IMPACT OF CORPORATE OWNERSHIP AND CONTROL ON FIRM PERFORMANCE: THE NIGERIAN EXPERIENCE

Ioraver Nyenger Tsegba*, John Iorpenda Sar**

Abstract

The main purpose of this study is to ascertain whether alternative corporate ownership and control structures give rise to significant differential firm performance in light of Nigeria's conflicting policies regarding the ownership structure of the state owned enterprises. The data obtained from a sample of 73 companies listed on the Nigerian Stock Exchange is analyzed through the Wilcoxon ranks tests for two independent samples. The evidence obtained suggests that firms with foreign ownership and control outperform their indigenous counterparts. However, firms controlled by single shareholders do not perform better than those controlled by multiple shareholders. The study recommends that foreign ownership and control of Nigerian firms be encouraged due to their affirmative features, while single shareholder control of firms, embedded in the core investor mode of ownership, be reconsidered.

Keywords: Corporate Control, Corporate Governance, Core Investor, Concentrated Ownership, Corporate Ownership, Domestic Ownership, Foreign Ownership, Single Shareholder Control, Multiple Shareholder Control, Firm Performance, Nigeria

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1. Introduction

The rising number of corporate failures and/or scandals, such as Enron, WorldCom, Global Crossing, HIH Insurance, Ansett, Pan Pharmaceuticals, Lever Brothers, Cadbury, and Afribank, and their association with corporate governance failure, has precipitated the growing interest in the governance structures of firms by researchers in accounting, finance, and economics. Exemplar studies that have examined the related contextual issues on corporate governance include Dockery and Herbert (2000); La Porta et al. (2000); Yakasai (2001); Detomasi (2002); Fort and Schipani (2003); Sanda, Mikailu, and Garba (2005); and Barako and Tower (2006).

Corporate governance is concerned with the ways in which all parties interested in the way the firm is run (the stakeholders) attempt to ensure that managers/directors and other insiders take measures or adopt mechanisms that safeguard the interests of the stakeholders (Sanda, Mikailu and Garba, 2005; Javed and Iqbal, 2007). One of the corporate governance mechanisms that has received considerable attention in the literature is the use of a monitoring board appointed by the company’s shareholders (see John and Senbet, 1998; Abdullah, 2006; Kyereboah-Coleman and Biekpe, 2006a &b; Nguyen and Faff, 2006; Filatotchev and Wright, 2011). However, the collapse of Enron and other large multinationals demonstrates the limits of the monitoring board; it is also a testimony to the complexity of the monitoring task (Deakin and Konzelmann, 2004). The failure of the board of directors (BoD) to adequately address the agency problem created by the separation of ownership and management in a modern corporation alerted by Berle and Means (1932) has refocused attention to corporate ownership as an increasingly influential form of corporate governance (Connelly et al., 2010).

The efficacy of ownership structure as a corporate governance mechanism is succinctly captured by Pedersen and Thomsen (1999) who advance three reasons why corporate ownership structure matters: first, potential owners differ (with respect to goals, economic competence, information access, risk preference, etc); second, legal ownership modes differ (with respect to the bundle of rights allocated to the owner); and third, the level of ownership concentration determines the tradeoff between monitoring efficiency (high concentration) and diversification of risk. Other factors that further support the importance of ownership structure as a
governance mechanism include the number of shareholders, and regional spread of ownership.

An extensive empirical literature exists on the relation between corporate ownership structure and firm performance/value but the results are rather conflicting (see, for example, Demsetz and Lehn, 1985; McConnel and Servaes, 1990; Demsetz and Villalonga, 2001; Pivovarsky, 2003; Welch, 2003; Chu and Cheah, 2006; Farooque et al., 2007). Moreover, the literature tilts towards examination of the relationship between ownership structure and firm performance or value, at the detriment of whether ownership and control could jointly affect performance. Furthermore, the investigations into the relationship are predicated on data from developed economies such as Anglo-America, Europe and Japan. Those that utilize data from emerging economies are rather sparse. Notable exceptions include Adenikinju and Ayorinde (2001), Bai et al. (2005), Barako and Tower (2006), Farooque et al. (2007), Javed and Iqbal (2007), Sanda, Mikailu and Garba (2005), and Tsegba and Herbert (2011). Despite the geopolitical and economic importance of Nigeria as an emerging economy and the second largest economy in Sub-Saharan Africa, the scant empirical assessment of the phenomenon of interest suggests that a lacuna exists in this area. Moreover, the few reported studies that have examined the relationship between ownership structure and firm performance in Nigeria have produced conflicting results (see Adenikinju and Ayorinde, 2001; Sanda, Mikailu and Garba, 2005; Tsegba and Herbert, 2011).

