with only a significant sign. From these results, it could be surmised that there is mild evidence that a) family connection in the boardrooms could aid performance, b) long

CEO tenure is good for firm performance, c) foreign chief executives perform better than indigenous ones and d) outside directors have the capacity to aid performance.

Table 7 about here

But the similarities seem to end there. Large and small firms tend to differ in a number of important ways. First ownership concentration turns out with negative signs for large firms (Table 6) but does so with predominantly positive signs for small firms (Table 7). Second, while CEO membership of audit committee makes no impact on performance of large firms, there is mild evidence that this hurts performance of small firms. Finally, interlocking directorship is associated with good performance in small firms, but with reduced performance in large firms.

10 Policy Implications

Developing countries require resources to achieve and maintain economic growth as a veritable means of fighting poverty. Yet, for many countries, although the need for developing sound corporate (as well as country-level) governance has been recognized, research has been rather scanty on the links between firm-level governance structures and corporate financial performance. In this paper, we explore this issue, paying particular attention on the relationship between corporate board independence and firm financial performance in Nigeria. Using data for varying sample size (ranging from 89 firms for regression to 205 firms for descriptive analysis) obtained from the Nigerian Stock Exchange for the period 1996 through 2004, certain aspects of board independence are examined and their possible effects on firm performance investigated. The key results are that share ownership is highly concentrated in Nigeria, with this structure tending to engender board structures with close family affiliations and in which the CEO tends to take an active part in membership of audit committees. While family affiliation of board members is found to support firm growth, we find evidence that audit committee membership of chief executives hurts firm performance. We also find that foreign chief executive perform better than their local counterparts.

These results have important implications for policy in Nigerian. One major implication is that foreign investors through the actions of foreign chief executives resident in Nigeria do contribute to the performance of Nigerian firms. The country therefore needs to strengthen policies to improve firm-level corporate governance in order to attract such investors and bolster overall growth. The regulatory authorities in Nigeria need to strengthen the independence of board of directors by for example making it mandatory upon firms to ensure that boards of directors have sizeable representation of outside directors, as is the practice in other countries, and since the evidence from this study suggest the need for this. We also like to call on the authorities in Nigeria to formulate policy that will exclude CEOs from participation in audit committees, since in many advanced countries they are barred from doing so, and since our results suggests that such participation hurts performance of firms in Nigeria.

We should caution though that our study leaves a lot of unanswered questions. A crucial question for which we have no answer is whether Nigerian firms are afflicted with expropriation of minority shareholders. A related unknown issue is whether there is a bi-directional causality in which board independence is both the cause and consequence of firm performance. We leave these as potential areas for further empirical scrutiny.

REFERENCE

- Adenikinju, O. and F. Ayonrinde. 2001. "Ownership Structure, Corporate Governance and Corporate Performance: The Case of Nigerian Quoted Companies". Unpublished Final Report Presented at the AERC Bi-Annual Workshop, Nairobi, May.
- Agrawal, A. and C.R. Knoeber. 1996. "Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders". *Journal of Financial and Quantitative Analysis* 31(3, September): 377-397.
- Bates, R.H. 2006. "Institutions and Development" *Journal of African Economies*, Volume 15, AERC Supplement 1, pp: 10-61
- Bhagat, S. and B. Black. 2000. "Board Independence and Long Term Firm Performance". *Working Paper* No. 188, Stanford Law School.
- Bhagat, S. and B. Black. 2001. "The Non-Correlation Between Board Independence and Long-Term Firm Performance". *Journal of Corporation Law* 27: 231-271.
- Bigsten, Arne; Paul Collier; Stefan Dercon; Bernard Gauthier; Jam W. Gunning; Anders Isaksson; Abena Oduro; Remco Oostendorp; Cathy Pattillo; Mans Soderbom; Michel Sylvain; Francis Teal; and Albert Zeufack. 1997 "Investment in Africa's Manufacturing Sector: A Four Country Panel Data Analysis." *Working Paper WPS/97-11*. Centre for the study of African Economies, Institute of Economics and Statistics, University of Oxford.
- Cadbury Committee Report. 1992. *Report on the Financial Aspects of Corporate Governance*. London: Gee Publishing.
- Coles, J., N. Daniel, and L. Naveen. 2004. "Boards: Does One Size Fit All?" *Working Paper*, Arizona State University.
- Collier, Paul 2006 "International Political Economy: Some African Applications" A paper presented at the plenary session, AERC, May.
- Core, J. E., R.W. Holthausen, and D. F. Larcker. 1999. "Corporate Governance, CEO Compensation, and Firm Performance". *Journal of Financial Economics*, 51: 371-406.
- Daily, C. M. and J. L. Johnson. 1997. "Sources of CEO Power and Firm Financial Performance: A Longitudinal Assessment". *Journal of Management*, 23(2): 97-117.
- DeAngelo, H. and L. DeAngelo. 1985. "Managerial Ownership of Voting Rights: A Study of Public Corporations with Dual Classes of Common Stock". *Journal of Financial Economics* 14: 33-69.
- Fama, E.F. 1980. "Agency Problems and the Theory of the Firm". *Journal of Political Economy*, 88(2, April): 288– 307.

