



THE IMPACT OF CORPORATE GOVERNANCE ON COST OF CAPITAL: THE CASE OF SMALL, MEDIUM, AND LARGE CAP FIRMS

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ABSTRACT

Purpose: *This study is an empirical examination of the argument that higher Corporate Governance (CG) is associated with decreased cost of capital.*

Methodology: *The sample of the study comprise of 200 small, medium, and large corporate firms listed at the Pakistan Stock Exchange.*

Findings: *The results reveal that CG and cost of capital is negatively correlated in large, medium, and small Cap firms. The result confirms the theoretical proposition of the agency theory that investors will be willing to accept a lower risk premium if firms have robust oversight mechanisms to curb managerial opportunism. In case of interaction effect the results show that in medium Cap firm's investors demand lower cost of capital from high CG-medium ownership group. Nonetheless, pool and large Cap firms in the high CG-predominant ownership group category pay higher cost of capital. The result also indicates that large and small Cap firms as compare to medium Cap firms in low CG-medium ownership category pay higher cost of capital. Further, it appears that investors demand higher cost of capital from pool and small Cap firms in low CG-predominant ownership group.*

Practical Implication: *There are significant academic and practical implications which are briefly described in last part of the study.*

JEL classification: C36; G32; G34; O16

Keywords: Corporate governance; insider's ownership; Pakistan stock exchange; asymmetric information; cost of capital; firm-level panel data; System GMM

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1. INTRODUCTION

Substantial literature in the area of corporate governance reveals that firms' decision to implement CG ultimately influences investors' decisions. Firms' with higher CG regulations offer better shareholder rights; therefore investors may be more willing to invest in such firms (Chalevas & Tzovas, 2010). Robb, Single, and Zarzeski (2001) suggest that financial analysts as well as institutional investors seek non-financial information about the long-term ability of managers to manage effectively and efficiently. Today's informed and discerning investors demand greater transparency and disclosure about the company, how it is managed, and perhaps more importantly, who is managing it (Shabbir & Padgett, 2008). Numerous articles have confirmed the importance of the CG system in attracting investment (e.g., De-Jong & Semenov, 2006; Klapper & Love, 2004; Carvalhal & Leal, 2005; Black, Love, & Rachinsky, 2006; Brown & Caylor, 2006; Black & Khanna, 2007; Lin & Shen, 2012). According to Coombes and Watson (2000) today's investors are now become more circumspect and closely monitor company's CG before making an investment decision. In a similar vein, as stated in McKinsey (2002), when assessing investment decision, institutional investors consider CG as important as financial indicators, to the point where 76% institutional investors would be willing to pay a premium to invest in firms with higher governance structures. Furthermore, Leuz, Lins, and Warnock (2009) find empirical evidence that in countries characterized with weak legal institutions investors do indeed invest less in weak governed firms. This signifies that the enhancement of CG is a potential lever for fascinating investment (Bhat, Hopea, & Kang, 2006; Kanagaretnam, Lobo, & Whalen, 2007).

There is a growing body of literature suggesting that investor protection or CG improves value of the firm (e.g., Claessens et al., 2002; La Porta et al., 2002; Black et al., 2003; Gompers et al., 2003). Nevertheless, the assumption of these studies is that CG influence firm value through enhancing expected cash flows and minimizing expropriation. However, the question of whether CG also influences the cost of capital, another determinant of firm value, needs to be investigated. This is a more direct measure of a firm's financing costs as compare to firm valuation (Chen, Chen, & Wei, 2003). This is an important issue because financing costs impact not only a company's investment decisions, but also its external financing capability. The positive link between CG and firm valuation can also be expounded by the lower expected rate of investment return for strong CG firms. The reason for accepting a lower discount rate is because investors might discern strong governance firms as less risky, which subsequently results in greater valuation for firms. In the view of La Porta et al. (2002), the protection of outside investors (i.e., shareholders and creditors) from management expropriation is one of the important objectives of CG.

Corporate governance enhance management monitoring, rises disclosure as well as quality of reported financial information (Chen & Jaggi, 2000; Eng & Mak, 2003; Bozec & Bozec, 2010) and mitigate asymmetric information between management and capital providers (Core, Holthausen, & Larcker, 1999; Lang & Lundholm, 2000;

Mazzotta & Veltri, 2012). From a theoretical perspective, agency risk will be higher for firms that are badly governed, which in turn leads to future cash flows uncertainty (Jensen & Meckling, 1976; Jensen, 1986; Bhojraj & Sengupta, 2003). Agency risk is the risk that firm managers run firms in the pursuit of their own interests. Empirically, Ashbaugh, Collins, and LaFond (2004a) provide evidence that as compared to low CG firms the cost of capital is on average 88 basis points lower for higher CG firms.