In spite of the conflicting results, Nigeria has, over the decades adopted different, and sometimes conflicting, policies regarding the ownership and control of the state owned enterprises (SOEs) in order to mitigate the dismal performances of the enterprises. For instance, Nigeria inherited corporate ownership structure that was predominantly foreign at independence in 1960. In the early 1970s, an indigenization programme was pursued which encouraged domestic ownership (see Federal Government of Nigeria, 1972). In the late 1980s, a diffuse ownership structure was pursued in the process of the privatization and commercialization programmes embarked upon by the federal government. In the late 1990s till date, the policy initiative is tilted toward promoting concentrated and foreign ownership (Federal Government of Nigeria, 1999). These differing and conflicting policies beg the question of whether alternative corporate ownership and control structures possess higher affirmative features.

This study seeks to bridge the gap in the literature by providing an empirical evaluation of the effect of alternative corporate ownership and control structures on firm performance in Nigeria. The main objective of this paper, therefore, is to ascertain the effect of two sets of alternative corporate ownership and control structures on firm performance, namely foreign ownership and control versus domestic ownership and control; and single shareholder control versus multiple shareholder control. The remainder of the paper is divided into four sections. The next section presents a review of the related literature while section three sets forth the methodology adopted for the study. Section four analyses the data and section five contains the conclusions and recommendations.

2. Review of related literature

Concerns over the adverse consequences of the separation of ownership and management in a modern corporation are traced to Smith (1776). However, Berle and Means (1932) are widely cited to be the first to document the adverse consequences of the separation of ownership and control in a modern corporation on firm performance (see Jensen and Meckling, 1976; Demsetz, 1983; Dockery, Herbert and Taylor, 2000; Demsetz and Villalonga, 2001; Javed and Iqbal, 2007; Connelly et al., 2010). Berle and Means see diffuseness in ownership structure as undermining the role of profit maximization as a guide to resource allocation and as having the potential to render owners of shares powerless to constrain professional management from abusing their vantage position in the corporation. They (Berle and Means) argue further that since the interest of management need not, and generally does not perfectly cohere with those of owners, this would imply that corporate resources are not used entirely in pursuit of shareholder profit.

Demsetz and Lehn (1985) assert that Berle and Means’ work was anticipated by Thorstein Veblen’s (1924) volume. Vembelm believed that he was witnessing the transfer of control from capitalist owners to engineer-managers and that the consequences of this transfer were to become more pronounced as diffusely owned corporations grew in economic importance. One of such consequences was the end of the type of profit seeking associated with capitalists, who as owners sought neither efficiency nor increased output so much as monopolistic restrictions to raise prices. The fears expressed over the adverse consequences of separation of ownership from control have generated a lot of research interest particularly with respect to how variations in the ownership structure and hence control affect firm performance or value. Exemplar studies on the phenomenon under discussion include Demsetz and Lehn (1985), Demsetz and Villalonga (2001), Welch (2003), Sanda, Mikailu and Garba (2005), Farooque et al. (2007), and Tsegba and Herbert (2011). Such investigations have been affected by conceptual issues related to corporate ownership and control, and the ownership structures that need
investigation. The remainder of this review addresses these and other related issues that have the potential to affect the outcome of this study.

2.1. Corporate Ownership and Control

The study of who owns and controls the use of capital and how this control affects the creation and distribution of wealth in society has long been an important line of intellectual inquiry by economists, originating with Marx (1867) (see Kang and Sorensen, 1999). The confusion stems from the question of who owns a firm because property law initially defined ownership in terms of physical possession of assets (Berle and Means, 1932), whereas in the modern corporation, it is not the shareholders, but rather the managers and workers who come closest to physically “possessing” the firm’s assets. This is underscored by the fact that the assets of the modern corporation are often complex, such as in the case of large-scale production facilities and research laboratories, thereby making it difficult for most shareholders to determine whether the assets are used correctly or efficiently, lacking both the information and expertise needed to monitor their usage (Kang and Sorensen, 1999). Furthermore, a majority of shareholders individually own a small fraction of the total number of shares issued by the firm and face considerable costs in conducting effective monitoring.

Kang and Sorensen’s (1999) grouping of the main actors in the firm with their roles clarifies issues particularly with respect to who owns the firm. They consider the modern firm as a large organization with four main groups of actors: shareholders, board of directors, top executives and other managers, and workers. The shareholders are construed as the owners of the firm; they provide financial capital and in return receive a contractual promise of financial returns from the operations of the firm. Directors act as fiduciaries of the corporation who may formulate or approve certain strategy and investment decisions but whose main responsibility appears to be to hire and fire top managers. Managers operate the firm and make most business decisions and employ and supervise workers. Workers carry out the necessary activities that create the firm’s output which translates into financial and economic returns.

Control has been defined by Tannenbaum (1962) as any process in which a person or group of persons or organization of persons determines what another person or group or organization will do. The definition infers that a person or group of persons possesses power to determine what actions are to be taken in a given situation. The literature seems to support the contention that the shareholders, and not professional managers as envisioned by Veblen (1924) and Berle and Means (1932) control the modern corporation. In this vein, control is achieved through shareholder representation on the board of directors, board committees, shareholder audit committees and active participation by shareholders in annual general meetings (AGMs) where broad policies affecting the corporation are considered and approved.

