



## **DO THE OWNERSHIP STRUCTURE AND CORPORATE GOVERNANCE HAVE A RELATION WITH THE CAPITAL STRUCTURE? EVIDENCE FROM BUILDING AND CONSTRUCTION MATERIAL SECTOR OF PAKISTAN.**

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**ABSTRACT:** Relevant study is aimed to estimate the impact of ownership structure and governance pattern on the capital adjustment. The estimations implied in this study will also suggest about governance structure in the under consideration sector. Corporate governance is a utensil which satisfies the financiers of an entity that the considerable returns are being met to them, ownership structure shows the percent shares of a specific entity in the capital of the relevant sector and the capital structure captures the proportion of debt and equity financing in the total amount of assets employed. The corporate governance variables like institutional shareholding, board size, percentage of outside directors and CEO duality instead of managerial shareholding proportion has a negative relation with the debt ratio. The control variables ROA and firm size has a negative and positive relation respectively.

**KEYWORDS:** ownership structure, corporate governance, capital structure, Karachi Stock Exchange, financing, debt/equity

### **INTRODUCTION**

Corporate governance is a utensil which satisfies the financiers of an entity that the considerable returns are being met to them Shleifer and Vishny (1997). Bradbury (1999) stated that the implementation of governance includes the appointment of non executive directors, corporate governance standards and the business plans. Nelson (2005) provides evidence that the academicians and the government have a belief that the corporate governance has a collision on the long run performance of the business entities. A well established governance structure is mandatory not only to satisfy the shareholders but to get the capital at the lowest cost. There is not much enough study from the background of Pakistan to understand the relationship of firm size, institutional shareholding, CEO (chief executive officer) duality, board composition, board size and profitability with capital structure in point of fact. Therefore this study will be of assistance for the stakeholders of cement sector.

### **Problem Statement**

It is clear from aforesaid discussion that after the implication of CG from SECP in Pakistan, there is not remarkable results of the firms as they were expected. Lack of implication of CG is worst affecting the capital structure as well as ownership structure in our country is also influencing the debt ratio. Thereafter some grounds are felt to be studied more.

### **Research Objective**

The initiative for this work was to investigate the affiliation and collisions of corporate governance variables like CEO duality and non executive directors. On the other side the impact of ownership structure is tried to examine that how it may affect the capital structure of a firm.

### **Research Questions**

Being started our study there are some queries about this matter that whether the CEO duality has impact on capital structure positively or negatively? Whether outside directors have any positive or negative influence on capital structure? It is hypothesized that institutional shareholding is negatively associated with leverage.

### **Plan of the Study**

To surround the whole study there is a sequential way which is the first section is after introduction, literature review and subsequently data and methodology section, results and discussion and finally conclusion and recommendations.

### **LITERATURE REVIEW**

Constantinos and Christos (2010) worked on the Greece business atmosphere to know the changes in the earning behavior, managerial performance and the financing structure due to the binding adoption of governance structure. Above mentioned motive was tested with the help of cross section analysis to discern the association of CG mechanism. The study accomplished that the adoption of CCG enabled the firms to get the financing at the lowest cost of capital. But the earning behavior and management performance was not significantly enforced by the CG. Nadeem and Zongjun (2012) performed research on the consequence of Corporate Governance on debt ratio. The study engaged panel data style because sample consisted on data transversely companies and time period. The outcome propose that panel size of board of directors ,external directors and ownership dispersion are definitely related to total debt ratio and long term debt ratio but director compensation is depressingly associated. CEO duality remains insignificant.

Abel and Francis (2010) performed study on local corporate possession and leverage decision in Nigeria. The study adopted panel data and used regression models to approximate the link between financial leverage and corporate ownership. The outcome show that investment structure relies primarily on leading nature of corporate possession structure in every country and subsequently financial market development. Sabur, Omar and Wares (2012) analyzed the ownership structure, corporate governance and firm presentation. The rationale of this study is to explore the bond between ownership structure, board distinctiveness and performance of the firm. The methodology was OLS applied to listed firms of stated country. It is found that our investors are fewer concerned with accounting based information but they rely on market operation measure.

