The Effect of Ownership Structure and Corporate Governance on Capital Structure of Ghanaian Listed Manufacturing Companies

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Abstract
The study explores the relationship between ownership structure and corporate governance on capital structure of some listed manufacturing companies in Ghana Stock Exchange. This study was motivated by the fact that although the concept of corporate governance has been researched on in literature, no clear evidence exist of its study in Ghana relating to ownership structure on leverage. The study covers the period 2007 to 2011 for which firm level data for eight (8) randomly selected manufacturing listed companies from Ghana Stock Exchange has been examined by using descriptive, correlation and multivariate regression analysis. Corporate governance variables employed are board size, board composition, and CEO/Chair duality. Impact of ownership has also been examined by using managerial and institutional shareholding. Similarly influence of controlled variables like firm size and profitability on firms’ financing mechanism is also investigated. Results reveal that Board Size, Board Composition, Institutional and Managerial shareholding is significantly correlated with leverage ratio positively, whereas it is negatively influenced by CEO/Chair duality. However, firm size and return on assets are found to have a positive and negative significant effect on capital structure respectively. Therefore results suggest that corporate governance and ownership structure play important role in firm’s capital mix determination.

Key words
Corporate governance, Capital structure, Return on asset, Ownership structure, Managerial shareholding

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1. Introduction

Corporate governance (CG) has become one of the most discussed topics in business administration due to balance sheet manipulations or even collapse of some public corporations like Enron, WorldCom, etc. Corporate Governance enlarged up prevailing debate on shareholder value management (Arnsfeld & Growe, 2006). It deals with management and the supervisory system of companies and represents in fact the legal and factual regulation framework for the interaction of management, board and stakeholders (Bassen & Zöllner, 2007).

There is an on-going reform process on CG after the financial crisis. The enormous consequences, namely catastrophic losses of financial firms which almost led to a collapse of the financial system followed by the deep global recession emphasises the importance of CG (Lang & Jagtiani, 2010).

Sound corporate governance principles are the foundation upon which investors and lenders trust are built. Good corporate governance practices may have significant influence on the strategic decisions of a company, example, external financing, cost of financing, etc that are taken at board level. Therefore corporate governance variables like size of board, composition of board, board skills and Chief Executive Officer (CEO)/Chair duality may have direct impact on capital structure or leverage decisions.

According to modern corporate finance theories, agency cost is one of the determinants of capital structure whereas corporate governance is structured to alleviate agency issues. Hence corporate governance and capital structure are linked through their association with agency costs. Corporate governance has been a growing area of management research. A comprehensive review of literature reveals that empirical work is mostly focused on the impact of corporate governance on firm’s performance or examines the influence of ownership structure on firm value (Claessens, 2002).
However, relationship between corporate governance and capital structure has not been fully explored. According to Wen, Rwegasira and Bilderbeek (2002) and Abor (2007) only few studies have discussed the influence of corporate governance on the capital structure decisions of firms for developed and emerging markets, such as United States, United Kingdom, Eastern Europe or Asia. Therefore, this project intends to fill this gap by conducting a research on the effect of corporate governance and ownership structure on firms’ capital structure decision of manufacturing companies listed on the Ghana Stock Exchange (GSE) during the period of 2007-2011.

1.1. Objectives of the study

- To determine the relationship between corporate governance provisions and capital structure of listed manufacturing companies
- To identify the effect of ownership structure on the leverage of listed manufacturing companies

2. Literature Review

2.1. Definition of Corporate Governance

According to Claessens (2003), definitions of corporate governance vary widely. He categorizes the definitions into two. He says the first set of definition concerns itself with a set of behavioral patterns: such as performance, efficiency, growth, financial structure, and treatment of shareholders and other stakeholders. While the second set concerns itself with the normative framework: that is, the rules under which firms are operating—with the rules coming from such sources as the legal system, the judicial system, financial markets, and factor (labor) markets.

According to Shleifer and Vishny (1997) “Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment” (1997, p. 737). Claessens (2003) expanded this definition of corporate governance as being concerned with the resolution of collective action problems among dispersed investors and the reconciliation of conflicts of interest between various corporate claimholders.