The review of previous findings (Ashbaugh, Collins, & LaFond, 2004; Cheng, Collins, & Huang, 2006; Chen et al., 2009; Reverte, 2009; Yu, Peng, & Liu, 2013) indicates that shareholder of firms with higher CG enjoys positive value implications and governance ratings can be a valid assessment of the strength or weaknesses of firm's CG practices. Furthermore, there is also empirical evidence that higher CG firms are perceived favourably by the market enabling them to enjoy reduced cost of equity capital. The literature review also suggests that in emerging markets there is limited evidence about the relation between CG and cost of debt. Nevertheless, majority of the studies (e.g., Sengupta, 1998; Bhojraj & Sengupta, 2003; Anderson et al., 2004; Cremers, Nair, & Wei, 2007) that examine the link between CG and cost of debt focus on just one aspect of governance or information quality. Other studies were cross sectional in nature studying the influence of CG on cost of debt for a single year. The results of most of the studies indicate that while assessing firms risk profile investors take into account firm's governance attributes. This risk profile determines debt holders required return. Furthermore, majority of the literature focused either on equity or debt capital in their relation with CG. Nevertheless, firms mostly depend on multiple types of capital and there are firms especially in Pakistan that are highly leveraged. Therefore, reduction in firm's equity cost sometimes does not reflect the rise of full degree in market valuation of firm's that are highly leveraged. Thus, according to the author knowledge this study is the first attempt in Pakistan that investigates the link between CG and weighted average cost of capital.

The rest of the article proceeds as follows. First, we discuss our research methods, sample selection. Then, results of hypothesized relationships are discussed in the subsequent section. Finally, we conclude the paper.

2. DATA AND METHODS

The target population of the study consists of all 'Pakistan Stock Exchange (PSX)' listed non-financial companies for the period 2003 to 2014. The selection process produces a final sample of 200 companies on the basis of data availability. The study further categorizes the sample firms into small, medium, and large firms on the basis of their market capitalisation. Companies below the 25th percentile (first quartile Q1) are considered as small Cap firms, companies between the 25th percentile and the 75th percentile (third quartile Q3) are considered as medium Cap firms, whereas companies above the 75th percentile are considered as large Cap firms. Secondary data in this study are obtained from three sources: State Bank of Pakistan (SBP) annual balance

2004); financial statements analysis of companies (non-financial) listed at PSX (2006-2011)]; the company's annual reports, and the PSX web site. The study constructed a composite measure of CG based on: (1) OECD CG principles; (2) The Pakistan code on CG; (3) prior CG studies relevant to Pakistan. The index consists of three sub-indices: Board of director sub-score (10 items), audit sub-score (4 items), and disclosure sub-score (4 items). To construct the CGS we score each attribute on a 0 to 4 scale. The scores are aggregated across all the attributes, divide it by the maximum possible score and multiply it by 100. In order to ensure that the index adequately capture improvements in particular governance mechanism over time the maximum score is normalized to 100.

As documented in Bierman (1993), Bruner, Eades, Harris, and Higgins (1998), Meier and Tarhan (2007), and Chalevas and Tzovas (2010) the WACC is widely used in practice to measure firms' cost of capital. The cost of equity and after-tax cost of debt is required in the computation of cost of capital and then the cost of each capital component is multiplied by its proportional weight and takes the sum of the results. Following, Chalevas and Tzovas (2010) WACC is calculated as follows:

$$WACC_{it} = (re_{it} (TOTEQ_{it} / (DEBT_{it} + TOTEQ_{it}))) + ((rd_{it} (1 - TAXRATE_{it})) * (DEBT_{it} / (TOTEQ_{it} + DEBT_{it})))$$

Where, $TOTEQ_{it}$ is total equity of the company i for year t , $DEBT_{it}$ is total debt capital of company i for year t , $TAXRATE_{it}$ is the marginal corporate tax rate, re_{it} is the required return on equity of company i for year t , rd_{it} is the cost of debt of the company i for year t .

Cost of debt is calculated by dividing the average interest expense on a company's debt by its average financial debt whereas CAPM is used to calculate cost of equity. CAPM is widely used in research studies (e.g., Graham & Harvey, 2001; Welch, 2008; Da, Guo, & Jagannathan, 2012) to estimate a firm's cost of equity. CAPM is calculated as follows:

$$K_e = R_{fr} + \hat{\alpha} (R_m - R_{fr})$$

Where, K_e is cost of equity, R_{fr} is the risk-free rate, $\hat{\alpha}$ is the estimation of the sensitivity of the stock returns to changes in market returns, and $(R_m - R_{fr})$ is the equity premium which is the expected excess market return (R_m) over the risk-free rate (R_{fr}).