The decisions by shareholders to alter the ownership structure of the firm from one level to another might have the consequences of loosening or tightening control over professional management. Demsetz and Lehn (1985) argue that the higher cost and reduced profit that would be associated with loosening of owner control should be offset by lower capital acquisition cost or other profit enhancing aspect of diffuse ownership if shareholders chose to broaden ownership, vice versa. Control, as conventionally construed, suggests substantial voting rights in a corporation, preferably above 50% of the issued equity for both the individual and group of investors who may wish to team up for effective monitoring of management. Turnbull (1997), however, recognizes two models through which control may be exercised outside the extreme situation postulated above. He recognizes that the political model attributes the allocation of corporate power, privileges and profits between owners, managers and other stakeholders in a corporation through how governments favour their various constituencies. This viewpoint is supported by the argument that the ability of corporate stakeholders to influence allocations between themselves at the micro level is subject to the general macro framework over which the corporate sector has strong influence.

Pound (1993) defines the political model of corporate governance as an approach in which active investors seek to change corporate policy by developing voting support from dispersed shareholders rather than by simply purchasing voting power and control. He believes that the new form of governance based on politics rather than finance will provide a means of oversight that is both far more effective and far less expensive than the takeovers of the 1980s. The political model is also concerned with the related issue of trading off investor voice to investment exit, and institutional agents monitoring corporate agents i.e. “watching the watchers” (see Monk and Minow, 1995). These issues are influenced by government laws and regulations and could be a subject of public policy debate as is done in the US (Turnbull, 1997). In Nigeria, the political process is mainly consummated under the auspices of shareholder associations and alliances among institutional investors. For instance, the Association of Nigerian Development Finance Institutions (ANDFI) coordinates the activities of all development finance institutions in the country and influences decisions
taken at board levels and AGMs by companies in which members collectively have substantial voting rights.

The model of corporate governance based on power perspective refers to the ability of individuals or groups to take action when required. Turnbull (1997) has noted, however, that the explicit use of power seems to be a neglected area, in spite of the truism that even when shareholders, directors, management or any other stakeholder have the knowledge and the will to act, they may not possess the necessary power to do so. For instance, there are various inhibitions on the power of shareholders to act arising from security laws, agenda setting by management at general meetings, proxy procedures, voting arrangements and the corporate by-laws. Turnbull (1997) states further that the power of directors to control management is contingent on there being sufficient number of directors who also have the requisite knowledge of the subject matter and the will to act to form a board majority. Moreover, even if independent directors have the knowledge to act, they many not have the will and power to act because they are loyal or obligated to management and for hold their board position at the grace and favour of management.

2.2. Theoretical Framework

Ownership structure can, theoretically, help to promote good corporate governance practices and firm performance, but there exists no robust empirical evidence to support this assertion (Tsegba and Herbert, 2011). The theoretical framework upon which most research on the relationship between ownership structure and firm performance/value has been rooted in agency theory which presumes fundamental tension between shareholders and corporate managers (Jensen and Meckling, 1976; Farooque et al., 2007). The modern corporation is depicted as a largely autonomous entity where executives and managers successfully pursue their own objectives of growth and stability rather than maximizing the returns to the shareholders (Dockery, Herbert and Taylor, 2000). The agency theory is, therefore, used in the organizational economics and management literature as a theoretical framework for structuring and managing contract relationships and explaining the behaviours of principals and agents (van Slyke, 2007). A basic assumption of the agency theory, therefore, is that managers will act opportunistically to further their own interest before shareholders; and the basic conclusion is that the performance/value of the firm cannot be maximized because managers possess discretions which allow them to expropriate wealth to themselves (Turnbull, 1997).

The agency model presents a particular problem within the context of the development and dissemination of social science theories: a collection of strictly self-interested actors may occasion conflicts of interest which may be resolved through incentives, monitoring, or regulatory action (Cohen and Holder-Webb, 2006). The transaction conditions and the incentive mechanisms postulated in the literature to address costs related to managerial transactions or agency costs include remuneration systems, stock ownership, product market competition, and market for corporate control. The costs to the organization include monitoring costs, perquisites consumption, pet projects, free cash flow dispersion, hampered capital access, replacement resistance, resistance to profitable liquidation or merger, power struggles, excessive risk taking, self-dealing transfer pricing, excessive diversification and excessive growth. Jensen and Meckling (1976) summarize these agency costs as being the sum of the cost of: monitoring management (the agent); bonding the agent to the principal (stockholder/residual claimant'); and residual losses. The focus of corporate governance is to minimize these costs and enhance firm performance. It becomes imperative that management is constantly monitored to ensure it does not pursue policies that are inimical to the prosperity of the enterprise. This monitoring task rests squarely with the board whose composition reflects the ownership structure of the firm.

