

Aspect[s] of the Corporate Governance that Matter in a Firm's Value: Evidence from Non-Financial Firms in Pakistan

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Abstract

Corporate governance (CG) is key to enhance firm's value. The purpose of this research is to examine the effects of various aspects of corporate governance on firm's value. We used secondary panel data of 100 companies on the Pakistan Stock Exchange for the period: 2010 – 2016. Findings

Key Words

Corporate Governance, Firm's Value, Size of Firm, Age of Firms, Capital Structure, Non-Financial Firms.

revealed that among other aspects of CG, managerial ownership and board size have significant influence on the value of a firm. Among controlled variables, firm size and firm ages were also found significant in firm's value. We are convinced that findings of this study would help addressing agency issues through effective corporate governance measures. This study has come up with some practical implications as well. It is suggested that for better firm performance and increasing efficiency the board size may be kept at minimum.

Introduction

Corporate governance (CG) relates to various procedures and procedures to make the routine operations of firms succeed. It focuses on both micro and macro issues. At the micro level, the prime concern is to increase shareholders' wealth, while at the macro level it aims to contribute towards the national economy (Keaseyat et al.2005). From an economic perspective, it plays a significant part in enhancing efficiency for firms. Corporate governance mechanisms and practice enhance control of companies' procedures and other activities to reduce the chance of fraud within the firm and increase the firm's value.

There is evidence that various aspects i.e. board size, managerial ownership, and audit quality have a close association with a firm's value. For example, Ararat et al. (2017) determined corporate governance through sub-indices like indices for board structure, disclosure of financial statements, ownership and shareholders rights and concluded that CG indicators are statistically important and positively effects the value of a firm. They also disclosed that among these sub-indices, the sub-indices for disclosure of financial statements are the principle ones to better predict a firm's profitability and a firm's value. The reason is a strong governance mechanism helps to better monitor routine business activities (Black et al. 2014).

Corporate governance issues of emerging economies are quite different from those of developed economies in various ways like ownership concentration and varying economic scenarios. For example, Braga-Ales and Morey, (2012) argued that as compared to developed economies, in emerging economies political risk is higher and hence firms are more vulnerable to corporate governance issues. This requires firms to pay more consideration towards corporate governance measures. Like other emerging economies, firms in Pakistan are exposed to poor corporate governance. This leads to weak shareholders' protection. Additionally, more political interference causes shareholders' trust to diminish and hence reduces overall investment. Hence, the core objectives are to investigate the proposed relations towards this end (CG& FV).

Literature Review

There are many studies which focus on the relationship between corporate governance mechanisms and value of the firm (Black et al. 2014, Black and Kim, 2012). These studies came up with varying results. For example, a study of Malaysian firms by (Zabri et al. 2016) discovered board size as important to the value of the firm, while board independence was found as insignificant. In another study of Pakistani firms, board independence was found to have a significant and positive relation with the value of the firm (Javeed et al.2007). Similar results were reported by Park and Jang (2010), whereas, Cui and Mak (2002) found a W shaped relationship between corporate governance and a firms' value: it declines at the start then increases then falls down and at the end moves up.

There are also a few studies that predict no relation between corporate governance and a firm's value. For example, Gupta et al. (2009) examined the association between four dimensions of corporate governance and a firm's value. There are studies which suggest a positive association of the two subject variables (i.e. CG & FV) (Shukeri et al.2012); however, this association is a weak one. Contrary to this, some studies propose a significant relation between CG and FV. For instance, in a study of a corporate governance index of 0-100 for 526 Korean companies, it was noticed that an increase in governance index predicts strong governance which results in a major positive effect on the value of firm. A well-placed corporate governance mechanism directs and limits the authority and responsibility of top management and ensures the protection of the rights of minority shareholders and hence increases the firm's value.