- Fosberg, R. 1989. "Outside Directors and Managerial Monitoring". *Akron Business and Economic Review*, 20: 24-32.
- Gilson, S. 1990. "Bankruptcy, Boards, Banks and Blockholders: Evidence on Changes in Corporate Ownership and Control when Firms Default ". *Journal of Financial Economics*, 27: 355-387.
- Ghosh, C. and C.F. Sirmans. 2003 "On REIT Compensation: Does Board Structure Matter?" Paper presented at the Cambridge-Maastricht real estate conference, June.
- Greenbury Committee Report. 1995. *Report on Directors Remuneration*. London: Gee Publishing.
- Gujarati, D. N. (1995) *Basic Econometrics*, Third Edition. USA: McGraw-Hill, inc.
- Hayes, R., H. Mehran and S. Schaefer. 2004. "Board Committee Structures, Ownership, and Firm Performance". A Revised Version of the Paper Presented at the Federal Reserve Bank of New York Finance Seminar Series, at New York University.
- Hempel, R. 1998. *Committee on Corporate Governance: Final Report*. London: Gee Publishing.
- Hermalin, B.E. and M.S. Weisbach. 1991. "The Effects of Board Composition and Director Incentives on Firm Performance". *Financial Management*, Winter: 101-112.
- Jensen, M. C. 2001. "Value maximization, stakeholder theory, and the corporate objective function". Working Paper No. 01-01, Harvard Business School.
- Jensen, M.C. and J. Fuller. 2002. "What's a Director to do?" *Research Paper No. 02-38*, Harvard NOM.
- John, K. and L. W. Senbet. 1998. "Corporate Governance and Board Effectiveness". *Journal of Banking and Finance*, 22: 371-403
- Johnson, W.B., R.P. Magee, N.J. Nagarajan, H.A. Newman and G.W. Schwert (1985) "An Analysis of the Stock Price Relation to Sudden Executive Deaths: Implications for the Management Labour Model" *Journal of Accounting and Economics* Vol. 7. No. 1-3, pp. 151-174
- Kaplan, S. and D. Reishus. 1990. "Outside Directorships and Corporate Performance". *Journal of Financial Economics*, 27: 389-410.
- Klein, A. 1998. "Firm Performance and Board Committee Structure". *Journal of Law and Economics*, XLI: 275-303.
- Lasfer, M. A. 2002. "Board Structure and Agency Costs". *Discussion Paper*, City University Business School, Barbican Centre, London.
- Levine, R. 2004. "Finance and Growth: Theory and Evidence." Unpublished paper prepared for Handbook of Economic Growth.