The Arrelano and Bond (1991) GMM estimator is increasingly popular in empirical work using firm level panel data. This is the primary estimation method employs in this study as it takes into account the dynamic endogeneity issue. If dynamics are introduced in the model then GMM technique becomes more appropriate. In order to investigate the association between CG and cost of capital the following dynamic panel data model is to be estimated:

Model 1:

Where,

WACC is dependent variable weighted average cost of capital, is lag of dependent variable, is constant of the equation, is coefficient of the variable, is debt ratio proxied by the proportion of debts to total assets, is firm listing age proxied by actual length of listing, is firm growth proxied by growth rate in assets over the previous fiscal year, is logarithm of total assets used to measure firm size, is insider ownership proxied by percentage of equity collectively owned by members of the board including their family members, is return on equity measured by profit after tax divided by shareholders' equity, is a dummy variable indicating 1 if the firm belongs to family and 0 otherwise, and is the error term. A regression of WACC on insider's ownership, family representation and other control variables is undertaken for Model 1_Pool, Model 1_Large, Model 1_Medium, and Model 1_Small Cap firms and the regression results are presented in Table 8 to 11.

Further, to test the joint effect of CG and insider's ownership on firm cost of capital the following model is formulated:

WACC

Model 2:

Where,

WACC,, , , , , lnTA, , , are as previously defined. is a dummy variable representing high CG and medium ownership category, is dummy variable representing high CG and predominant ownership, is dummy variable representing low CG and low ownership, is dummy variable representing low CG and medium ownership, and is dummy variable representing low CG and predominant ownership. A regression of WACC on control variables and interaction terms is undertaken for Model 2_Pool, Model 2_Large, Model 2_Medium, and Model 2_Small Cap firms and the regression results are presented in Table 12.

3. EMPIRICAL RESULTS

Descriptive Statistics: Table 2, 3, and 4 reports the descriptive statistics of the sample firms in terms of the variables, which have been identified previously. The summary statistics are grouped according to sample firms' market capitalization, namely, large Cap, medium Cap, and small Cap firms. As mentioned previously the aim of this study is to examine the link between CG and cost of capital with respect to insider ownership, the key variables of interest thus in this study are: CG score (CGS); cost of capital (WACC); and insiders' ownership (INSIDOWN). The mean CG score for large Cap firms is 60% which is the highest as compare to medium Cap firms 54%, and small Cap firms 48%. The highest variation in governance score occurs in large Cap firms with a standard deviation of 0.14 followed by medium Cap firms (0.11) and small Cap firms (0.10). The results show that WACC has a mean value of 0.02, 0.12,

and 0.33 in large, medium, and small Cap firms respectively. This indicates that large Cap firms attract capital at lower costs as compare to medium and small Cap firms. Further, small Cap firms have the highest variation in their WACC as shown by standard deviation of 2.84 followed by medium (1.48) and large Cap firms (0.02). The mean insider's ownership is the highest in small Cap firms 35.69, whereas for medium Cap firms the mean value is 24.78; however the mean value is the lowest in large Cap firms 8.17.

Correlation Results: The Pearson correlation coefficients between the dependent variables and the independent variables are presented in Table 5, 6, and 7 with the Pearson coefficients shown in each cell of the table with the p-value provided underneath in brackets. Correlation analysis is used following previous studies to check multicollinearity among variables in empirical models. Gujarati (2003) argues that multicollinearity may threaten the regression analysis at a threshold of 0.80 or 0.90. From the results it can be seen that multicollinearity does not appear to be a problem between the variables in any of the three samples.

4 RESULTS OF GMM ESTIMATION

This section explores the association between CG, in terms of its internal significance, and the cost of capital. As previously mentioned investors consider weak governance firms as risky business and hence as a result will demand for positive risk-adjusted returns. In order to control for endogeneity between CG measures and cost of capital the study utilizes a dynamic system GMM estimation framework.

The results reveal that CG and cost of capital is negatively correlated in pool, large, medium, and small sample firms. Specifically, an increase of one unit in CGS is linked with a decrease of 0.26 in cost of capital in pool sample, 0.008 in large sample, 0.38 in medium sample, and 0.60 in small sample. Thus, the results provide evidence that the CGS coefficient is lower than zero indicating that higher governance decrease the cost of capital of the firm and as a result implicitly increase firm value. Prior research argues that investors expect lower future cash flows for weak governed firms (La Porta et al., 2002). Hence, the evidence of negative association indicates that investors will likely charge higher discount rate for cash flows of weakly governed firms. Thus, a governance risk premium could be added to current business evaluation models. The result also confirms the theoretical proposition of the agency theory that investors will be willing to accept a lower risk premium if firms have robust oversight mechanisms to curb managerial opportunism. Based on Hansen's J statistic (Hansen, 1982) the instrument set is tested for validity of the full instrument set and the Difference-in-Hansen test of a subset of instruments for over-identifying restrictions in a GMM model. The null hypothesis is that the instruments are uncorrelated with the error term hence they are valid instruments. Therefore, a rejection of the null hypothesis is required. The results also report the autocorrelation tests of Arellano–Bond where the null hypothesis is that there is no autocorrelation of order 2. Because the p-value is higher than 0.05, therefore the null hypothesis of no autocorrelation cannot be rejected at the 5% level of significance. Hence, the test for autocorrelation presents no evidence of model

misspecification.