The Cadbury Committee defines corporate governance as “the system by which companies are directed and controlled” (Cadbury Committee, 1992, introduction). The Cadbury Committee’s definition is close to later definition that defines corporate governance as a set of mechanisms through which firms operate when ownership is separated from management. It is furthered as a mechanism through which the boards and directors are able to direct, monitor and supervise the conduct and operation of the corporate and its management in a manner that ensures appropriate levels of authority, accountability, stewardship, leadership, direction and control.

According to Claessens (2003), the major reason why corporate governance has received so much attention is the proliferation of scandals and crises as they are just manifestations of a number of structural reasons. Other reasons given by him as to why corporate governance has gained attention are: privatization of markets, technological progress, mobilization of capital from other sources other than the owners, and lastly, international financial integration and trade and investment flows.

Bansal in 2005 asserted that some of the variables of corporate governance are board size, board composition, CEO/chair duality. Again, Mohamad, Hartini and Noriza (2004 cited in Saad, 2010) found that the level of corporate compliance is consistently high for all corporate governance mechanisms or practices concerning BOD that include: BOD composition; BOD responsibilities i.e. division of power between the Chairman and the CEO; BOD meeting; board committees; remuneration of directors; and (iv) BOD training which form the basis for elements of good corporate governance in organizations.

2.2. Ownership Structure

Bansal (2005), indicated that the comity of investors and shareholders (owners) is generally made up of individuals, groups and institutions whose interests, goals, investment horizons and capabilities may vary considerably. As general shareholders, they have the right and capacity to influence company’s fundamental issues including election of directors, amendments in company’s organic documents, approval of extraordinary transactions, modifications in company’s internal status and appointment of auditors.
Jensen and Meckling (1976) classify ownership structure in terms of capital contributions, comprising inside investors (managers), and outside investors (debt holder and equity holder). Abel and Okafor (2010) defines ownership structure as the percentage of share held by managers (managerial ownership), institutions (institutional ownership), government (state ownership), foreign investors (foreign ownership), family (family ownership) and etc.

Jensen (1986 cited in Said, 2013) points to the preference of managers to increase firm size through excessive investment for private benefit. To Jensen, this brings to fall the disciplinary role of debt which limits the opportunistic behavior of managers. Said (2013) posits that the choice of the leverage itself raises an agency problem between shareholders and managers. This led Zwiebel (1996) to suggest that free cash flow left in the business requires disciplinary systems that lead managers to use more leverage. The decision of funding depends on firm’s ownership structure since decisions are taken by those that run the affairs of the company. Said (2013) posited that given these arguments, debt is associated with the ownership structure.

2.3. Capital Structure

Capital structure, according to Margaritis and Psillaki (2010) refers to mix of debt and equity capital maintained by a firm with different sources of funds, particularly to the long-term funds/capitals. To them, it is a framework, which shows how equity and debt is used for financing firms operations. They argue that it is important to find an optimal capital structure or optimal combination of debt and equity since capital structure maximizes the value of the firm. They therefore claim that, the main purpose of capital structure is to know the optimal mix of debt and equity.

Optimal capital structure is the combination of debt and equity that leads to the maximization of the value of the firm. Optimal capital structure minimizes the firm’s overall cost of capital and maximizes the value of the firm. According to Weston and Brigham (1992), the optimal capital is the one that maximizes the market value of the firm’s outstanding shares. Graham and Harvey (2001) suggest that firms need to identify their optimal capital structure and endeavour to reach and keep it.

There exist asymmetric information theories that there is a certain pecking order or hierarchy of firm preferences with respect to the financing of their investments. This “pecking order” theory suggests that firms will initially rely on internally generated funds, i.e., undistributed earnings, where there is no existence of information asymmetry; they will then turn to debt if additional funds are needed, and finally they will issue equity to cover any remaining capital requirements (Myers, 1984).

The use of debt in the capital structure of the firm leads to agency costs. Jensen and Meckling in 1976 came out with the agency cost theory, which they subsequently defined the agency relationship as: ”A contract under which one or more person (the principal) engages another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent”.

