

Concentrated Share Ownership and Financial Performance of Listed Companies in Ghana

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Abstract

Investment on the Ghana Stock Exchange has attracted keen interest from within and outside the country. Foreign investors have grown substantially in developing markets over the last two decades, parallel with the increase in their impact. These investors seek to own large proportions of equities as well as acquire State Owned Enterprises, and as a result they have become influential on the performance of companies in which they invest. Previous studies show no conclusive evidence on the direction of the role of share ownership on the financial performance of firms especially in developing economies. This research attempts to examine the effect of share ownership and investors' involvement on performance of investee companies. The study was conducted using panel data regression analysis and Performance was measured by using Tobin's Q and Return on Asset (RoA). Significant statistical relationships were found in this research. The results of the research suggest that share ownership on the Ghana Stock Exchange is heavily concentrated in the hands of Ghanaians and that ownership concentration, institutional and insider ownership precipitate higher firm financial performance. There is the need to encourage concentrated ownership structure. Also, investments by insider and institutional ownerships should be promoted in order to ensure proper monitoring, reduced agency costs and improve performance.

Keywords: ownership structure, concentration, financial performance, Ghana stock exchange

1. Introduction

Theoretically, was argued that the ownership concentration may improve performance by decreasing monitoring costs or decline due to the possibility that large shareholders use their control rights to monitor activities of the agents (Shleifer and Vishny, 1986). Stiglitz (1999) also asserted that when shareholders are dispersed, monitoring of managers becomes a public good and hence is under supplied which affect financial performance of the firm negatively. As a result, all owners have little control over managers, which may pursue goals different from maximizing financial performance of the company. This is likely to impair company financial performance.

Indeed several authors asserted that ownership concentration act as monitoring mechanism, endowed with incentives to reconcile the interests of shareholders and consequently a determinant in the value maximization for example, Jensen (1986), Stiglitz (1985) and Shleifer and Vishny (1986), They predict the possibility of concentrating ownership in the hands of a limited number of shareholders as a mechanism to monitor the activities of the agent and ensure that the interest of the principal is projected. Furthermore, concentrated ownership may reduce managerial incentives to consume perquisites, expropriate shareholders' wealth as a result of strict monitoring by the shareholders (Meckling, 1976). Thus concentrated share ownership would improve financial performance of the firm

Thus Shareholders attempt to concentrate their share holding in order to have control and ensure that their interest is served to avoid most of problem which may emerge because of the conflict of interest between principal and agent. On the other hands Fama and Jensen (1983) argued that dispersed share ownership may rather have adverse (entrenchment) effects in reconciling agency conflicts. This may lead to an increase in managerial opportunism; implying conflict of interest on the part of corporations' agents Thus , diversify ownership may prove necessary for management to have the capacity to handle complex organisational structures, diversify risk among shareholders and obtain large enough funds to acquire specific assets.

Indeed empirical studies by number of researchers on performance implications of ownership concentration have produced mixed results. For example some empirical studies found that concentrated share ownership affects firm's performance as the ownership concentration motivates innovation that leads to value maximization (Hill and Snell,1989). Shleifer and Vishny (1986) posited that equity concentration is more likely to have a positive effect on firm performance in situations where control by large equity holders may act as a substitute for legal protection in countries with weak investor protection and less developed stock markets where they also classify Continental Europe.

Countering this, Fama (1983); Morck et al.(1988) point to the possibility of *negative entrenchment effects* on firm performance associated with high managerial ownership stakes. For example in areas where legal protection of minority ownership is absent, concentrated ownership is likely to be accompanied by weak and non-transparent disclosures with negative implication for firm performance. A study by Mayer, and Rossi (2007,) report that "*one of the best established stylized facts about corporate ownership is that ownership of large listed companies is dispersed . . . in the U.S. and concentrated in most other countries.*" Dispersion of ownership arises when shares are distributed among numerous petty stock holders. However if there is an effective mechanism for legal protection of minority ownership rights, the problem of ownership dispersion may not be great. Thus the debate on the effect of share ownership concentration and firm's financial performance is inconclusive.

Apart from the results being inconclusive most of the research on ownership concentration and performance has been conducted in developed countries (Bergström, and Rydqvist. 1990; Bebchuk,,1999; Allen, and Phillips, 2000). However, there is an increasing awareness that the theories developed in developed countries based on research evidence collected on developed countries may have limited applicability to emerging market.