Further, the coefficient on sub-category BRDSCR is also negative and statistically significant in pool, large and medium sample firms. According to agency theory framework, for minority shareholders board structure may represent an important tool for protecting their interests against opportunistic management behavior and thus having an effect on the cost of capital. The negative relation suggests that the board structure and procedures succeed in reducing information asymmetry and agency conflicts. Thus, if investors have confidence on the capability of board to exercise effective monitoring of management they are willing to demand lower cost of capital. The sub-score AUDSCR is negative and significant only in large and medium samples. However, the result does not appear to significantly influence cost of capital in pool or small sample firms. On the other hand, the DSCSCR sub-score is negative and significant in pool, large, medium, and small sample firms. In summary, the result corroborate the awareness of the market about CG implication on firm value, in this instance, cost of capital.

In terms of control variables, debt ratio is found to have negative and significant correlation with cost of capital in pool, medium and small sample firms, indicating that high leverage firms have lower cost of capital due to advantage of the debt tax shield. Nevertheless, in case of large Cap firms the result is significant but positive. Further, the study fails to find any significant association between firm age and cost of capital in either of the sample firms. However, in terms of growth variables the result indicates that the coefficient is negative and significant in pool, large, medium, and small sample firms. For the pool, medium, and small sample firms the results indicate that the variable $\ln TA$ is negatively and significantly related to cost of capital. Conversely, for large Cap firms the result is positive and highly significant.

Results indicate a significant positive coefficient for insider's ownership in pool and large Cap firms, however insignificant in medium sample, but significant in small sample in Model 1 and 3 only. Hence, higher share ownership by board members lead to higher cost of capital, due to board domination by one group of shareholder and lack of balance. Further, the positive evidence confirms potential rent extraction by significant shareholders. The variable ROE is found to have inverse influence on firms cost of capital in pool and medium sample firms and the result is significant at the 1% level. Nonetheless, the coefficient on ROE is negative in large Cap firms but the significance level drops to 10%. Further, the study fails to find any significant effect of ROE on cost of capital in small Cap firms. Equity and default risk for profitable firms is lower; hence ROE negatively affect cost of capital. Finally, the coefficient on family variable is negative and significant in pool and small sample firms. However, in large Cap firms the result appears to have positive relation with cost of capital. In medium Cap firms the result is statistically insignificant.

Note. The table shows the results of WACC regressed on CGS, sub-score, and firm specific variables for pool sample. WACC L1 is weighted average cost of capital (lag dependent variable). P-values are displayed in parentheses under coefficients. Sample period is from 2003 to 2014.

Note. The table shows the results of WACC regressed on CGS, sub-score, and firm specific variables for large sample. P-values are displayed in parentheses under coefficients. Sample period is from 2003 to 2014.

*, **, ***= statistical significance at the level of 0.10, 0.05 and 0.01

Note. The table shows the results of WACC regressed on CGS, sub-score, and firm specific variables for medium sample. P-values are displayed in parentheses under coefficients. Sample period is from 2003 to 2014.

*, **, ***= statistical significance at the level of 0.10, 0.05 and 0.01

Note. The table shows the results of WACC regressed on CGS, sub-score, and firm specific variables for small sample. P-values are displayed in parentheses under coefficients. Sample period is from 2003 to 2014.

*, **, ***= statistical significance at the level of 0.10, 0.05 and 0.01

Testing the joint effect of CG and insiders' ownership on cost of capital: Table 12 show the results of the joint effect of CG and insider's ownership on firm cost of capital. The coefficient of is negative and statistically significant in medium Cap firms (Table 12, column 4, and row 9) indicating that investors of group demands lower cost of capital as compare to the base category of . However, the result is insignificant in pool, large and small sample firms. The results further show that pool (Table 12, column 2, and row 10) and large (Table 12, column 3, and row 10) Cap firms in the category pay higher cost of capital.

Further, the coefficient on category is insignificant in all four samples. However, the group pay higher cost of capital in pool (Table 12, column 2, and row 12), large (Table 12, column 3, and row 12), and small (Table 12, column 5, and row 12) Cap firms, except in medium Cap firms (Table 12, column 4, and row 12) where the result is positive and significant. The result indicates that large and small Cap firms as compare to medium Cap firms in group pay higher cost of capital. In terms of joint category it appears that investors demand higher cost of capital from pool (Table 12, column 2, and row 13) and small Cap (Table 12, column 5, and row 13) firms (see Table-12 in appendix).

Note. The table shows the results of WACC regressed on joint CG and insiders' ownership as well as control variables. is high CG and medium ownership, is high CG and predominant ownership, is low CG and low ownership, is low CG and medium ownership, is low CG and predominant ownership. P-values are displayed in parentheses under coefficients. Sample period is from 2003 to 2014.