According to the agency theory, the way of professional management style, which is the separation of ownership and management may result agency conflicts that is caused by insufficient work effort of manager, indulging in perquisites, choosing inputs or outputs according to one’s preferences. Due to these reasons, a firm may fail to maximize its value. Conversely, with these reasons one can maximize his/her own wealth and utility (Berger & Bonaccorsidipatti, 2006). On the other hand, the conflict between debt-holders (creditors) and shareholders is due to moral hazard. Agency theory suggests that information asymmetry and moral hazard will be greater for smaller firms (Chittenden & Hutchinson, 1996). Conflicts between shareholders and creditors may arise because they have different claims on the firm.

2.4. Empirical Literature

2.4.1. Ownership Structure and Capital Structure

Bodaghi and Ahmadpour (2010) study revealed that institutional ownership has positive relationship with capital structure which is consistent with corporate governance philosophy. Managerial ownership significantly affects capital structure represented by debt to equity ratio according to Arshad and Safdar (2009) study conducted in Pakistan. Also, Short, Keasey and Duxbury (2002) examine the influence of ownership structure on the financial structure of UK firms. Their results revealed that there exists positive relationship between management ownership and leverage ratio whereas negative relationship was
observed between large external equity holder’s ownership and financial leverage. They however observed that, the relationship between management ownership and leverage ratio is not significant in the presence of a large outside equity holders.

Another study by Brailsford in 2002 found that the managerial ownership and leverage may be related in nonlinear fashion. He provides evidence about the presence of negative relationship among managerial equity holding and gearing levels. He discovers that low level ownership by managers leads to low level of agency conflicts and results in higher level of debt.

2.4.2. Board Size and Capital Structure

The board of directors is the highest body of a company that is responsible for managing the firm and its operation. It plays vital role in strategic decisions regarding financial mix. In Bodaghi and Ahmadpour (2010) examination of the relationship between corporate governance, ownership structure and capital structure by using multivariate regression analysis, it was revealed that board size is significantly related to capital structure. The evidence regarding direction of relationship between board size and capital structure was mixed.

Again, Abor and Biekpe (2007) examined the relationship between corporate governance and capital structure decisions of Ghanaian Small and Medium Enterprises (SMEs) by using multivariate regression analysis. The results provide evidence about negative relationship between board size and leverage ratios. It was concluded that SMEs with larger boards generally have low level of gearing.

On the other hand, Wen, Rwegasira and Bilderbeek (2002) found positive relationship between board size and capital structure. He argues that large boards follow a policy of higher levels of gearing to enhance firm value especially when these are entrenched due to greater monitoring by regulatory authorities. Also, he argued that larger board may find difficulty in arriving at a consensus in decision which can ultimately affect the quality of corporate governance and will translate into higher financial leverage levels.

Anderson, Mansi and Reeb (2004) revealed that the cost of debt is generally lower for larger boards because lenders think that these companies are being monitored more effectively by a diversified portfolio of experts.

2.4.3. Non executive directors and capital structure

Non executive directors are cornerstone of modern corporate governance. The relationship between presence of non executive directors and capital structure has been explored by few researchers but evidence in this regard is mixed. Some representative work is reviewed below.

Lipton and Llorsch (1992), accentuate that non executive directors plays a pivotal role in enhancing the capability of a company to get recognition from external stakeholders. This leads to reduction in uncertainty about company and enhance ability of the company to raise funds. They found that higher level of representation of non executive directors on board leads to higher gearing levels.

Abor and Biekpe (2007) provided evidence that Ghanaian SMEs that have more outside directors and a diversified set of skills at board generally have higher level of gearing.

On the other hand researchers like Wen (2002) provides evidence about the existence of significantly negative relationship between gearing level and representation of non executive directors on the board. The possible reason is that non executive directors monitor the managers more efficiently and effectively so managers are forced to seek lower gearing levels for achieving superior results.

2.4.4. CEO/Chair duality and Capital Structure

Another important feature of modern corporate governance is CEO/Chair duality. It indicates the corporate management where the CEO also serves as chairman of the board. This situation has direct impact on the financing decision of the company.

Decision management function encompasses the right to initiate and execute new proposals for the disbursement of the firm's resources while decision control function comprises of the right to approve and monitor those proposals. This separation is ensured through a set of internal checks and internal controls. This system facilitates the judicious utilization of firm’s resources. Therefore role of chief decision
management authority (CEO) should also be separated from role of chief decision control authority (chairman). Board of directors is the seat of premier level of decision control mechanism in the corporate structure so it must not be controlled by CEO. Presence of CEO/Chair duality signals the absence of separation of management and control decision and it ultimately leads to agency problems.