This attributed to the vast differences in political, socio-cultural and business contexts between the developed and developing countries. For example in a recent study on corporate governance by Zeitun and Gary (2007) suggest that social, economic and cultural factors of a country affect corporate ownership structure which in turn impacts on a firm's performance. This, present an important opportunity for research into ownership concentration and performance of firms listed on Ghana Stock Exchange. Thus the main objective of this paper is to analyse the relationship between share concentration and performance of listed firms on the Ghana Stock Exchange.

2. Literature

2.1 The fundamental discourse between Ownership structure and Firm Performance

Developed economies are largely characterized by the existence of a widely held ownership structure, highly liquid stock markets due to good investor protection and control of companies by professional managers on behalf of scattered shareholders (Bhasa2004). In these economies, corporate management has more power to make decisions, and these decisions may frequently be in their own interest, which may give rise to an agency cost. Agency theory argues that ownership concentration may improve firm performance by decreasing agency costs (Shleifer and Vishny, 1986). Jensen and Meckling (1976) claim that agency costs consist of three different components: monitoring costs, bonding costs and residual loss. Monitoring costs are the control costs incurred by the principal to mitigate the deceitful behavior of the manager. Bonding costs are incurred to ensure that the manager takes decisions beneficial to the principal. Residual loss is a political cost that occurs when both the above kind of costs fails to control the divergent behavior of the manager.

In addition, Jensen and Meckling (1976) showed formally how share identity can influence the agency cost and value of the firm. Since then, the relationship between ownership concentration and firm performance has attracted special attention. Agency theory perspective and empirical literature thereof

usually considers share identity specially insider ownership as the main corporate mechanism that affects firm value. However, empirical evidence regarding the relationship between ownership concentration and the financial performance or firm's value has shown mix results (e.g., Agrawal and Knoeber, 1996; Demsetz and Villalonga, 2001; Thomsen and pedersen 2006). Counteracting the convergence-of Interest Hypothesis, Fama and Jensen (1983) point out that a rise in the managerial share-ownership stakes may have adverse (entrenchment) effects in reconciling agency conflicts and these can lead to an increase in managerial opportunism; implying conflict of interest on the part of corporations' agents and hence hurting overall performance of the corporation. Furthering this proposition Jensen and Ruback, (1983) argued that the principal and the agent (agency cost theory) are never exactly the same, and thus the agent, who is the decision-making part, tends always to pursue his own interests instead of those of the principal. It means that the agent will always tend to spend the free cash flow available to fulfil his need for self-aggrandisement and prestige instead of returning it to shareholders. Hence, the main problem faced by shareholders is to ensure that managers will return excess cash flow to them (e.g. through dividend payouts), instead of having it invested in unprofitable projects (Jensen, 1986). If the principal wants to make sure that the agent acts in his interests he must undertake some *Agency Costs* (e.g. the cost of monitoring managers). The more the principals want to control manager decisions the higher their agency costs will be.

The agency theory hypothesis that ownership concentration and share identity may improve firm performance by decreasing agency costs. This was first challenged by Demsetz (1983), who argues that the ownership structure of a corporation should be thought of as an endogenous outcome of decisions that reflect the influence of shareholders on the management of the firm which may influence agency to improve value of the firm. According to Demsetz (1983), there should be no systematic relation between variations in ownership structure and variations in firm performance. Demsetz and Lehn (1985) used profit as a measure of firm's performance on a proportion of shares owned by the top five percent shareholders to evaluate the relationship between ownership concentration and firms' performance. They found no evidence of any relation between the profit rate and the ownership concentration.

2.2. Empirical studies on share ownership and firm performance

Shleifer and Vishny (1986) investigated the important role played by concentrated ownership of shares, by examining the relationship between firm's share price and ownership concentration. They found positive relationship between ownership concentration and firm value. In a related study, Morck et al. (1988) re-examined the relation between corporate ownership structure and firms' performance. They used Tobin's q as a measure of firms' performance. Their results revealed positive relationship between ownership concentration and Tobin's q.

Wu and Cui (2002) found that there is a positive relation between ownership concentration and Return on Assets (ROA) and Return on Equity (ROE) which are measures of accounting profits. However they reported a negative relationship between ownership concentration and market value of the firms which was measured as share price per earnings ratio (P/E) and market price to book value ratio (M/B). Studies on ownership structure and performance in developed countries firms substantially rely on the legal protection of investors consequently the ownership structure of these firms is found to be dispersed. In other areas where there is less reliance on elaborate legal protections, share ownership tend to be concentrated in the hands of large investors and banks, for example Europe and Japan. In developing countries where legal protection is weaker, share ownership is typically heavily concentrated in hands of families.