*, **, ***= statistical significance at the level of 0.10, 0.05 and 0.01

5. CONCLUSION

This study is an empirical examination of the argument that higher Corporate Governance (CG) is associated with decreased cost of capital. The sample of the study comprise of 200 small, medium, and large corporate firms listed at the Pakistan Stock Exchange. The results reveal that CG and cost of capital is negatively correlated in large, medium, and small Cap firms. Specifically, an increase of one unit in CGS is linked with a decrease of 0.26 in cost of capital in pool sample, 0.008 in large sample, 0.38 in medium sample, and 0.60 in small sample. The result confirms the theoretical proposition of the agency theory that investors will be willing to accept a lower risk premium if firms have robust oversight mechanisms to curb managerial opportunism. In case of interaction effect the results show that in medium Cap firms investors' demands lower cost of capital from high CG-medium ownership group. Nonetheless, pool and large Cap firms in the high CG-predominant ownership group category pay higher cost of capital. The result also indicates that large and small Cap firms as compare to medium Cap firms in low CG-medium ownership category pay higher cost of capital. Further, it appears that investors demand higher cost of capital from pool and small Cap firms in low CG-predominant ownership group.

One implication of the findings in this study is that, under a weak legal protection regime, minority investors would make reference to a firm's level of CG to assess their risks of expropriation by the controlling insider. Investors would have grave concern about a firm that is not transparent in CG, and are not likely to support a firm's share price where predominant insider ownership exists. Conversely, they are much more willing to invest in a firm by subscribing or holding on to its shares where they perceive a low likelihood for agency problems. One implication is the reduction of asymmetric information and hence cost of capital through enhancing CG for firms planning to raise capital in the future. This study supports this notion to be one of the main incentive factors that influence firms' to enhance CG practices.

REFERENCES

- Anderson, K. L., Deli, D. N., & Gillan, S. L. (2003). Board directors, audit committees, and the information content of earnings (Georgetown University, Arizona State University, and University of Delaware Working Paper). Retrieved from: .
- Arellano, M., & Bond, S. (1991). Some tests of specifications for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58, 277-297.
- Ashbaugh, H., Collins, D. S., & LaFond, R. (2004). Corporate governance and cost of equity capital (University of Wisconsin- Madison, University of Iowa and Massachusetts Institute of Technology Working Paper). Retrieved from:
- Bhat, G., Hopea, O., & Kang, T. (2006). Does corporate governance transparency affect the accuracy of analyst forecast? *Accounting and Finance*, 46, 715-732.
- Bhojraj, S., & Sengupta, P. (2003). The effect of corporate governance on bond ratings and yields: The role of institutional investors and outside directors. *Journal of Business*, 76, 455-475.
- Bierman, H. J. (1993). Capital budgeting in 1992: A survey. *Financial Management*, 5, 22-24.
- Black B. S., Tang, H., & Kim, W. (2003). Does corporate governance affect firm value? Evidence from Korea (Stanford Law School Working Paper No. 237). Retrieved from: .
- Black, B. S., Love, I., & Rachinsky, A. (2006). Corporate governance indices and firms' market values: Time series evidence from Russia. *Emerging Markets Review*, 7, 361-379.

- Black, B., & Khanna, V. (2007). Can corporate governance reforms increase firm market values? Event study evidence from India. *Journal of Empirical Legal Studies*, 4, 749-796.
- Bozec, R., & Bozec, Y. (2010). Governance–performance relationship: A re-examination using technical efficiency measures. *British Journal of Management*, 21, 684-700.
- Brown, L. D., & Caylor, M. L. (2004). Corporate governance and firm performance (Georgia State University Working Paper No. 653). Retrieved from: .
- Bruner, R. F., Eades, K. M., Harris, R. S., & Higgins, R. C. (1998). Best practices in estimating the cost of capital: Survey and synthesis. *Financial Practice and Education*, 4, 13-28
- Carvalho-da-Silva, A. L., & Leal, R. P. C. (2005). Corporate governance index, firm valuation and performance in Brazil. *Brazilian Review of Finance*, 3, 1-18.
- Chen, C. J. P., & Jaggi, B. (2000). Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy*, 19, 285-310.
- Cheng, C. S., Collins, D., & Huang, H. H. (2006). Shareholder rights, financial disclosure and the cost of equity capital. *Review of Financial Accounting*, 27, 175-204.
- Chen, K. C. W., Chen, Z. H., & Wei, K. C. J. (2003). Disclosure, corporate governance, and the cost of equity capital: Evidence from Asia's emerging markets (Hong Kong University of Science and Technology Working Paper). Retrieved from: .
- Claessens, S., Djankov, S., Fan, J., & Lang, L. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57, 2741-2771.