Fosberg (2004) revealed that firms with separate chairman and CEO employ the optimal amount of debt in their capital structures. He discovers that firms with separate CEO and chairman generally have higher financial leverage. However it is worth mentioning that this relationship is statistically insignificant. Abor and Biekpe (2007) also provide evidence about the presence of positive relationship between gearing levels and CEO duality.

3. Methodology of research

The study was a deductive based on an in-depth analysis on a cross sectional and time series pooled data from the audited annual reports of some listed manufacturing firms on the Ghana Stock Exchange. It was also a causal study because it sought to establish the effect of corporate governance and ownership structure on capital structure. Regression model by Arshad and Safdar (2009) was adopted in this study. It also employed quantitative and descriptive techniques.

Also, the population of the study was based on thirteen (13) listed manufacturing companies on the Ghana Stock Exchange out of which eight (8) were randomly sampled. These were African Champion Industries Limited, Aluworks Ghana Limited, Cocoa Processing Company, Pioneer Kitchenware Limited, PZ Cussons Ghana Limited, Ayrton Drugs Manufacturing Limited, Guinness Ghana Breweries Limited and Unilever Ghana limited. This is due to the time constraints and availability of data on the needed information of the listed firms.

Time series data was extracted from the financial statements of the listed manufacturing companies relating to the years 2007 to 2011 (recent five years). The financial data used in the study was acquired from the Ghana Stock Exchange (GSE) and the individual companies. Data on corporate governance practices and capital structure were collected from secondary sources. The secondary data for this study were sourced published financial statements of the eight (8) listed manufacturing companies. Since all listed companies are required by law to submit their audited financial statements to the Ghana stock exchange at the end of every year it was a bit easier to get the audited annual reports.

The study analyzed the financial and non-financial data in the form of correlation test, F-value and t-test to verify the statistical significance of each estimated coefficients. This made it reliable in determining the relationship between the dependent and independent variables. The descriptive process used in the study provides average indicators such as mean, median and standard deviation in testing validity and reliability of the data. Again, the study provided descriptive, correlation and multivariate regression analysis with the aid of Statistical Package for Social Science (SPSS) and Microsoft excel.

3.1. Design of the Variables: Operationalization and Measurement of Variables

The variables used to operationalised the constructs include board size (number of directors in the board), board composition (number of non executive directors), CEO/Chair Duality (if the positions of chairman and the CEO were held by single person or two separate persons), board committees (number of board appointed committees), Institutional shareholding and Shareholding of Board Members are used as measures of Corporate Governance. The leverage structure is measured as Debt to Equity ratio which is considered as proxies for capital structure in the study. Similarly, impact of control variables like Return on Assets and Firm Size on capital structure has also been studied.

3.2. Regression Model Specification

This study adopted multivariate regression analysis by Arshad and Safdar (2009) to help explore cross-sectional and time series data simultaneously.

The general form of the model is:

\[
LEV_i = \beta_0 + \beta_1 (\text{Log BZ})_i + \beta_2 (\% \text{NED})_i + \beta_3 (\% \text{INSTSH})_i + \beta_4 (\% \text{MANGSH})_i + \beta_5 (\text{ROA})_i + \beta_6 (\text{Log SZ})_i + \beta_7 (\text{DUALITY})_i + \epsilon_i
\] (1)

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Where:
LEV = Leverage (Total debt to equity)
BZ = Board size (Logarithm of total number of board members)
NED = Non Executive Directors (number of non-executive directors divided by total number of directors)
INSTSH = Institutional Shareholding (percentage as given shown in the annual report)
MANGSH = Managerial Shareholding (percentage as given shown in the annual report)
ROA = Return on Assets (company’s net earnings divided by its total assets)
SZ = Size of Firm (as logarithm of total assets)
DUALITY = CEO/Chair Duality (dummy variable, It is taken as 1 if CEO is chairman; otherwise it is taken as 0)
ε = Error Term
β₀ = Intercept of the equation
β = marginal effect of variable on debt to equity ratio

The study adopted this model on the basis that it has been used in similar studies in other countries such as Pakistan, Malaysia among others in international journal publications.