In emerging economies, where firm ownership is highly concentrated with family ownership, a positive and significant effect of ownership concentration on firm performance is proposed. Zeitun and Gary (2007) examined the relationship of ownership concentration, and firm performance both in term of accounting measures and market measures using a sample of public listed companies in the Jordan stock exchange, and found that there is a significant relation between ownership concentration and the accounting performance measures. Abor and Biekpe (2007) investigated whether the effects of corporate governance and ownership structure on the performance of SME's in Ghana. They found that board size, board composition, CEO duality, inside ownership and family ownership have significant positive impacts on profitability.

However, interaction of these economic characteristics with governance and corporate structures and performance implications of these factors have not been examined extensively even though the empirical studies on ownership structure on firms' performance, mostly from developed countries, have provided divergent evidence. These contextual differences across countries therefore, create another dimension to the ownership structure and performance issue. Because of the contextual differences across countries, different relations between ownership and firm value could be expected. The problem is compounded where shareholder cannot rely on only the market regulators to allocate assets to the most productive firms Hashi (1997). It may be advantageous to employ several measures rather than select a single one relying on subjective assumptions about their appropriateness. For instance Kuznetsov and Muravyev (2001) employed labour productivity, profitability, and Tobin's q as proxies for performance.

2.3. Determinants of firm Performance

Performance is a difficult concept, in terms of both definition and measurement. It has been defined as the result of activity, and the appropriate measure selected to assess corporate performance is considered to depend on the type of organization to be evaluated, and the objectives to be achieved through that evaluation Hunger et al (1997). Researchers have offered a variety of models for analyzing corporate performance. However, little consensus has emerged on what constitutes a valid set of performance criteria Cameron, (1981).

Lewin et al (1986) for instance, have suggested that studies on corporate performance should include multiple criteria analysis. Thus different models or patterns of relationship between corporate performance and its determinants should be used to demonstrate the various sets of relationships between the dependent and the independent variables in the estimated models (Schmidt,1993). Nickell et al.(1997), have identified the following factors as the drivers of performance, namely firm size, competition, leverage, corporate control, and corporate demographic issues

The effects of firm size on corporate performance have gained important attentions in the research of the firm. According to common intuition, the size of the firm has an important role in firm performance for many reasons. In a certain perspective of studies, size can be a proxy of firm resource. Since larger firms have more organizational resources, they give larger firms the better equipment to achieve their goals Penrose, (1959). Sizes can also proxy for the probability of default and the volatility of firm assets. It assumes that larger firms are more difficult to liquidate.

Majumdar (1997) also point out that larger firms generate superior performance relative to smaller firms. A firm's demographic characteristic such as number of outlets and the age or life stage of the firm as well as board size are seen by some researchers as driver of corporate performance. If there are economies of scale, a larger number of outlets mean a better performance, if not; more outlets lead to a worse performance. In a study on retail banks, Barnett *et al.* (1994) find single unit banks performing better. They argue that a firm's emphasis on market positioning retards organizational learning.

Again the age of a firm is said to have a consequence for performance. Firms have a cycle of growth and decline. Newly established firms generally have an enthusiastic and energetic crew, which should enhance performance. On the other hand young firms are confronted with start-up problems Cromie (1991). Older firms have overcome these problems, and can rely on experience and a network of existing suppliers and customers, which enhances efficiency. Birley (1990) find mature firms performing better.

3.0. Methodology

This study employed data on listed firms at the Ghana Stock Exchange over a period of ten years spanning from 1999 to 2008. The data were collected from different sources including audited accounts of the listed companies as well as from the fact book of the Ghana Stock Exchange. Panel data was developed and used for this study as it increases efficiency by combining time series and cross-section data.

To reveal the impact of ownership concentration on firm's performance, the estimation procedure used by Kuznetsov and Muravyev (2001) was adopted modified as:

$$Y_{it} = \alpha_i + \beta_1 X_{it} + e_{it} \quad (1)$$

Where

- Y_{it} is performance measure,
- α_i = refers to time-invariant firm-specific effects
- X_{it} are the independent (ownership concentration and control) variables
- β_1 coefficients of ownership and control variables respectively
- e_{it} is a random disturbance.