Godfred and Anastacia (2009) did work on rights composition, capital structure decision and corporate governance. In response to get most probable results, pooled panel cross-section regression data are used. The regression outcomes disclose that managerial shareholding has constructive influence on the capital structure. Orapan, John, and Sununta (2010) tried establish the precious model of CG with the experience from the state own entities of the Thai economy. A case study was exerted with the help of qualitative and quantitative approaches to gather information about CG. A questionnaire was developed with the help of 38 state enterprises. According to this survey the important element of CG is the strategically management of HR, subsequent with board size, outside directors, IT information technology, internal control, internal audit and risk management.

Larry (2010) explored the relationship between the diversification of CG and the debt equity adjustment of Chinese public limited's. Accomplishment of this task was with the employ of Kruskal-Wallis rank test, cluster analysis, parametric two-sample t-test and non-parametric Kolmogorov-Smirnov test. The findings suggested that the capital structure was adversely affected with a corporate level diversification either in related or unrelated industries. Teodora and Zhaoxia (2012) explored the ownership structure and the debt financing behavior of pyramidal firms. The desired data was taken from the database of OSIRIS developed by Bureau Van Dijk with the collection of information for 2003 to 2006 This discussion concluded that the one third of the G7 countries had the pyramidal structure and the one half of which have more than one major shareholder.

A.N. Bany-Ariffin, Fauzias, and Carl (2010) suggested about the pyramidal ultimate ownership, control behavior and financing structure by using the empirical tests combined with the three stage regression analysis. The evidence provided that the separation of control from the cash flow is the cause of increase in

leverage intimidating the mind of family firms to retain the ownership with them. That increased leverage created the negative valuation for the pyramidal entities due to the chances of financial crises.

#### **DATA AND METHODOLOGY**

In order to empirically test the governance structure, ownership behavior and the capital structure of the construction and material sector of Pakistan the OLS (Ordinary Least Square) technique has been employed.

#### **Sample Selection**

Our concentration field is construction and materials (cement) sector listed 38 firms on KSE (Karachi Stock Exchange) of Pakistan. There are total 37 companies listed on this stock exchange, primarily all of these were taken to get the financial and corporate governance data but due to non accessibility of some data we finally took the 32 entities as our sampling mechanism. The sample is across previous five years 2007-2011 with total observations of  $32 * 5 = 160$ . Annual reports of the nonfinancial firms were the crucial data spring.

#### **Measures of CG and their Relation with Capital Structure**

Numerous researchers from European or other countries and some of Pakistani have also taken the board size, institutional shareholding, manager shareholding, board composition and chief executive duality as the measures of CG. Some of the studies based on these rudiments are Marcia, Alen, and Hassan (2008); Euyung (2006); Prakash and Michael (2007); J.M. San and Jorge (2012); Teodora and Zhaoxia (2012); Rob, Bart, Roger, and Alireza (2008); Amy and Jan (2007); Gloria and Garry (2011); James (2005); Marco (1999). A brief description of these CG and other dealings is below.

#### **Capital Structure: as Dependent Variable**

This study deals with the capital structure as explained variable. It is formulated by using total liability to total asset ratio. Total liability comprises of current and noncurrent liability. Banks are usually unwilling to grant the loans for long time period. Nadeem and Zongjun (2011) said that the decision about the capital structure is decisive for all type of organizations. Generally it is the task of management to augment the value of an entity but this process of value enhancement is not easy because it involves the decision about the portion of debt and owners capital. A single mismanaged decision about financing can create distress and bankruptcy.

$$= \text{total liabilities} \div \text{total assets}$$

#### **Board Size**

It is as sensed to have unconstructive linkage among leverage and boards. As the Adams and Mehran (2003) said that the performance of the management can be effectively monitored by a bigger board size. On the other side Lipton and Lorsch (1992) argued that some members of the bigger board may enjoy against the effort of the other member.

$$= \log (\text{number of BODs})$$

H0= board size is not negatively related with debt ratio.

H1= board size is negatively related with debt ratio.

#### **Board Composition**

Having the independent Directors or non executive directors on board shows that firm is more credit worthy in case of debt financing. Weisbach (1988) argued that the top management feels more pressure with existence of outside directors. Pfeffer (1972) says that the board size and the board composition are not two

different or random determinants. We can understand this saying by concluding that a board composition was aimed to create outside directors, so we can also say that a board without the NEDs is not a board in real.

$$= \text{NEDs} \div \text{board size}$$

H0= non executive directors are not negatively related with debt ratio.