4. Findings and Discussion

Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>LEV</th>
<th>BZ</th>
<th>NED</th>
<th>INSTSH</th>
<th>MANGSH</th>
<th>SZ</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.730</td>
<td>0.903</td>
<td>0.760</td>
<td>80.354</td>
<td>3.257</td>
<td>7.536</td>
<td>0.004</td>
</tr>
<tr>
<td>Median</td>
<td>1.176</td>
<td>0.903</td>
<td>0.833</td>
<td>89.100</td>
<td>0.024</td>
<td>7.696</td>
<td>0.139</td>
</tr>
<tr>
<td>Standard Dev.</td>
<td>1.592</td>
<td>0.110</td>
<td>0.172</td>
<td>10.556</td>
<td>0.700</td>
<td>-0.068</td>
<td>0.227</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.822</td>
<td>-1.223</td>
<td>3.378</td>
<td>0.189</td>
<td>2.506</td>
<td>0.100</td>
<td>0.227</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.687</td>
<td>0.060</td>
<td>-1.861</td>
<td>-1.288</td>
<td>3.392</td>
<td>0.024</td>
<td>-0.327</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.084</td>
<td>0.699</td>
<td>0.143</td>
<td>40.720</td>
<td>0.002</td>
<td>6.119</td>
<td>0.188</td>
</tr>
<tr>
<td>Maximum</td>
<td>6.850</td>
<td>1.800</td>
<td>0.917</td>
<td>94.640</td>
<td>0.000</td>
<td>9.020</td>
<td>0.237</td>
</tr>
<tr>
<td>Count</td>
<td>40.000</td>
<td>40.000</td>
<td>40.000</td>
<td>40.000</td>
<td>40.000</td>
<td>40.000</td>
<td>40.000</td>
</tr>
<tr>
<td>Largest(1)</td>
<td>6.850</td>
<td>1.800</td>
<td>0.917</td>
<td>94.640</td>
<td>0.000</td>
<td>9.020</td>
<td>0.237</td>
</tr>
<tr>
<td>Smallest(1)</td>
<td>0.084</td>
<td>0.699</td>
<td>0.143</td>
<td>40.720</td>
<td>0.002</td>
<td>6.119</td>
<td>0.188</td>
</tr>
<tr>
<td>Confidence Level (95.0%)</td>
<td>0.509</td>
<td>0.035</td>
<td>0.055</td>
<td>5.512</td>
<td>3.376</td>
<td>0.224</td>
<td>0.044</td>
</tr>
</tbody>
</table>

The results of table 1 above reveal that the average size of board in Ghanaian listed manufacturing companies is 8.5 with largest board of 12 members and minimum board size of 5 members. Non-executive directors (NEDs) constitute 76% of boards which is a good representation which indicated the independency of NEDs.

Moreover, Managerial Ownership is approximately 3.26% which is fairly insignificant whereas Institutional shareholding or ownership is 80.35% representing a high ownership of institutional investment in the manufacturing companies listed in Ghana, with the remaining 16.39% widely spread among individual investors or shareholders.

Again, average rate of return on assets is 0.4% with average total debt to equity been 1.73 representing a fairly overall capital mix.

Table 2. Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>LEV</th>
<th>BZ</th>
<th>NED</th>
<th>INSTSH</th>
<th>MANGSH</th>
<th>SZ</th>
<th>ROA</th>
<th>Duality</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BZ</td>
<td>0.497</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NED</td>
<td>0.331</td>
<td>-0.133</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSTSH</td>
<td>0.281</td>
<td>0.246</td>
<td>-0.093</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANGSH</td>
<td>-0.300</td>
<td>-0.088</td>
<td>-0.107</td>
<td>-0.488</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SZ</td>
<td>0.292</td>
<td>0.588</td>
<td>-0.182</td>
<td>0.415</td>
<td>-0.222</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-0.468</td>
<td>0.114</td>
<td>-0.496</td>
<td>-0.054</td>
<td>0.384</td>
<td>0.402</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Duality</td>
<td>-0.050</td>
<td>0.130</td>
<td>0.170</td>
<td>-0.090</td>
<td>0.023</td>
<td>-0.015</td>
<td>-0.080</td>
<td>1.000</td>
</tr>
</tbody>
</table>
From Table 2 above, Profitability (ROA) is negatively correlated with total debt to equity ratio which is consistent with pecking order theory that firms use internally generated funds as first option to finance projects before resorting to debt. There is a positive relationship between leverage and the size of firm. This appears rational as larger firms have more assets for collateral and it is easier for them to negotiate better terms with lenders. It may also be piercing out here that, in Ghana, most commercial banks are very conservative in their lending policies. Prudential Regulations prescribed by Bank of Ghana make it extremely difficult for commercial banks to be adventurous in their lending policies. Hence, presence of a large assets base is necessary for any borrowing; be it long or short term.