In a study by Mansoor (2013) the association of CG and FV was examined. It was found that among various corporate governance indicators, three indicators were found to be more significant regarding the firm's value in the Pakistani market. Similarly, (Javeed, et al. 2007) concluded that other indicators of CG such as an independent board and ownership pattern were found to be significant and have a positive association with FV. The relationship between core attributes of corporate governance like ownership concentration, outside directors, board size and managerial ownership and firm's value was statistically found to be significant by examining non-financial firms in Pakistan. This study further revealed that ownership concentration has positive links to all measure of performance used in the study. Strong governance mechanisms improve the stock market performance within the country which maximizes shareholder value and encourages investors for investment (Parigi et al.2014). The positive association of effective corporate governance measures and equity return was presented by the study of Ibrahim et al. (2010) in non-financial sector firms.

Research Methodology

This is a quantitative study and has used panel data. The population of the study are those firms which are non-financial and listed at Pakistan Stock Exchange (PSX). Through purposive sampling techniques, data from 100 firms for the period of 7 years from 2010-2016 are collected. Annual reports of each firm, data and State Bank of Pakistan, PSX are used as sources. Data were verified through various diagnostic tests to ensure their validity and normality.

The Variables

Firm's Value (as DV):

This is measured through Tobin's Q (market value of equity divided by book value of equity).

Board Size (as IV):

This is measured as total no. of directors; directors may be executives (employees of the firm and also board members) and non-executive (board members from external) directors in the firm's board

CEO Duality (as IV):

This is measured through a dummy variable. It carries a value of (1) when the CEO also holds the office of the chairman of the firms and (0) in other cases.

Managerial Ownership (as IV):

This is a ratio of total no. of shares with managers to total outstanding shares

Audit Quality (as IV):

This is measured in terms of a dummy variable, value is 1 when financial statements were audited by top five well-known auditors who obey the disclosure rule of the SECP and 0 in other cases.

Big 5 Ownership (as IV):

This is measured as the top five shareholders who hold an excess number of the firm’s shares outstanding divided by total issued shares.

Firm’s Size (as CV):

This is measured as the natural log of total assets/sale

Firm’s Age

This is the natural log of the total number of years from the time of listing on PSX.

Statistical Model

Descriptive statistics will exhibit information regarding data used in the study. This information includes the mean or average of each variable separately followed by the minimum and maximum value of observation. Finally, the standard deviation of each variable is disclosed.

Correlation Matrix

A classical linear regression model (CLRM) has some important and basic assumptions which cannot be violated in order to have reliable results. One is to notice perfect multicollinearity in the data which presents the association of study variables. For that purpose, a correlation matrix has been used to reflect the relationship between study variables.

Heteroskedasticity/Breusch-Pagan Test

Among the assumptions for reliable findings under the classical linear regression model (CLRM), one is that the error term [random disturbance] is as presented below. This study tests basic assumptions through Breusch-Pagan test

$$Var(\mu_t) = \sigma^2 \text{-----}(1)$$

Hausman’s Test

Hausman test is used for model specification (fixed effect vs random effect models). Through the following formula null hypothesis is checked to accept or reject it.

$$H = (\beta^{FE} - \beta^{RE}) [Var(\beta^{FE}) - Var(\beta^{RE})]^{-1}(\beta^{FE} - \beta^{RE}) \sim \chi^2 \text{-----}(2)$$

Where “β^{FE}” refers to fixed effect while “β^{RE}” refers to random effect. The statistics and significant value specify the appropriate approach between the two. Larger value of statistics leads to significant difference between estimators, so this will result to take the alternate hypothesis that fixed effect model.

Fixed Effect Model

It is used because of its appropriateness for panel data. The advantage is that it is fixed/constant even when the estimators have a correlation with the effect of the individual. Through the following formula, data are analyzed using a fixed-effect model.

$$Y_{it} = \alpha_{it} + \beta_1 X_{1it} + \beta_2 X_{2it} + \text{-----} + \beta_k X_{kit} + \mu_{it}$$

Where Y_{it} in the above equation is the DV every single with observation at time t, X_{it} is the regressor or the independent variables, alpha (α) is the effect of individual which is unobserved time-invariant and μ_{it} is the error term. Equation (1) is the main model including firm value as the dependent variable and the rest are explanatory variables to achieve the main objectives of the study.

$$TOBIN'Q_{it} = \alpha_0 + \beta_1 BSIZE_{it} + \beta_2 AUDQTY_{it} + \beta_3 MangO_{it} + \beta_4 CEOD_{it} + \beta_5 B5OWN_{it} + \beta_6 FSIZE_{it} + \beta_7 Fage_{it} + \varepsilon \text{-----}(1)$$

Whereas, α , β1, β2, β3.....β7 are the parameters.ε is the error term. Other variables have already been defined

Empirical Findings and Discussion

Table 1 exhibit results of the descriptive statistics including important information regarding the data used.