Based on the above general model the impact of ownership concentration on firm performance was evaluated using the model outlined below.

$$\text{PERF}_{it} = \alpha_0 + \beta_1 \text{TOP5}_{it} + \beta_2 \text{TOP5SQ}_{it} + \beta_3 \text{DEBT}_{it} + \beta_4 \text{FIRMSIZE}_{it} + \beta_5 \text{BODSIZE}_{it} + \beta_6 \text{BODSIZESQ}_{it} + \beta_7 \text{AGE}_{it} + \beta_8 \text{AGESQ}_{it} + \epsilon_{it} \quad (2)$$

Where

- PERF_{it} , is the measure of the performance of the firms
- α_i is a constant term that is the intercept of the regression equation
- β is the coefficient of the variables and β_i represents the sensitivity of a company i 's performance to changes in the movements of the various variables
- TOP5_{it} is the ownership concentration of the i th firm
- TOP5SQ_{it} is the square of the ownership concentration of the i th firm
- FIRMSIZE_{it} is the size of the i th firm
- BODSIZE_{it} is the board size of the i th firm
- BODSIZESQ_{it} is the square of board size of the i th firm
- AGE is the length of existence – age- of the i th firm
- AGESQ_{it} is the square of the age of the i th firm
- ϵ_{it} is the error term
- The subscripts and i and t represent listed firm and time respectively.

In this study two performance measures were considered, namely return on assets and Tobin's q. This choice is motivated by the assumption that these indicators may have different interpretations regarding firm's performance. Return on assets is calculated by dividing income after tax by total assets. Tobin's q is the ratio of market values of equity to the book value equity. Market capitalization is used as proxy for the market value of equity and is obtained from the GSE's trading list from 1999 to 2008.

4.0. Results and discussion

The descriptive statistics of the performance indicators and level of share ownership concentration as well as control variables are shown in Table 1. The average Tobin's Q for the period under study is 0.921453 with a high standard deviation of 1.552668 (155.27%). The results show that on the average firms listed on the GSE achieved a Tobin's q of 92.15% which is quite high. However, the high deviation of 155.27% suggests that very few firms were able to achieve the average Tobin's q. on the average, about 0.7644432 (76.44%) of shares of listed companies on GSE is in the hands of Top 5 shareholders. This depicts that firms are concentrated and the result is fairly representative of the entire observations because its dispersion is about 0.1289022 (12.89%). A greater percentage of the assets of listed companies are financed with debt even though the deviation is very high (Mean; 0.654534 and Standard deviation; 0.7297543). The average of board size is 9.260337 with a deviation of 2.545818. Lastly, the average of the squared board size listed firms is 92.260337 with a very high variation of 53.0221. (Note 1)

Augmented Dickey-Fuller unit-root test and sign test was conducted to test for the stationary and presence of multicollinearity respectively. The results of these tests showed that the variables were stationary and multicollinearity is not a serious issue. Furthermore, the Hausman specification test was conducted and the result suggests that the firm fixed effects approach was the appropriate test to be employed for the data analysis. The value of the overall R-square from the regression equation involving Tobin's q was 0.7540 representing 75.4%. This means that 75% of the dependent variable is explained by the explanatory variables. The model is also fit for the regression since the P-value (Prob. >F = 0.0000) is also statistically significant. On the other hand the overall R-square from the regression equation with Return on Assets was 0.3646, that is, the explanatory variables explains 36.46% if a change in the dependent variable. The P-value (Prob. > F=0.0000) is also highly significant. The regression results are presented in table 2 below (Note 2)

The results indicate that ownership concentration is positively related to Tobin's q. on the other hand the square of ownership concentration has a negative relationship with Tobin's Q. However, they are jointly insignificant. Similarly, ownership concentration is positively related to Return on Assets while

its square variable has a negative relation. Here both concentration and the square of concentration are highly significant at 1% level. Our results are in line with theory that concentrated ownership improves performance. This may be attributed to better monitoring of managers to restrain their opportunities to pursue their own interests than smaller and dispersed shareholders. The findings are also consistent with empirical evidence from the studies of Wu and Cui (2001), Kuznetsov and Muravyev (2001), Djankov and Cleassens (1999), Pohl *et al.* (1997), Barberies *et al.* (1996) and Earle and Estrin (1996) who in their various studies find positive relation between ownership concentration and firm's financial performance. The negative relationship between the square of concentration and performance suggests that concentration has a non linear relation with performance. Performance increases with concentration, reaches the optimum level beyond which any increase in concentration results in a decrease in performance. Besides ownership concentration there may be other hidden factors that may affect performance. Contrary to expectation firm size is negatively related to Tobin's q and return on assets. The results are statistically significant at 1% and 5% level respectively. Theoretically it is believed that larger firms improve performance since they have huge capital to acquire high technology equipment and employ highly skilled labour to improve performance. Our result is consistent with empirical findings by Haines (1970), Marshal (1961) and Marcus (1969) who found a negative correlation between firm size and profitability.