H1= non executive directors are negatively related with debt ratio.

### **Chair Duality/CEO**

The duality greed leads to lower levels of leverage. It is also negatively related with leverage levels as evidenced by Fosberg (2004); Kyereboah-Coleman and Biekpe (2006). According to Boyd (1995) the duality increases the diplomacy of the executives by his/her appointment as the chairperson.

$$\text{existence of duality will be '1' other wise '0'}$$

H0= CEO duality is not negatively related with debt ratio.

H1= CEO duality is negatively related with debt ratio.

### **Institutional Shareholding**

Greater the institutional shareholding more will be the confidence of the public and financial institutions on the company. Mehran (1992) and Brailsford, Oliver, and Pua (2002) suggested that the block holders have the positive and significant relation with the short term debt but the insignificant toward the long run debt.

$$= \text{number of shares held by the block holders} \div \text{total number of shares}$$

### **Shareholding by the Internals**

Due to the agency problem between the managers and shareholders, the manager favors to debt source but this font of finance levies a higher responsibility on management to perform with minimum requisites to avoid the firms from bankruptcy, Grossman and Hart (1982); Jensen (1986).

$$= \text{number of shares held by the managers} \div \text{total number of shares}$$

H0= MS is not significantly related with leverage

H1= MS is significantly related with leverage

### **Firm Size**

Hefty firms normally have deep associations with the financiers. They get long term debt easily. So it is estimated that there is optimistic link among size of firms and Leverage, Uglurlu (2000). On the other hand the debt ratio is less than 1 in the smaller firms due to more costs, Castanias (1983).

$$= \log(\text{total amount of assets})$$

### **Profitability- Return on Asset**

It is clear that profitability of firms and leverage both are negatively correlated with each other, Titman and Wessels, (1988); Barton, Ned, and Sundaram (1989). Cassar and Holmes (2003); Esperanca, Ana, and Mohamed (2003); Sogorb-Mira and How (2005); hall, Hutchinson, and Michaelas (2004) also suggest a negative relation between the leverage and firm size.

$$= \text{net profit after tax} \div \text{total assets}$$

### **Empirical Models**

To show the impact of ownership and governance structure on the capital adjustment this model is loyal.

$$Lev = \beta_0 + \beta_1(logBS)it + \beta_2(NED)it + \beta_3(IS)it + \beta_4(MS)it + \beta_5(CED)it + \beta_6(ROA)it + \beta_7(logFS)it + \varepsilon$$

## EMPIRICAL RESULTS AND DISCUSSIONS

### Descriptive Statistics

table 1; descriptive statistics

	BS	FS	IS	LEV	MS	NED	ROA
<b>Mean</b>	0.895	10.1638	0.0788	0.5852	0.199	0.5758	-0.2182
<b>Median</b>	0.84	10.25	0.03	0.625	0.05	0.57	0
<b>Maximum</b>	1.07	10.89	0.55	0.81	0.87	0.9	0.21
<b>Minimum</b>	0.77	8.79	0	0.24	0	0	-10.71
<b>Std. Dev.</b>	0.074703	0.367906	0.100502	0.172677	0.293767	0.254639	1.515817
<b>Skewness</b>	0.746945	-0.97339	2.263836	-0.64015	1.303231	-0.84095	-6.83211

In Table (1) descriptive statistics of dependent, independent and control variables are presented which are used in the study. Here in the results average LEV (dependent variable) of sample firms is 58.5% Whereas NEDs mean is 57.5% in these firms Managerial shareholding is 19.9% with the maximum value 87% and minimum value is 0. 29.3% increase or decrease in the mean value is measured. Institutional shareholding is 7.8% in ownership structure of the sample firms which shows the less block holding. Board size remained statistically significant with the mean of 89.5% in the stated firmsROA is -21% with a maximum of 21 and negative skewness that is because of losses in the more than 50% of cement firms in Pakistan.