Table 1. Results of the Descriptive Statistics

Variable	Mean	Std.dev	Min	Max
MO	0.331	0.287	0.000	1.000
B5OW	0.604	0.234	0.000	1.000
AQ	0.517	0.715	0.000	1.000
BS	7.976	1.958	0.000	15.00
CEOD	0.370	0.852	0.000	1.000
FS	6.652	0.633	2.850	8.529
T'Q	3.376	25.48	-2.855	432.1
LA	3.437	0.475	1.089	4.189

Table 1 shows a brief summary of all variables (DV, IV, CV) used in the study. The mean value of managerial ownership is 0.331 ranging from 0 to 1 having standard deviation of 0.287. The finding of the study is aligned with Sheikh and Wang (2012). Table 2 further displays the mean 0.604 and standard deviation 0.234 of the top five shareholders holding outstanding shares having a higher value of 1 and lower value 0. The mean value of board size is 7.976 which shows that each firm keeps an average of 7 to 8 members in their board set up consistent with the study of Lei and Song (2012). The maximum value of the board size is 15 while the minimum value is 0. CEO duality is an average value 0.37 means that 37% of the selected sample have same individual for CEO and chairman of the board while 59% of the non-financial firms have their independent CEO. The mean value of the dependent variable T'Q is 3.376 having upper value 432.1 and lower value -2.855; the standard deviation for the same variable is 25.48.

Correlation Matrix

Correlation shows the strength of the linear relationship among all variables. It detects existent of perfect multicollinearity which violate the basic CLRM assumptions.

Table 2.

	T'Q	MO	B5O	AQ	BS	CEOD	FS	LA
T'Q	1.0000							
MO	-0.0689	1.0000						
B5O	0.0343	-0.0871	1.0000					
AQ	-0.0160	0.2120	-0.0896	1.0000				
BS	-0.0372	-0.4136	0.0940	0.1905	1.0000			
CEOD	-0.0189	0.3751	-0.1216	-0.1553	-0.3801	1.0000		
FS	-0.2553	-0.0247	-0.0272	-0.0524	-0.1745	0.0218	1.0000	
LA	0.0439	0.1654	0.0590	-0.0286	-0.0600	0.0825	0.1822	1.0000

Table 2 exhibits the pair wise correlation results among explained and explanatory variables. It reflects that there is no sever relation exist which indicates the presence of multicollinearity, so data used does not violate the primarily assumption of CLRM.

Breusch-Pagan Test for the Detection of Heteroscedasticity

Breusch and Pagan established a model for the detection of heteroskedasticity which is known as the Lagrange Multiplier (LM). It is the violation of the preliminary requirement of CLRM). For testing the null hypothesis for the existence of heteroskedasticity through Breusch-Pagan test, the question is whether "Data is homoscedastic or constant variance" while the alternative hypothesis is "Data is heteroskedastic".

Table 3. Result of the Breusch-Pagan test

Chi Square Statistic	Probability
1.21	0.185

The above table shows that the probability value 0.175 is more than the significant value 0.05. This means that the null hypothesis cannot be refuted and clarifies that the data used in the study have constant variance following the basic assumption.

Hausman's Model Specification Test

To tackle the problem of endogeneity in the panel data and to use a suitable model, Hausman's test was used and it shows that the fixed effect model is a fitting one.

Table 4. Hausman's Test for Fixed and Random Effect Model.

Chi Square Statistic	Probability
4.83	0.001

This shows the result of the Hausman's test having a probability value 0.001 less than 0.05 and indicates the rejection of the null hypothesis which states no relation of error and explanatory variables such that the fixed effect model is more suitable.

Fixed Effect Model

The relevant results of regression are shown in table below.