Correlation analysis indicates that managerial holding is negatively correlated with total debt to equity ratio. This is quite consistent with other studies which argue that as managers’ shareholding in a company increases, they tend to bring down the size of firm’s debt to reduce the risk and costs of bankruptcy. Institutional shareholding is positively correlated with capital structure. This positive relationship is result of efficient monitoring and reduction of the agency cost and managerial opportunism. Temporal effect has also been tested but result is found insignificant for time dummies.

The size of board is found to be positively correlated with total debt to equity ratio indicating larger boards may exert pressure on managers to follow lower gearing levels and enhance firm performance as well as shareholders wealth maximization. An aspect of this observation is that larger companies have larger boards – and larger companies with larger assets base are more inclined to incur debt at favourable terms.

Relationship between NEDs and shareholding is negative which shows that concentration of ownership leads to reduce the presence of NEDs on boards. This results in establishment of stronger control on firms. Domination of a board by a close family and absence of a reasonable number of NEDs are the practices that are generally deemed against the spirit of good corporate governance. These practices adversely affect the performance of company but here as shown by the relationship between Return on Assets and managerial shareholding is positive due to majority of NEDs on board.

Table 3. Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Coefficients*</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t-value</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t-value</td>
<td>Sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-10.517</td>
<td>2.442</td>
<td>-4.307</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>5.597</td>
<td>2.019</td>
<td>.388</td>
<td>2.773</td>
<td>.009</td>
</tr>
<tr>
<td>Board Composition</td>
<td>1.544</td>
<td>1.196</td>
<td>.166</td>
<td>1.291</td>
<td>.206</td>
</tr>
<tr>
<td>Institutional Shareholdings</td>
<td>.007</td>
<td>.012</td>
<td>.081</td>
<td>.599</td>
<td>.554</td>
</tr>
<tr>
<td>Managerial Shareholdings</td>
<td>.013</td>
<td>.022</td>
<td>.085</td>
<td>.592</td>
<td>.558</td>
</tr>
<tr>
<td>Size of firm</td>
<td>.717</td>
<td>.396</td>
<td>.315</td>
<td>1.809</td>
<td>.080</td>
</tr>
<tr>
<td>Profitability</td>
<td>-6.706</td>
<td>1.890</td>
<td>-3.548</td>
<td>.104</td>
<td>.001</td>
</tr>
<tr>
<td>Duality</td>
<td>-0.104</td>
<td>0.013</td>
<td>-0.54</td>
<td>0.233</td>
<td>.024</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Leverage

Table 4. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.800a</td>
<td>.640</td>
<td>.574</td>
<td>1.039</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Profitability, Institutional Shareholdings, Board Size, Board Composition, Size of firm, Managerial Shareholdings
b. Dependent Variable: Leverage
The results of the regression analysis summarized in Table 4 shows that Corporate Governance Practices and ownership structure contributes significantly to Capital Structure and predicts 57.4% of the variation in leverage decision can be explained by this model.