2.3. Corporate Ownership Structure

A number of corporate ownership structures and their relationship with firm performance/value have been identified and investigated in prior studies (see Demsetz and Villolanga, 2001; Welch, 2003; Pivovarsky, 2003; Farooque et al., 2007; Tsegba and Herbert, 2011). Such structures include the largest/dominant shareholder, concentrated ownership, insider (board or management) ownership, foreign ownership, institutional ownership and government ownership. A purview of some of these ownership structures investigated, particularly those that have been on the agenda of Nigeria’s indigenization and privatization programmes is necessary if we are to efficiently develop, construct, test and implement new approaches to the assessment of the impact of ownership structure and control on firm performance. However, the central tenet of this study is to examine the differential impact of alternative corporate ownership and control structures on firm performance. Accordingly, the corporate ownership structures that evidently have inbuilt control mechanisms manifest in dominant/largest and hence controlling shareholder, ownership concentration, and foreign ownership with control capabilities. These control
capabilities are measured in terms of percentage holdings that exceed 50% of the issued equity of the firm.

The issue of corporate control appears to revolve around the question: ‘who is in control of the firm: is it the owners or the managers?’ In a diffuse ownership structure that person is practically the manager and the fears in prior literature are that he may make operating decisions that benefit his interest rather than maximizing returns to the shareholders (see Jensen and Meckling, 1976; Dockery, Herbert and Taylor, 2000; Javed and Iqbal, 2007). Extant literature therefore favours a dominant/largest and hence controlling shareholder structure. For instance, Bebchuk and Roe (1999, p.129) suggest that the presence or absence of a controlling shareholder “affects substantially the way in which, and the ends towards which, a corporation will be governed”. They report that eighty-five percent of the largest German firms have a dominant shareholder (usually family, sometimes financial) with twenty-five percent or more of the firms voting rights. The authors argue that countries that differ in their incidence of controlling shareholders have corporate structures that differ from each other, substantially.

The presence of the dominant/controlling shareholder in a firm is supported by two main arguments in prior literature. The first is that if ownership starts as diffuse, the emergence of a dominant/largest shareholder with substantial interest in the firm may mitigate the free-rider problem (Barako and Tower, 2006). The free-rider problem emerges in highly disperse shareholder structures due to the imbalance existing between the effort required to control management behavior and the benefits such monitoring entails (Jensen, 1986). The second argument relates to the potential of a dominant/largest shareholder to curb ‘tunneling’, a term that is used to describe the transfer of resources out of the firm for the benefit of the controlling shareholders (see Johnson et al., 2000). It is argued that since tunneling is not healthy for the firm as a whole, the existence of a dominant/largest shareholder whose interest and that of the firm cohere may have little incentive to engage in tunneling. The implication of these arguments is that a firm with a dominant/largest controlling shareholder will post higher performance over those with multiple controlling shareholders.

The Nigerian privatization framework has brought to the fore the concept of ‘core investor’ or group of ‘core investors’ which is a modified version of a dominant/largest controlling shareholder who exercises absolute control with less than 50% stake in the company (see National Council on Privatization, 2000). The concept of core investor is, therefore, quite alien in the extant literature on corporate ownership structure and control. It does not also appear to have received empirical evaluation even though it has, indeed, been practiced in other jurisdictions. For instance, in China, listed companies normally have one ultimate owner who holds a significant percentage of total shares of the firm and control its operations (Bai et al., 2005). The National Council on Privatization (2000 p.55) precisely spells out the major distinguishing characteristics of strategic/core group investors:

“They must possess the technical know-how in relation to the activities of the enterprise they wish to invest in….The core investors must possess the financial muscle, not only to pay competitive price for the enterprise they wish to buy into but also to turn around its fortune, using their own resources without relying on the Government for funds. The core investor must have the managerial know-how to run a business profitably in a competitive environment where market forces dictate the business environment”.

In effect, the ‘core investor’ is an idiosyncratic concept in relation to the revival of failing or failed SOEs under a programme or policy of privatization or commercialization. In this respect, ‘core investors’ are perceived as economic agents, usually of the multinational genre, with three defining features: (1) expertise or technical know-how in the enterprise they seek to invest in; (2) financial capacity to not only purchase or acquire the required interest in the slated SOE, but also to revive or turnaround the fortunes of the company; and (3) managerial competence to inject and sustain the profitability of the enterprise in a competitive market environment.