- Coombes, P., & Watson, M. (2000). Three surveys on corporate governance. *The McKinsey Quarterly*, 4, 74-77.
- Core, J., Holthausen, R., Larcker, D. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51, 371-406.
- Cremers, K. J. M., Nair, V. B., & Wei, C. (2007). Governance mechanisms and bond prices. *Review of Financial Studies*, 20, 1359-1388.
- Da, Z., Guo, R., & Jagannathan, R. (2012). CAPM for estimating the cost of equity capital: Interpreting the empirical evidence. *Journal of Financial Economics*, 103, 204-220.
- De Jong, E., & Semenov, R. (2006). Cultural determinants of ownership concentration across countries. *International Journal of Business Governance and Ethics*, 2, 145-165.
- Eng, L. L., & Mak, Y. T. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*, 22, 325-345.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118, 107-155.
- Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics*, 60, 187-243.
- Gujarati, D. N. (2003). *Basic econometrics*, (4th Eds.). New York: McGraw-Hill.
- Hansen, L. P. (1982). Large sample properties of generalized method of moments estimators. *Econometrica*, 50, 1029-1054.

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial behavior agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review*, 76, 323-329.
- Kanagaretnam, K., Lobo, G. J., & Whalen, D. J. (2007). Does good corporate governance reduce information asymmetry around quarterly earnings announcements? *Journal of Accounting and Public Policy*, 26, 497-522.
- Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, 10, 703-28.
- Lang, M., & Lundholm, R. (2000). Voluntary disclosure and equity offerings: Reducing information asymmetry or hyping the stock? *Contemporary Accounting Research*, 17, 623-663.
- La Porta, R., Lopes-de-Silanes, F., Shleifer A., & Vishny, R. W. (2002). Investor protection and corporate valuation. *The Journal of Finance*, 57, 1147-1170.
- Leuz, C., Lins, K. V., & Warnock, F. E. (2009). Do foreigners invest less in poorly governed firms? *Review of Financial Studies*, , 3245-3285.
- Lin, K. L., & Shen, C. H. (2012). The Impact of corporate governance on the relationship between investment opportunities and dividend policy: An endogenous switching model approach. *Asia-Pacific Journal of Financial Studies*, 41, 125-145.
- Mazzotta, R., & Veltri, S. (2012). The relationship between corporate governance and the cost of equity capital: Evidence from the Italian stock exchange. *Journal of Management and Governance*, 18, 419-448.

- McKinsey (2002). Global investor opinion survey. Retrieved from: <http://www.mckinsey.com/>
- Meier, I., & Tarhan, V. (2007). Corporate investment decision practices and the hurdle rate premium puzzle (SSRN Working Paper). Retrieved from: abstract=960161.
- Reverte, C. (2009). Do better governed firms enjoy a lower cost of equity capital? Evidence from Spanish firms. *Corporate Governance*, 9, 133-145.
- Robb, S. W. G., Single, L. E., & Zarzeski, M. T. (2001). Nonfinancial disclosures across Anglo-American countries. *Journal of International Accounting, Auditing and Taxation*, 10, 71-83.
- Sengupta, P. (1998). Corporate disclosure quality and the cost of debt. *Accounting Review*, 73, 459-474.
- Shabbir, A., & Padgett, C. (2008). The UK code of corporate governance: Link between compliance and firm performance (Cranfield University Bedford Working Paper). Retrieved from: .
- Welch, E. (2003). The relationship between ownership structure and performance in listed Australian companies. *Australian Journal of Management*, 28, 287-305.
- Yu, B., Peng, T., & Liu, X. (2013). The influence of corporate governance and independent audit on the cost of debt. Paper presented at (pp. 279-288). Retrieved from: .

APPENDIX

Table 1: Summary of Variables

Variable	Label	Nature of Variable	Description	Data source
Dependent Variables				
Weighted Average Cost of Capital	WACC	Numerical	$WACC_{it} = (r_{e,it} \left(\frac{TOTEQ_{it}}{TOTEQ_{it}} \right) + (r_{d,it} \left(\frac{DEBT_{it}}{TOTEQ_{it} + DEBT_{it}} \right) \right) * (1 - TAXRATE_{it}))$	Annual Report
Independent Variables				
Corporate Governance Score	CGS	Numerical	The CGS is a checklist containing 18 items and three Sub-scores	Annual Report
Insiders' Ownership	INSIDOWN	Numerical	Percentage of equity collectively owned by members of the board of directors, including their family members	Annual Report
Growth	FGR	Numerical	Growth rate in assets over the previous fiscal year	Annual Report
Debt Ratio	DR	Numerical	The proportion of debts to total assets	Annual Report
Profitability	ROE	Numerical	Net income/Common equity	Annual Report
Company size	lnTA	Numerical	Logarithm of assets	Annual Report
Firm Age	FRMAGE	Numerical	Actual listing status	Company Website
Family	FAMILY	Numerical	Dummy variable indicating 1 if the firm belongs to family and 0 otherwise	Company Website