- Liang, N. and J. Li. 1999. "Board Structure and Firm Performance: New Evidence from China's Private Firms". Paper presented at the Academy of Management Annual Conference, Chicago, USA, 7-10 August.
- Lipton, M. and J.W. Lorsch. 1992. "A Modest Proposal for Improved Corporate Governance". *Business Lawyer* 48(1): 59-77.
- Loderer, C. and K. Martin. 1997. "Executive stock ownership and performance: Tracking faint traces". *Journal of Financial Economics*, 45: 223-255.
- Mayers, D., A. Shivdasani, and C.W. Smith. 1997. Board composition and shareholders wealth: the case of management buyout. *Financial Management* 21, 58-72.
- McConnell, J.J. and H. Servaes. 1990. "Additional Evidence on Equity Ownership and Corporate Value". *Journal of Financial Economics*, 27(2, October): 595-613.
- Mehran, H. 1995. "Executive compensation structure, ownership and firm performance". *Journal of Financial Economics*, 38: 163-184.
- Monks, R.A.G. and N. Minow. 1995. "Corporate governance on equity ownership and corporate value" *Journal of Financial Economics*, 20: 293-315.
- Morck, R. and B. Yeung (2003) "Agency Problems in Large Family Business Group" *Entrepreneurship Theory and Practice*, Baylor University.
- Ndanusa, S. A. 2004. "The Role of Securities and Exchange Commission in Corporate Government". *Paper presented during a joint workshop at the 1st Annual Conference on Corporate Governance and Practices for Directors*, Organised by Securities and Exchange Commission (SEC)/Institute of Chartered Secretaries and Administrators of Nigeria (ICSAN).
- Nmehielle, V. O. and E. S. Nwauche. 2004. "External-Internal Standards in Corporate Governance in Nigeria". *Public Law and Legal Theory Working Paper NO. 115*, The George Washington University Law School.
- Nor, F.M., R.M. Said and H. Redzuan. 1999. "Structure of Ownership and Corporate Financial Performance: A Malaysian Case". *Malaysian Management Review*, (December): 44-48.
- Oman, C., S. Fries; and W. Buiter. 2003. "Corporate Governance in Developing, Transition and Emerging-Market Economies." *Policy Brief No. 23*. OECD Development Centre, Le Seine Saint-Germain, France.
- Pass, C. 2004. "Corporate Governance and the Role of Non-Executive Directors in Large UK Companies: An Empirical Study". *Corporate Governance*, 4(2): 52-63.
- Rosenstein, S. and J. G. Wyatt. 1990. "Outside Directors, Board Independence and Shareholders Wealth". *Journal of Financial Economics*, 26: 175-192.

- Ross, S. 1973. "The economic theory of agency: The principal's problem". *American Economic Review*, 63(2): 134– 39.
- Sanda, A.U., A.S. Mikailu, and T. Garba. 2005. "Corporate Governance Mechanisms and Firm Financial Performance in Nigeria". AERC Research Paper 149, Nairobi, Kenya.
- Shivdasani, A. 1993. "Board Composition, Ownership Structure and Hostile Takeover". *Journal of Accounting and Finance*, 16: 167-198.
- Shivdasani, A. and D. Yermack. 1999. "CEO Involvement in the Selection of New Members: An Empirical Analysis". *Journal of Finance*, LIV(5, October): 1829-1853.
- Shleifer, A. and R.W. Vishny. 1998. "Large Shareholders and Corporate Control." *Journal of Political Economy* 16:461-488.
- Shleifer, A. and R.W. Vishny. 1997. "A Survey of Corporate Governance". *Journal of Financial Economics*, 52(2): 737-783.
- Tsai, W., J. Hung, Y. Kuo, and L. Kuo (2006) "CEO Tenure in Taiwanese Family and Nonfamily Firms: An Agency Theory Perspective" *Family Business* Vol. XIX, No. 1, pp. 11-28
- Udueni, H. 1998. " Power Dimension in the Board and Outside Director Independence: Evidence from Large Industrial UK Firms". *Discussion Paper*, School of Management & Finance, University of Nottingham, June.
- Wade, J., O. Reilly and I. Chandratat. 1990. "Golden Parachutes: CEO and the Exercise of Social Influences". *Administrative Science Quarterly*, 35: 587-603.
- Weir, C. and D. Laing. 2001. "Governance Structures, Director Independence and Corporate Performance in the UK". *European Business Review*, 13(2): 86-94.
- Weisbach, M. 1988. "Outside directors and CEO turnover" *Journal of Financial Economics*, Vol. 20, pp. 431-460.
- Yeboah-Duah, K. 1993. "Stock Ownership and the Performance of the Firm in Malaysia". *Capital Market Review* 1(2): 83-108.
- Yermack, D. 1996. "Higher market valuation of companies with a small board of directors". *Journal of Financial Economics* 40: 185-211.
- Zahra, S. A. and W.W. Stanton. 1988. "The Implications of Board of Directors' Composition for Corporate Strategy and Performance". *International Journal of Management*, 5(2): 229-236.