The theory of concentrated ownership structure seeks to explain the behavior of corporate managers and invariably corporate performance when a given number of shareholders control the firm. Prior literature segments concentrated ownership in terms of the percentage of shares held by the largest five, ten, fifteen, or twenty shareholders (see, for example, Bai et al., 2005; Sanda, Mikailu and Garba, 2005). Pedersen and Thomsen (1999), however, divide concentration into three: (1) dispersed structure if the largest shareholder holds less than 20% of its issued equity; (2) dominant minority if the largest shareholder holds between 20 percent to 50 percent; and (3) majority ownership in which case the largest shareholder holds more than 50 per cent of its issued equity. They argue that the study of ownership concentration is meaningful only when it is possible to compare the efficacy of these structures in extracting cost and benefits from a firm’s economic function. Demsetz and Lehn (1985) further note that the more concentrated the ownership, the greater the degree to which benefits and costs are borne by the same owner.
instance, in the case of a firm owned entirely by one individual, all benefits and costs of shirking are borne by the owner, in which case ‘externalities’ confound his decision about attending to the tasks of ownership.

Four main arguments are advanced to support ownership concentration. First, Pivovarsky (2003) argues that a high concentration of shares into the hands of a few large shareholders tends to create more pressure on managers to behave in ways that are value-maximizing. This is underscored by the proposition that owners can hire and fire management. Second, Shleifer and Vishny (1997) argue that a combination of legal rules and ownership concentration could be used to mitigate governance problems of expropriation of wealth by controlling shareholders. They (Shleifer and Vishny) state further that shareholders with effective control over firms are not afraid that their firms will be expropriated and, thus, they can afford to sell shares to raise new capital to diversify risk. Furthermore, small investors can afford to take minority ownership interests in firms when they know that managers or controlling shareholders will not expropriate their ownership stakes. Third, it is argued that weak legal systems and capital markets increase risk and cost of capital and depress asset values (see La Porta et al., 2002). Consequently, Shleifer and Vishny (1997) suggest that firms can limit cost associated with legal systems and inefficient capital markets by adopting concentrated ownership structures. Jandik and Rennie (2004) provide evidence which is consistent with this view: that concentrated ownership is optimal in economies with weak legal systems and underdeveloped capital markets.

Fourth, Demsetz and Lehn (1985) support ownership concentration in terms of its control potentials which is the wealth gain achievable through more effective monitoring of managerial performance by firm owners. They argue that if the market for corporate control and managerial labour market perfectly aligned the interest of managers and shareholders, then control potential would play no role in explaining corporate ownership structure but in the presence of costs associated with the maintenance of corporate control, the market imperfectly disciplines corporate managers who work contrary to the wishes of shareholders. Concentrated ownership could, therefore, serve as a governance mechanism that disciplines entrenched managers towards firm value maximization.

A major literature contrarian argument against concentrated ownership highlighted by Bai et al. (2005) is that it gives the largest shareholders too much discretionary powers of using firm resources in ways that serve their own interest at the detriment of other shareholders. In other words, the controlling shareholders are able to obtain more control at minimal capital expense, thereby making tunneling much easier. Tunneling is a term used to describe the transfer of resources out of the firm for the benefit of the controlling shareholders (see Johnson et al., 2000). Bai et al. (2005) report that several corporate scandals disclosed in China’s capital markets were all about unconstrained large shareholders misusing firm resources. The possibility of tunneling by controlling shareholders portrays concentrated ownership as double edged and may affect the performance of firms in either direction.

The literature on foreign ownership, which signifies equity participation in a firm by non nationals, is rather sparse. However, there are two main arguments that support foreign ownership of firms in emerging or transition economies. First, foreign firms are adjudged to possess more business experience and entrepreneurship than domestic firms and are, therefore, more dynamic in their management style. For instance, Laing and Weir (1999) contend that firms managed by dynamic foreign chief executives (CEOs) tend to perform better than other categories of firms. Second, extant literature on international business has long demonstrated that foreign firms possess a range of advantages that prospectively lead to and/or sustain successful multinationalization, and these allow them to outperform their domestic counterparts.

Herbert (1995) identifies and classifies the sources of these advantages into privileged, ownership-specific advantages (due to common governance), and corollary advantages of multinationality. He (Herbert) states further that essentially, foreign firms enjoy advantages of proprietary technology, managerial, marketing or other skills specific to organizational function, large size, reflecting scale and scope economies, and large capital (or capacity to raise it). In spite of the advantages accorded foreign ownership in the literature, the relationship between foreign ownership and firm performance has received little systematic investigation, notable exceptions being the works of Laing and Weir (1999), and Estrin et al. (2001). Furthermore, there appears to be no known study that has investigated the contextual issue of the comparative performance of firms with foreign ownership and control and their domestic counterparts. This study seeks to augment the stock of empirical knowledge in this area.

2.4. Hypotheses Formulation

This study empirically determines our conjectures about the comparative performances of two sets of ownership and control structures, namely foreign ownership and control versus domestic ownership and control, and single shareholder control versus multiple shareholder control. Specifically, the following hypotheses are tested in this study:
**Ho1:** The performance of firms controlled by foreign owners is not significantly different from those controlled by domestic owners.