Table 2: Descriptive Statistics of Large Cap Firms

Variable	Mean	S.D.	Quantiles				
			Min	.25	Mdn	.75	Max
CGS	0.60	0.14	0.25	0.51	0.60	0.71	0.94
BRDSCR	0.64	0.12	0.33	0.55	0.65	0.70	0.90
AUDSCR	0.72	0.14	0.25	0.69	0.75	0.75	1.00
DSCSCR	0.41	0.35	0.00	0.00	0.50	0.75	1.00
WACC	0.02	0.02	0.00	0.00	0.02	0.03	0.17
ROE	-0.45	14.78	-319.09	0.10	0.20	0.32	2.97
FGR	0.18	0.30	-0.69	0.03	0.13	0.25	2.75
lnTA	10.06	1.18	6.11	9.35	10.08	10.75	13.11
DR	0.52	0.26	0.09	0.32	0.51	0.69	2.16
FRMAGE	30.19	13.04	6.00	19.00	31.00	44.00	55.00
INSDOWN	8.17	16.64	0.00	0.00	0.12	7.77	88.50

Table 3: Descriptive Statistics of Medium Cap Firms

Variable	Mean	S.D.	Quantiles				
			Min	.25	Mdn	.75	Max
CGS	0.54	0.11	0.25	0.46	0.53	0.61	0.93
BRDSCR	0.61	0.11	0.30	0.53	0.63	0.68	0.98
AUDSCR	0.68	0.13	0.25	0.69	0.69	0.75	1.00
DSCSCR	0.23	0.30	0.00	0.00	0.00	0.50	1.00
WACC	0.12	1.48	0.00	0.01	0.03	0.06	36.48
ROE	0.06	0.68	-17.53	0.02	0.11	0.20	3.99
FGR	0.17	0.39	-0.82	0.00	0.09	0.23	7.44
lnTA	8.25	1.01	4.90	7.52	8.23	8.94	11.33
DR	0.57	0.25	0.01	0.42	0.58	0.70	3.10
FRMAGE	29.01	11.42	6.00	21.00	27.00	38.00	56.00
INSDOWN	24.78	26.58	0.00	1.41	13.86	43.40	97.47

Table 4: Descriptive Statistics of Small Cap Firms

Variable	Mean	S.D.	Quantiles				
			Min	.25	Mdn	.75	Max
CGS	0.48	0.10	0.21	0.42	0.49	0.56	0.75
BRDSCR	0.58	0.12	0.20	0.48	0.58	0.68	0.80
AUDSCR	0.63	0.16	0.25	0.44	0.69	0.75	0.75
DSCSCR	0.12	0.20	0.00	0.00	0.00	0.25	1.00
WACC	0.33	2.84	0.00	0.02	0.05	0.07	40.38
ROE	0.01	1.06	-10.21	-0.08	0.05	0.15	11.57
FGR	0.08	0.25	-0.62	-0.05	0.03	0.17	1.44
lnTA	7.10	1.14	3.89	6.41	7.13	7.80	11.15
DR	0.83	0.89	0.11	0.53	0.66	0.82	12.16
FRMAGE	30.98	10.95	7.00	22.00	29.00	44.00	56.00
INSDOWN	35.69	27.53	0.00	9.05	34.48	59.08	93.11

Table 5: Correlation Matrix of Large Cap Firms

Variables	CGS	WACC	DR	FRMAGE	FGR	lnTA	INSDOWN	ROE
CGS	1.0000							
WACC	-0.1573 (0.0006)	1.0000						
DR	-0.0258 (0.5788)	0.5553 (0.0000)	1.0000					
FRMAGE	0.0167 (0.7183)	-0.1173 (0.0112)	0.0387 (0.4036)	1.0000				
FGR	-0.1131 (0.0175)	-0.1393 (0.0034)	-0.0033 (0.9442)	-0.0125 (0.7930)	1.0000			
lnTA	0.2580 (0.0000)	0.2432 (0.0000)	0.2504 (0.0000)	0.0623 (0.1792)	0.0075 (0.8750)	1.0000		
INSDOWN	-0.2586 (0.0000)	0.1595 (0.0005)	-0.0923 (0.0463)	-0.0208 (0.6534)	0.1046 (0.0280)	-0.1978 (0.0000)	1.0000	
ROE	0.0317 (0.4943)	-0.0462 (0.3193)	-0.0828 (0.0737)	-0.0423 (0.3614)	-0.0445 (0.3507)	-0.0628 (0.1755)	0.0212 (0.6482)	1.0000

Note. P-values are shown in brackets

Table 6: Correlation Matrix of Medium Cap Firms

Variables	CGS	WACC	DR	FRMAGE	FGR	lnTA	INSDOWN	ROE
CGS	1.0000							
WACC	0.0298 (0.3623)	1.0000						
DR	-0.1534 (0.0000)	-0.0084 (0.7966)	1.0000					
FRMAGE	0.0239 (0.4659)	-0.0008 (0.9814)	-0.0136 (0.6769)	1.0000				
FGR	-0.0526 (0.1252)	-0.0106 (0.7574)	-0.0872 (0.0109)	0.0384 (0.2633)	1.0000			
lnTA	-0.0137 (0.6760)	-0.0908 (0.0054)	0.2450 (0.0000)	-0.0147 (0.6529)	-0.0398 (0.2459)	1.0000		
INSDOWN	-0.2764 (0.0000)	-0.0424 (0.1946)	0.0628 (0.0546)	0.0008 (0.9806)	0.0571 (0.0955)	-0.0244 (0.4552)	1.0000	
ROE	0.0002 (0.9962)	0.0136 (0.6782)	-0.1273 (0.0001)	0.0189 (0.5644)	0.0641 (0.0615)	-0.0824 (0.0116)	0.0197 (0.5476)	1.000