Appendix 1: List of firms for which data was available for regression analysis

Union Ventures & Petroleum Plc.
Pharma-Deko Plc.
Pressco PLC
The Okomu Oil Palm Plc
Dunlop Nigeria Plc
EIB International Bank Plc
First Atlantic Bank Plc
First Bank of Nigeria Plc
Guaranty Trust Bank Plc
Inland Bank (Nigeria) Plc
Intercontinental Bank Plc
Lion Bank of (Nigeria) Plc
OmegaBank Plc
Trade Bank Plc
Trans International Bank
Union Bank of Nigeria Plc
Universal Trust Bank Plc
Wema Bank Plc
Guinness (Nigeria) Breweries Plc.
Benue Cement Company Plc.
CFAO (Nigeria) Plc.
John Holt Plc.
UACN Plc.
Unilever Nigeria Plc.
UTC (Nigeria) Plc.
Cadbury Nigeria Plc.
Flour Mills (Nigeria) Plc.
Nestle Foods (Nigeria) Plc.
Nigerian Bottling Company Plc.
Northern (Nigeria) Flour Mills Plc.
7-Up Bottling Company Plc.
Glaxo SmithKline Beecham Consumer Nigeria Plc.
First Aluminium Nigeria Plc.
Vitafoam (Nigeria) Plc.
Niger Insurance Plc.
Avon Crowncaps & Containers Plc.
Beta Glass Company Plc.
Oando Nigeria Plc.
Total Nigeria Plc.
Livestock Feeds Plc
Aviation Development Co. Plc
Access Bank Nigeria Plc
Cooperaive Development Bank Plc
Liberty Bank Plc
MannyBank Plc
NAL Bank PLc
Regent Bank Plc
Cement Company of North (Nigeria) Plc.

Nigeria Ropes Plc.
Berger Paints Plc.
CAP Plc.
DN Meyer Plc.
Nigeria-German Chemicals Plc.
Trsans-Nationwide Express PLC
Hallmark Paper Products Plc
NCR (Nigeria) Plc.
Thomas Wyatt (Nigeria) Plc.
Cutix Plc.
P S Mandrides & Company Plc.
BCN Plc.
Ekocorp Plc.
Evans Medical Plc.
May & Baker Nigeria Plc.
Morison Industries Plc.
Tourist Company of Nigeria PLC
Aluminium Manufacturing Company Plc.
B. O. C. Gases Plc.
Vono Products Plc.
Acen Insurance Company Plc
Cornerstone Insurance Plc.
Crusader Insurance Plc.
First Assurance Plc.
Guinea Insurance Plc.
Law Union & Rock Insurance Plc.
Linkage Assurance Plc.
NEM Insurance Plc.
Prestige Assurance Plc.
Royal Exchange Assurance Plc.
Unic Insurance Plc.
West African Providence Insurance Company Plc.
C & I Leasing Plc.
Poly Products (Nigeria) Plc.
Van Leer Containers (Nigeria) Plc.
Conoil Plc.
Mobil Oil (Nigeria) Plc.
Texaco Nigeria Plc.
Academy Press Plc.
Longman Nigeria Plc.
University Press Plc