On the other hand the results show that age is positively related to RoA and Tobin's q. However, they are both insignificant. The results suggest that age has a positive impact on performance. It is argued that older firms may have built up reputation over the years and acquired considerable experiences to enable them compete favourably in the market. Over time, firms discover what they are good at and learn to be more efficient (Arrow, 1962; Jovanovic, 1982; Ericson and Pakes, 1995). They specialize and find ways to standardize coordinate and speed up their production processes. As well as to reduce costs and improve quality. On the other hand the square of age is negatively related to return on assets and Tobin's q and in both cases they are also found to be insignificant. This suggests that old age may make knowledge, abilities and skills obsolete and induce organizational decay (Agarwal and Gort, 1996, 2002). Therefore performance may get to the optimum and then decline.

The findings revealed that debt positively related to return on assets and Tobin's q. It is however, that of Tobin's q is highly significant at 1% while that of return on assets is insignificant. The findings suggest that debt has a positive impact on performance. This is in line with theory that the introduction of debt in the capital structure of the firm improves performance since it exerts pressure on management to work harder to settle their obligation. The finding is consistent with our expectation and that of empirical evidence by Michealas *et al.* (1999). Lastly, while board size is positively related to Tobin's q, its square has a negative relation. The equation with return on assets however shows that both board size and its square are negatively related. However, the two equations reveal that they are all insignificant.

5.0. Concluding remarks

Generally on average, firms listed on the Ghana Stock Exchange achieved 92% ratio of market value to book value (Tobin's q). Also about 76% of the share traded on the exchange is held by Top 5% shareholders. Large proportion of asset of these firms are financed by debt and board size is quite high with average of 9. The regression result revealed that ownership concentration has significant positive effect on performance (return on asset). Thus concentrated ownership improves return on asset however ownership concentration does not offer significant increase in market value of the firms. In the context of the above findings and conclusion corporate ownership structure of companies should be evaluated and monitored. In particular, concentrated ownership structure should be encouraged.

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Note 1

Table 1: Descriptive Statistics of performance measures and level of ownership concentration

Variables	Obs	Mean	Std. Dev.	Min.	Max.
Logroa	219	-2.8427	0.9094	-6.6748	-0.1528
Logtobin's q	259	0.9215	1.5527	-2.4010	8.5675
TOP5%	264	0.7644	0.1289	0.3614	0.9836
TOP5%SQ	264	0.6009	0.1862	0.1306	0.9675
Firm size	264	6.4347	1.4519	2.9498	10.1799
Age	264	32.8485	14.0420	5.0000	64.0000
Agesq	264	1275.4550	944.7545	25.0000	4096.0000
Bodsize	264	9.2604	2.5458	4.0000	19.0000
BodsizeSq	264	92.1818	53.0221	16.0000	361.0000

Source: Ghana stock exchange field data (1999-2008)

Note 2:

Table 2: Regression Model results: concentration and firm performance

Variables	Logtobin's q			Logroa		
	Coef.	t-statistic	Prob.	Coef.	t-statistic	Prob.
Top5	4.4887	1.1900	0.2350	23.4547	5.0600	0.0000
Top5sq	-2.1550	-0.8300	0.4060	-15.8736	-5.000	0.0000
Firmsize	-0.1144	-3.2200	0.0010	-0.1074	-2.4500	0.0150
Age	0.0029	0.1700	0.8620	0.0209	0.9800	0.3290
Agesq	-0.0003	-1.1600	0.2470	-0.0003	-0.8100	0.4220
Debt	1.7028	5.9400	0.0000	0.0450	0.5900	0.5570
Bodsize	0.0426	0.4100	0.6820	-0.0220	-0.1600	0.8750
BodsizeSq	0.0010	-0.1900	0.8470	-0.0015	-0.0230	0.8210
_cons	-1.9645	-1.2800	0.2010	-10.9583	-6.0200	0.0000
R-sq	0.7540			0.3646		
F (.)	59.0100			42.0001		
Prob.>f	0.0000			0.0000		

Source: Ghana Stock exchange (1999-2008)

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