Table 5

T'Q	Coef	Std. Err	t	P> t
MO	-9.664	2.893	-3.34	0.001***
CEOD	-.5879	1.042	-0.56	0.573
BS	-1.239	.3788	-3.27	0.001***
B5O	1.039	3.118	0.33	0.739
AQ	-.9697	1.131	-0.86	0.392
FS	9.753	1.316	7.41	0.000***
LA	4.169	1.473	2.83	0.005**
cons	66.76	10.61	6.30	0.000

$R^2 = 0.2016$, $F(\text{prob}) = 0.000$; ** means significant at 0.05, *** means significant at 0.01.

Table 5 shows findings of the regression equation for analyzing various aspects of corporate governance as discussed above and the effect of these factors on the value of firms. The significance value of F statistics 0.000 and R-squared 0.2016 indicate the validity of the model used in the study. The result shows that managerial ownership which is treated as an independent variable has statistically significance of 0.001 and negative -9.664 relations with firm value supporting the study of (Ilaboya & Ohiokha, 2016), while in contradiction to the study of (Park and Jang, 2010). The findings confirm the presence of agency issue. The conflict causes agency cost to firms which affects the credibility of the firm and hence has a negative effect on the value of the firm. Managers facing agency conflicts are also involved in negative NPV projects which did not contribute to the shareholders value and hence firm value. The findings are aligned with Chen and Wang (2012).

It was also noticed that board size is statistically significant 0.001 and has a negative association -1.239 with the firm's value. Kumar and Singh (2013), argue that the negative relationship between independent variable board size and firm's value is due to increase in board size, with the increase of diversity/variability in opinion, and as a result consensus on certain decisions is less extreme. Less consensus deferred decisions on various valuable projects through which shareholders value can be maximized, opposed to the study of Adams and Mehran (2012) who argue that larger boards improve expertise which minimizes the risk of error in various valuable decision and hence improve shareholder wealth and firm's value. It was also shown that CEO duality which is a major indicator of corporate governance has significant 0.039 associations with the firm's value. Finding shows that CEO duality has negative -0.90 relationships to the firm's value.

CEO duality, big five ownership, and audit quality are the statistically insignificant 0.573, 0.897 and 0.689 aspects of corporate governance in association with the value of firms. Finding of the study disclosed that both controlled variables that are the firm's size and firm's age used in the study have statistically significant 0.000, 0.005, and have 9.753, 4.169 positive association with the value of firms. Firm size and firm age present the sustainability of the firm within the market which enhances the credibility and trust of the investors upon the firms. Investors feel safe and secure while investing in such firms because the larger size of the firm and consistency minimize the risk

for the investors which result in maximizing demand of the firm's stock: the stock price becomes high due to increase in demand which maximizes shareholders wealth and hence firm's value.

Conclusion

This research determined a causal association among various aspects of corporate governance and a firm's value. Findings revealed that two aspects among five of the corporate governance were statistically significant and have a major impact on a firm's value. Findings suggest managerial ownership and board size are more influential aspects affecting firm value while big five ownership, CEO duality, and audit quality are insignificant variables in the study. Findings of the study indicate that agency conflict within the firms is enhanced due to larger board size and managerial ownership which affect the firm's performance because managers will prioritize their own interest. Increase in board size increase variability and diversity and as a result, some key decisions may be deferred due to lack of consensus which affects firm value negatively. Results of the study also show that both of the controlled variables that are firm's size and firm's age have a statistically significant and positive association with the firm's value supporting the study of Dewi and Wirajaya (2013). Larger firm size and age increase credibility of the firm within the market which results in building the investors' trust in the firm due to its sustainability. Hopefully they will invest in such firms, increasing demand for the share and increasing the stock price and as a result maximizing shareholder wealth and firm value.

The findings of the study support the view that agency conflict is a serious issue within the firm affecting its performance. Agency problems can be minimized through good governance measures. Results of the study will help policymakers to design an effective corporate governance mechanism for the better performance of the firms and to increase value. To enhance the firm's performance and value, managerial concentration should be limited to a minimum level and the rules of performance-based incentives should be implemented. Firms should also keep a low board size because it will eliminate the chance of variability and enhance the firm's performance and value.

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