Table 5: Regression results: Whole sample

Independent variable	Measures of Firm Financial Performance			
	2 ROA	3 ROE	4 PERATIO	5 Stock Return
Board Size	0.107 (1.18)	-0.087 (-0.21)	3.629 (2.14)**	-0.004 (-0.06)
Board Size Squared	-0.006 (-1.39)	0.002 (0.07)	-0.196 (-2.46)**	0.0001 (0.04)
Log of No. of Employees (Firm Size)	0.015 (1.05)	0.337 (1.96)*	0.527 (0.92)	0.020 (0.83)
Family Dummy	0.077 (0.10)	2.735 (2.57)**	6.689 (3.02)***	-0.051 (-0.36)
Tenure Dummy of CEO	-0.060 (-0.63)	0.654 (1.99)**	-0.025 (-0.01)	0.858 (2.02)**
CEO foreign Dummy	0.166 (2.61)***	3.052 (5.20)***	-0.412 (-0.25)	0.079 (1.41)
Ownership Concentration Dummy	-0.058 (-1.00)	0.369 (1.05)	-0.568 (-0.37)	0.065 (1.60)
CEO Audit membership Dummy	-0.025 (-0.44)	-0.612 (-1.66)*	-1.498 (-1.10)	-0.045 (-0.99)
Board Composition	0.127 (1.01)	3.610 (3.62)***	5.108 (1.09)	0.060 (0.44)
Interlocking directorship	-0.049 (-1.05)	0.334 (0.91)	-0.335 (-0.22)	0.003 (0.07)
Yrdum96				0.125 (1.21)
Yrdum97				-0.071 (-0.67)
Yrdum98				-0.412 (-5.32)***
Yrdum99				-0.330 (-3.96)***
Yrdum00				-0.112 (-1.23)
Yrdum01				0.081 (0.81)
Yrdum02				-0.286 (-3.31)***
Yrdum03				-0.172 (-2.01)**
R ²	0.04	0.24	0.03	0.20
F	4.98***	6.24***	2.67***	6.76***
N	348	331	322	371

Four measures of firm performance (ROA, ROE, PERATIO and Stock Return) are regressed

Table 5: Regression results: Whole sample

Independent variable	Measures of Firm Financial Performance			
	2 ROA	3 ROE	4 PERATIO	5 Stock Return

against a set of control variables as well as measures of board independence. The control variables are board size (both the linear and quadratic measures of it), firm size, measured by the natural logs of number of employees of the firm and four dummy variables: the first (FAMILY DUMMY), taking a value of 1 in firms with evidence of family members on the same board; the second (CEO TENURE DUMMY) taking a value of 1 in firms with long tenure CEOs; the third, (CEO FOREIGN DUMMY) taking a value of 1 in firms with foreign chief executive officers; and the fourth (OWNERSHIP CONCENTRATION DUMMY) taking a value of 1 in firms with ownership concentration above the mean values. Two measures of board independence are added to the set of regressors. The first is CEO membership of audit committee, which takes a value of 1 in firms where the CEO sits on the audit committee. The second measure of board independence is board composition, computed by expressing the number of outside directors as a proportion of board size. Interlocking directorship is also one of the regressors, aimed to gauging whether or not participation board members on boards of other listed firms has any significant relation with performance. Finally, year dummies are included into the right-hand-side variables, but except in one specification, they turn out not to be jointly significant in the other three specifications, so we exclude them from further estimations for those three specifications.