**Ho2:** The performance of firms controlled by single shareholders does not vary significantly from the performance of firms controlled by multiple shareholders.

### 3. Methofology

#### 3.1. Sample

The sample for this study comprises of 73 firms listed on the Nigerian Stock Exchange (NSE) for the period 2001 to 2007. The non-probability sampling technique is used to draw up the sample from a population of 201 firms listed on the NSE based on two main criteria. First, the firm must be listed on the NSE prior to the commencement of year 2001. Second, the firm must be in operation for the entire study period i.e. 2001 to 2007. Firms with incomplete data, such as financial performance indices and shareholding structure, and firms that underwent major reorganizations within the study period, such as the banks, are excluded from the sample.

The strict criteria used for sample selection portend possible bias. First, the sample firms are those with complete information germane to the investigation rather than by any technical analysis. Second, the selection of firms was restricted to those with uninterrupted operations throughout the study period. However, overcoming sample selection bias is empirically difficult for studies focusing on the impact of corporate governance mechanisms, such as ownership structure, on ex post firm financial performance measures reported by management. The main argument is that researchers cannot generate firm performance measures on their own; they have to rely on what is available in the public domain, which is an indication of good corporate governance practices (Tsegba and Herbert, 2011).

#### 3.2. Variable Definitions and Measurement

Two sets of variables are employed in this study, one relating to ownership structure and control and the other to firm performance. As a comparative study which seeks to provide evidence on whether or not alternative corporate ownership and control structures give rise to differential firm performances, two sets of ownership and control are specified. These corporate ownership and control structures include foreign ownership and control (FOC), domestic ownership and control (DOC), single shareholder control (SSC), and multiple shareholder control (MSC). FOC firms are construed to be those in which foreign owners hold more than 50% of the issued equity. DOC firms are defined as firms in which Nigerians hold more than 50% of the issued equity. SSC firms are defined as those in which a single shareholder (irrespective of nationality) holds more than 50% of the issued equity. MSC firms represent those firms in which two or more shareholders hold more than 50% of the issued equity. As stated earlier, the issue of corporate control by foreigners and a single shareholder (amplified by the concept of a core investor) has remained a focal point of reference in the ongoing Nigerian privatization exercise. There is, therefore, need to test whether this policy is achieving the objective of maximizing firm performance.

For market economies, it has been proved that the appropriate measures of firm performance could be the market price of share (MPS), Tobin’s Q, and profits (see, for example, Demsetz and Lehn, 1985; Shleifer and Vishny, 1986). This study, however, uses firm performance measures which utilize share price and profits, but does not use Tobin’s Q for two main reasons. First, information on replacement cost, which is required for the computation of Tobin’s Q, is not available on the firms investigated in this study. Second, since Tobin’s Q is the ratio of valuation of shareholders to the market value of the firm’s assets, at the margin, the shareholders’ valuation will approximate to, and will be shown by, the firm’s share price. Thus, it is postulated here that the MPS, which is already available and published, will yield the same, if not better, results as Tobin’s Q (Tsegba and Herbert, 2011).

Three measures of firm performance are adopted in this study, namely, market price per share (MPS), earnings per share (EPS) and return on assets (ROA). Each measure of performance addresses a certain clientele. For instance, the MPS is a measure of how the market assesses the firm based on its performance. The EPS is targeted at existing shareholders who would like to gauge the earning capabilities of their firms. The ROA is an overall measure of how the firm is utilizing the assets in its hold and is targeted at all stakeholders. Table 1 below sets out how the variables are measured and sourced.
Table 1. Variable Measurement and Sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Source</th>
</tr>
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<tbody>
<tr>
<td>Foreign ownership and control</td>
<td>A dichotomous variable given the value of 1 (one) if the firm has foreign ownership and control.</td>
<td>Annual reports and accounts/Company Registrars.</td>
</tr>
<tr>
<td>(FOC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic ownership and control</td>
<td>A dichotomous variable given the value of 0 (zero) if the firm has domestic ownership and control.</td>
<td>Annual reports and accounts/Company Registrars.</td>
</tr>
<tr>
<td>(DOC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single shareholder control</td>
<td>A dichotomous variable given the value of 1 (one) if the firm has a single shareholder who exercises control rights over it.</td>
<td>Annual reports and accounts/Company Registrars.</td>
</tr>
<tr>
<td>(SSC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple shareholder control</td>
<td>A dichotomous variable given the value of 0 (zero) if the firm has two or more shareholders who control it.</td>
<td>Annual reports and accounts/Company Registrars.</td>
</tr>
<tr>
<td>(MSC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earnings per share (EPS)</td>
<td>Net profit after tax divided by the number of shares in issue.</td>
<td>Annual reports and accounts.</td>
</tr>
<tr>
<td>Return on assets (ROA)</td>
<td>Net profit after tax divided by total assets.</td>
<td>Annual reports and accounts.</td>
</tr>
</tbody>
</table>

3.3. Specification of the Models for Data Analysis

This study utilizes the z-test for the rank sum of two independent samples (also known as the Wilcoxon W-test) as the main tool for data analyses. The Wilcoxon rank tests are non-parametric tests which are suited for studies with small sample sizes (Jerome, 2008). The tests are two-tailed, at 5 percent confidence level.