### CORRELATION ANALYSIS

table 2; correlation matrix

	BS	CED	NED	IS	FS	MS	ROA
<b>BS</b>	1	-	-	-	-	-	-
<b>CED</b>	0.20978	1	-	-	-	-	-
<b>NED</b>	0.40645	-0.15	1	-	-	-	-
<b>IS</b>	0.51538	0.05088	0.38736	1	-	-	-
<b>FS</b>	0.09523	0.20446	-0.3096	-0.0744	1	-	-
<b>MS</b>	-0.3464	0.29199	-0.289	-0.2816	0.18707	1	-
<b>ROA</b>	-0.1893	-0.183	0.0533	-0.0753	0.05569	-0.1308	1

According to Bryman and Cramer (1997) the correlation between the independent variables should not increase by 0.80 that is doubtful of multicollinearity so there is no such issue in this correlation.

### REGRESSION RESULTS

table 3; regression results

Variable	Coefficient	t-Statistic
<b>C</b>	0.4592	1.70869
<b>BS</b>	-0.7337	-2.8546*
<b>CED</b>	-0.0256	-1.53158
<b>NED</b>	-0.0997	-1.87501
<b>IS</b>	-0.0265	-0.10610
<b>FS</b>	0.0786	4.2300*
<b>MS</b>	0.1564	2.4542*
<b>ROA</b>	-0.0044	-5.2959*
<b>R-squared</b>		0.6175
<b>F-statistic</b>		43.7959

Note: \* shows the significant level at 5%

The BS and ROA are highly significant and negatively associated with the leverage. The measure of NEDs also suggests a negatively relation but the relationship is insignificant. Chief duality and IS show again a negative relation but the t-stats indicates an insignificant association. FS and MS are highly significant and positive relation of these two with the leverage. R-square value is 0.6175 which describes the ability to forecast the variations in capital structure. Moreover F-statistics value is 43.7959 which confirm the significance of regression model applied on the study.

## DISCUSSION

The significant and negative relationship between the board and the leverage shows that the firms with larger boards discourage the debt financing. Due to larger board the managers will produce more with the low requisites therefore the need of debt diminishes. The negative relation of ROA with the leverage is understood, the firms who are earning well do not need to borrow when they can rely on internally generated funds. The negative relation of non executive directors shows that the outside directors can enforce the managers to take the actions for the will of shareholders. The negative coefficient of CEO duality indicates that when the executive officer is also the chairman of the board he/she will avoid the debt to avoid the bankruptcy due to high leverage. The mean of IS shows just 0.7 with the positive skewness. This low average of block holders cannot enforce to get the debt and the lenders of debt also will not prefer to advance loan to this sector due to low level of block holder shareholding.

The firms having the huge amount of assets can get the long term debt on the easy conditions. The positive relation of managerial shareholding with the capital structure is due to 57% outside directors' average and a negative skewness. The agency conflict between the shareholders and the managers enforces the managers to build high leverage.

Further more all the null hypothesis is rejected. The estimated results answer the study questionnaire by indicating a negative relation of CEO duality and outside directors with the total debt ratio.

## CONCLUSION AND RECOMMENDATIONS

Corporate governance variables like BS, NEDs and IS show a negative relation with capital structure. BOD has an average of 89 with a minimum of 77 and maximum 107 which reflect that the board of directors is in ample numbers who can easily force the managers to perform for the welfare of equity holder. The percentage of independent directors is 58%. Such mass existence of non executives discourages the debt source to avoid high level of leverage Institutional shareholders are also negatively associated and is just 7%

of total pattern, so IS cannot get buoyancy in the eyes of debt providers and cannot insist on the managers to get debt financing.

MS is positive and highly significant with debt ratio, which verifies that due to agency problem between the managers and the equity holders, the managers will prefer the debt financing. The larger entities can get the debt on a flexible and economic portfolio due to better repute with the lenders. While the firms with the greater returns do not need to borrow they will prefer to adjust from internal funds.

Whilst developing the conclusive statement, most of the governance variables are not in favor of debt financing either significantly or insignificantly. This is a good sign to keep the business entities afar from high leverage or bankruptcy.

## RECOMMENDATIONS

The most of relevant firms are suffering from loss; non debt tax shield can be used to decline the amount of losses. IS can be increased instead of NEDs and MS. Institutions can be helpful to obtain the borrowing from financial institutions or issuing equity instruments.

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