Table 6: Regression results: Large Firms

Independent variable	Measures of Firm Financial Performance			
	2 ROA	3 ROE	4 PERATIO	5 Stock Return
Board Size	0.441 (1.77)*	0.583 (1.66)*	3.579 (1.18)	0.001 (0.01)
Board Size Squared	-0.026 (-1.90)*	-0.039 (-1.99)**	-0.192 (-1.20)	-0.0004 (-0.08)
Log of No. of Employees (Firm Size)	0.244 (2.04)**	0.374 (1.25)	-1.147 (-0.79)	0.002 (0.03)
Family Dummy	0.624 (2.07)**	2.550 (2.14)**	6.699 (1.60)	-0.187 (-1.02)
Tenure Dummy of CEO	-0.183 (-1.09)	0.858 (2.32)**	2.357 (1.07)	0.186 (2.43)**
CEO foreign Dummy	0.211 (1.05)	2.600 (2.82)***	-1.019 (-0.43)	0.145 (1.41)
Ownership Concentration Dummy	-0.350 (-2.30)**	-0.500 (-1.50)	-0.960 (-0.49)	-0.031 (-0.43)
CEO Audit membership Dummy	0.017 (0.16)	0.080 (0.19)	-2.382 (-1.14)	0.016 (0.21)
Board Composition	0.003 (0.01)	1.995 (1.46)	16.004 (2.24)**	0.134 (0.72)
Interlocking directorship	-0.125 (-1.29)	-0.647 (-2.00)**	2.716 (1.10)	0.024 (0.38)
Yrdum96				0.191 (0.98)
Yrdum97				-0.258 (-1.35)
Yrdum98				-0.462 (-2.61)**
Yrdum99				-0.405 (-2.29)**
Yrdum00				-0.253 (-1.34)
Yrdum01				0.124 (0.62)
Yrdum02				-0.361 (-2.04)**
Yrdum03				-0.206 (-1.21)
R ²	0.17	0.26	0.10	0.30
F	2.48***	2.07**	4.93***	4.75***
N	153	142	140	149

Variable definition is same as indicated in Table 5. The only difference from the Table 5 is that the regression procedure is applied only to the large firms – firm with total assets above the average for the entire sample.

Table 7: Regression results: Small Firms

Independent variable	Measures of Firm Financial Performance			
	2 ROA	3 ROE	4 PERATIO	5 Stock Return
Board Size	-0.046 (-1.02)	-1.169 (-1.34)	4.929 (1.19)	0.113 (0.93)
Board Size Squared	0.001 (0.74)	0.061 (1.44)	-0.256 (-1.40)	-0.006 (-0.92)
Log of No. of Employees (Firm Size)	0.008 (0.63)	0.203 (1.03)	0.430 (0.59)	0.022 (0.56)
Family Dummy	0.095 (1.00)	3.727 (2.34)**	2.525 (0.59)	0.099 (0.49)
Tenure Dummy of CEO	0.100 (2.59)***	0.404 (0.76)	-3.450 (-0.93)	0.056 (0.65)
CEO foreign Dummy	0.159 (4.25)***	3.281 (4.26)***	0.571 (0.22)	0.050 (0.51)
Ownership Concentration Dummy	0.103 (2.96)***	1.415 (2.42)**	-1.680 (-0.65)	0.137 (1.60)
CEO Audit membership Dummy	-0.028 (-0.86)	-1.216 (-1.82)*	0.959 (0.42)	-0.040 (-0.47)
Board Composition	0.073 (0.58)	5.575 (3.78)***	-5.205 (-0.97)	0.252 (0.86)
Interlocking directorship	0.006 (0.15)	1.712 (2.60)**	-3.846 (-1.39)	0.097 (1.05)
Yrdum96				0.058 (0.41)
Yrdum97				-0.070 (-0.36)
Yrdum98				-0.561 (-4.11)***
Yrdum99				-0.361 (-2.06)**
Yrdum00				-0.035 (-0.23)
Yrdum01				0.012 (0.08)
Yrdum02				-0.298 (-2.23)**
Yrdum03				-0.154 (-1.11)
R ²	0.20	0.29	0.05	0.23
F	6.89***	6.61***	2.06**	3.69***
N	195	189	160	144

Variable definition is same as indicated in Table 5. The only difference from the Table 5 is that the regression procedure is applied only to the small firms – firm with total assets below the average for the entire sample.