The model for the z-value that is the test statistic is given as:

\[ Z_{\text{sample}} = \frac{(W - \mu_w)}{\sigma_w} \]

where:

- \( n_1 \) is the sample with the fewest cases
- \( n_2 \) is the sample with the most cases
- \( \mu_w \) is the rank order sums, and
- \( w \) is the smallest of the rank order sums.

4. Data Analysis and Results

4.1. Checks for data reliability and validity

The starting point for data analyses is to check for the reliability and validity of data. The data utilized in this study has been examined for errors and omissions. The examination has not revealed anything that would adversely affect the reliability of the results obtained in this study. Furthermore, chi-square goodness-of-fit test for normality is conducted to test the null hypothesis that there is no significant difference between the sample firms and the target population. Table 2 presents the results of the chi-square goodness-of-fit test. The calculated value for chi-square is 16.52. At 19 degrees of freedom, the critical value of the chi-square distribution falls between 0.5 and 0.7, which suggests that the null hypothesis be accepted. In other words, the selected sample is a valid representation of the population under investigation.

4.2. Empirical Results

The empirical results are obtained through the Wilcoxon W-tests. The results of the test for Ho1, which seeks to ascertain whether the performance of firms with foreign ownership and control is not significantly different from those with domestic ownership and control, are reported in Table 3 below.

The results suggest that foreign ownership and control (FOC) firms exhibit higher mean rank performances over the domestic ownership and control (DOC) firms. The mean rank difference ranges from 6.73 (for ROA) to 10.87 (for MPS). However, the z-statistics indicate that only the MPS variable is significant at the 5% level and could be used to reject the null hypothesis that foreign ownership and control of Nigerian firms does not yield higher firm performance. The z-statistics are also significant but at the 10% for EPS. A major conclusion that may be drawn from this result is that investors seem to have more confidence, and so are ready to pay higher prices, for the shares of firms with foreign ownership and control than for firms with domestic ownership and control.
Table 2. Chi-Square Goodness –of- Fit Test Computations

<table>
<thead>
<tr>
<th>Sector Classification</th>
<th>Actual (Fo)</th>
<th>Expected (Fe)</th>
<th>(Fo-Fe)²/Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>2.77</td>
<td>-1.17</td>
</tr>
<tr>
<td>Automobile &amp; Tyre</td>
<td>3</td>
<td>3.23</td>
<td>-0.23</td>
</tr>
<tr>
<td>Breweries</td>
<td>4</td>
<td>3.70</td>
<td>0.30</td>
</tr>
<tr>
<td>Building Materials</td>
<td>5</td>
<td>3.23</td>
<td>1.77</td>
</tr>
<tr>
<td>Chemicals &amp; Paints</td>
<td>8</td>
<td>4.16</td>
<td>3.84</td>
</tr>
<tr>
<td>Conglomerates</td>
<td>1</td>
<td>0.46</td>
<td>0.54</td>
</tr>
<tr>
<td>Commercial/Services</td>
<td>2</td>
<td>2.77</td>
<td>-0.77</td>
</tr>
<tr>
<td>Computer &amp; Office Equipment</td>
<td>3</td>
<td>2.77</td>
<td>0.23</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>4</td>
<td>2.31</td>
<td>0.69</td>
</tr>
<tr>
<td>Food/Beverages/Tobacco</td>
<td>5</td>
<td>3.23</td>
<td>1.77</td>
</tr>
<tr>
<td>Industrial/Domestic Products</td>
<td>7</td>
<td>3.70</td>
<td>2.30</td>
</tr>
<tr>
<td>Insurance</td>
<td>8</td>
<td>5.54</td>
<td>1.46</td>
</tr>
<tr>
<td>Machinery (Marketing)</td>
<td>9</td>
<td>11.09</td>
<td>-2.09</td>
</tr>
<tr>
<td>Packaging</td>
<td>1</td>
<td>1.39</td>
<td>-0.39</td>
</tr>
<tr>
<td>Petroleum Products (Marketing)</td>
<td>2</td>
<td>3.70</td>
<td>-0.70</td>
</tr>
<tr>
<td>Healthcare</td>
<td>3</td>
<td>5.08</td>
<td>0.92</td>
</tr>
<tr>
<td>Printing &amp; Publishing</td>
<td>4</td>
<td>1.85</td>
<td>1.15</td>
</tr>
<tr>
<td>Real Estate</td>
<td>5</td>
<td>0.46</td>
<td>0.54</td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>6</td>
<td>7.39</td>
<td>-6.39</td>
</tr>
<tr>
<td>TOTAL</td>
<td>73</td>
<td>73</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3. Comparison of Firm Performance: FOC versus DOC Firms