**Multivariate Regression Analysis**

Table 3 above presents results of the multivariate regression analysis

\[
LEV_{it} = -10.517 + 5.597 (BZ) + 1.544 (NED) + 0.007 (INSTSH) + 0.013 (MANGSH) - 6.706 (ROA) + 0.717 (\log SZ) - 0.104 (DUALITY) + \epsilon_t
\]

The Multivariate regression analysis provides that a percentage increase in Profitability (ROA) leads to 6.71% decrease in leverage and this relationship is significant at $\alpha = 0.05$. Results have economic relationship and are in sequence with pecking order theory which assumes that profitable firms use internally generated fund for financing as first choice. The result is in line with Murinde, Agung and Mullineux (2004) observation that retentions are the principal source of finance. Thus firms with high profit rates, all things being equal, would maintain relatively lower debt ratios since they are able to generate such funds from internal sources.

Leverage decision (Debt to equity ratio) is significantly affected by Size of the firm and an increase in size increase the tendency of the firm to exercise the mode of debt financing by 0.717. Correlation analysis also indicates the presence of significant relationship between the two variables. It may be due to the fact that large firms have established their reputation as successful organization and have tangible assets on their balance sheet that can serve as collateral. Therefore, it is relatively easier for large firms to secure debt financing on favourable terms. This confirms the theory that larger firms are more diversified and hence have lower variance of earnings, making them able to tolerate high debt ratios (Lindblom, Sandahl & Sjogren 2011).

Regression analysis also provides evidence about the existence of significant positive relationship between size of board and total debt to equity ratio. This relationship is consistent with results of correlation analysis which is in line with Bodaghi and Ahmadpour (2010) findings of a significant relationship between capital structure and board size. It also confirms Wen (2002) findings of a positive relationship between board size and capital structure. He argues that large boards follow a policy of higher levels of gearing to enhance firm value especially when these are entrenched due to greater monitoring by regulatory authorities.

The Presence of NED on the board has significant impact on leverage. It may be due to fact that in large business NEDs are generally representatives of financial institutions, or hand-picked nominees of the controlling shareholders. This is consistent with Abor and Biekpe (2007) findings which provide evidence about the presence of positive relationship among gearing levels and board composition. Also Outside directors are viewed as a vehicle for disciplining, monitoring and, if necessary, for displacing operational management. For an independent board, majority of outside directors will be more logical (Bansal, 2005).

CEO/Chair duality has insignificant impact on debt to equity ratio which also substantiates the above justification. Both the correlation and regression analysis reveals a negative relationship to leverage decision. Fosberg (2004) finds that firms with separate chairman and CEO employ the optimal amount of debt in their capital structures. He discovers that firms with separate CEO and chairman generally have higher financial leverage. However it is worth mentioning that this relationship is statistically insignificant and is consistent with the findings.

Finally the multivariate regression reveals a positive relationship between capital structure represented by debt to equity ratio and both Institutional and Managerial ownership. On the basis of correlation, managerial and institutional shareholding indicates negative and positive relation to leverage respectively. The institutional results is in line Bansal (2005) theory that institutional shareholders are highly concerned about obtaining fair treatment from controlling shareholders and the management hence influencing leverage decisions.

The result of the managerial ownership confirms Short, Keasey and Duxbury (2002) observation of the influence of ownership structure on the financial structure of UK firms. Results reveal that there exist positive relationship between management ownership and leverage ratio.
5. Conclusions

Firm financing decision is one of most fundamental issues managers have to face. According to new theories, capital structure decisions can be affected by various factors, among which corporate governance and ownership structure constitutes important element.

This paper empirically examined the relationship between corporate governance, ownership structure and capital structure for Ghanaian listed manufacturing companies for the period 2007-2011 by using multivariate regression analysis.

Results reveal that Board Size, and Board Composition (Non-Executive Directors) is significantly positively correlated with debt to equity ratio whereas it is negatively influenced by CEO/Chair duality. Again, Managerial and Institutional ownership have a positive relationship with capital structure which is consistent with corporate governance philosophy. Furthermore, traditional determinants of capital structure like firm size and profitability have significant effect on corporate financing decisions. Moreover, profitability is negatively related with debt to equity ratio and it is consistent with pecking order hypothesis. Finally, size has positive relationship which shows that large firms can arrange debt financing due to long term relationship and better collateral offering. Therefore it can be wrapped up that corporate governance and ownership structure have an effect on the capital structure of Ghanaian listed manufacturing firms.

The researchers recommend further study be conducted to cover all listed companies on the Ghana Stock Exchange since the study only considered eight (8) manufacturing companies in order to aid generalisation.

References