<table>
<thead>
<tr>
<th>Firm Performance</th>
<th>Mean Rank (FOC)</th>
<th>Mean Rank (DOC)</th>
<th>Mean Rank Difference</th>
<th>Z-statistics For Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS</td>
<td>43.85</td>
<td>32.98</td>
<td>10.87</td>
<td>-2.11**</td>
</tr>
<tr>
<td>EPS</td>
<td>42.69</td>
<td>33.66</td>
<td>9.03</td>
<td>-1.75*</td>
</tr>
<tr>
<td>ROA</td>
<td>41.24</td>
<td>34.51</td>
<td>6.73</td>
<td>-1.31</td>
</tr>
</tbody>
</table>

*Significant at 10% level; **Significant at 5% level; ***Significant at 1% level.

These results support the assertion in the extant literature that firms with foreign ownership and control are expected to perform better than their domestic counterparts in emerging or transition economies because the foreign firms possess more business acumen and entrepreneurship, and have easier access to technical expertise, capital, and spare parts, amongst others (Laing & Weir, 1999; Estrin et al., 2001). The results are also consistent with the evidence provided by Estrin et al. (2001) which suggests that firms with foreign ownership perform better than those with domestic ownership in Bulgarian.

The results of the test for Ho2, which seeks to confirm whether single shareholder in control (SSC) firms perform significantly different from those controlled by multiple shareholders (MSC) are contained in Table 4 below.

Table 4. Comparison of Firm Performance: SSC versus MSC Firms

<table>
<thead>
<tr>
<th>Firm Performance</th>
<th>Mean Rank (SSC)</th>
<th>Mean Rank (MSC)</th>
<th>Mean Rank Difference</th>
<th>Z-statistics For Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS</td>
<td>41.08</td>
<td>34.74</td>
<td>6.34</td>
<td>-1.22</td>
</tr>
<tr>
<td>EPS</td>
<td>40.96</td>
<td>34.81</td>
<td>6.15</td>
<td>-1.19</td>
</tr>
<tr>
<td>ROA</td>
<td>41.15</td>
<td>34.70</td>
<td>6.45</td>
<td>-1.24</td>
</tr>
</tbody>
</table>

*Significant at 10% level; **Significant at 5% level; ***Significant at 1% level.

The results suggest that all the mean values of firms with single controlling shareholders (SSC) are higher than those with multiple controlling shareholders (MSC). However, the mean rank differences are not statistically significant, even at 10% level, to warrant the rejection of H02. The a priori expectation, however, is that a single controlling shareholder in a firm overcomes the
free-rider problem and also curbs tunneling (see Barako and Tower, 2006; Johnson et al., 2000). A single controlling shareholder structure also supports the goal congruence argument advanced by Jensen and Meckling (1976). Accordingly, a firm with a single controlling shareholder is expected to perform better than one with multiple controlling shareholders. A possible explanation why this study does not find evidence to support a significant higher performance for single shareholder control firms in Nigeria may lie in the propensity of such shareholders to expropriate wealth for personal aggrandizement at the detriment of pursuing strategies that would enhance overall company performance (see Dockery, Hebert and Taylor, 2000; Javed and Iqbal, 2007).

5. Conclusions and recommendations

This study sought to ascertain whether alternative corporate ownership and control structures could achieve higher firm performance. This broad objective is demarcated into two subsidiary objectives. First is the desire to ascertain whether or not foreign ownership and control of Nigerian firms promote higher firm performance over their indigenous counterparts. The second object is to ascertain whether single shareholder control firms post higher performance over multiple shareholder control firms. Both objects have been inspired by Nigeria’s changing, and sometimes conflicting, policies over the ownership structure of the SOEs since independence in 1960. In particular, the adoption of the core investor mode of corporate ownership in the current privatization programme encourages both foreign ownership of, and single shareholder control of Nigerian firms.

The findings of this study can be compactly summarized as follows: (1) the performance of firms with foreign ownership and control is significantly higher than those with indigenous or domestic ownership and control. (2) Single shareholder control firms do not post significant higher performance over those controlled by two or more shareholders. These results have two policy implications for corporate Nigeria. First, given that foreign ownership and control of Nigerian firms promote higher firm performance, policy initiatives that encourage foreign ownership and control of Nigerian firms or foreign direct investments in the country should be pursued. Second, lack of evidence that single shareholder control firms perform better than those controlled by multiple shareholders, the core investor mode of corporate ownership which rests control in the hands of single shareholders should be reconsidered in Nigeria’s privatization strategy. The paper, however, calls for further investigation into the phenomenon of interest, since the impact of corporate ownership and control on firm performance is very important, far too important for corporate Nigeria, to be left to the conclusions of one or a few studies. Such studies should include the banking sector that is the engine of economic growth.

References