Note. *P-values* are shown in brackets

Table 7: Correlation Matrix of Small Cap Firms

Variables	CGS	WACC	DR	FRMAGE	FGR	lnTA	INSDOWN	ROE
CGS	1.0000							
WACC	0.1220 (0.0082)	1.0000						
DR	-0.2272 (0.0000)	-0.0434 (0.3494)	1.0000					
FRMAGE	0.0500 (0.2800)	-0.0100 (0.8290)	-0.1032 (0.0256)	1.0000				
FGR	0.0478 (0.3284)	-0.0257 (0.5989)	-0.2258 (0.0000)	0.1022 (0.0364)	1.0000			
lnTA	0.0685 (0.1388)	-0.0857 (0.0639)	-0.2779 (0.0000)	-0.0845 (0.0678)	0.0674 (0.1682)	1.0000		
INSDOWN	-0.2518 (0.0000)	-0.1245 (0.0070)	-0.1360 (0.0032)	-0.1982 (0.0000)	0.0177 (0.7183)	-0.0218 (0.6373)	1.0000	
ROE	-0.0054 (0.9079)	0.0106 (0.8190)	0.0042 (0.9284)	-0.0677 (0.1437)	0.0114 (0.8153)	0.0347 (0.4539)	-0.0519 (0.2627)	

Note. *P-values* are shown in brackets

Table 8: Regression Results for Corporate Governance Score, Sub-score, Firm Specific Characteristics and Weighted Average Cost of Capital (Pool Sample)

Variables	Model (1)	Model (2)	Model (3)	Model (4)
WACC	0.7935***	0.7934***	0.7782***	0.7941***
LI	(0.000)	(0.000)	(0.000)	(0.000)
CGS	-0.2613***			
	(0.000)			
BRDSCR		-0.2171***		
		(0.000)		
AUDSCR			0.1894	
			(0.157)	
DESSCR				-0.0717***
				(0.000)
DR	-0.0816***	-0.0697***	-0.0665***	-0.0692***
	(0.000)	(0.000)	(0.000)	(0.000)
FRMAGE	0.0023	0.0029	-0.0019	0.0040
	(0.812)	(0.766)	(0.877)	(0.667)
FGR	-0.7476***	-0.7208***	-0.8636***	-0.7215***
	(0.000)	(0.000)	(0.000)	(0.000)
lnTA	-0.2903***	-0.2998***	-0.3607***	-0.2828***
	(0.000)	(0.000)	(0.000)	(0.000)
INSDOWN	0.0102***	0.0104***	0.01468***	0.0101***
	(0.000)	(0.000)	(0.000)	(0.000)
ROE	-0.0007***	-0.0007***	-0.0008***	-0.0007***
	(0.000)	(0.000)	(0.001)	(0.000)
FAMILY	-1.9639***	-1.9803***	-2.4965***	-1.9121***
	(0.000)	(0.000)	(0.000)	(0.000)
Cons	3.8878***	3.9384***	4.6128***	3.6041***
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	1668	1668	1668	1668
No. of Instruments	102	102	102	102
No. of Groups	200	200	200	200
AR (1)	-1.05	-1.05	-1.07	-1.05
[P-Value]	(0.029)	(0.029)	(0.028)	(0.029)
AR (2)	1.00	1.00	1.00	1.00
[P-Value]	(0.317)	(0.317)	(0.317)	(0.317)
Hansen test	109.61	108.23	102.30	107.59
[P-Value]	(0.102)	(0.119)	(0.217)	(0.127)
Difference in Hansen test	101.43	99.47	93.74	98.93
[P-Value]	(0.108)	(0.135)	(0.242)	(0.143)
F-Significance	(0.000)	(0.000)	(0.000)	(0.000)

Table 9: Regression Results for Corporate Governance Score, Sub-score, Firm Specific Characteristics, and Weighted Average Cost of Capital (Large Sample)

Variables	Model (1)	Model (2)	Model (3)	Model (4)
WACC	0.3208***	0.3214***	0.3046***	0.3304***
L1	(0.000)	(0.000)	(0.000)	(0.000)
CGS	-0.0078***			
	(0.000)			
BRDSCR		-0.0040***		
		(0.000)		
AUDSCR			-0.0197***	
			(0.000)	
DESSCR				-0.0033***
				(0.000)
DR	0.0339***	0.0369***	0.0332***	0.0367***
	(0.000)	(0.000)	(0.000)	(0.000)
FRMAGE	-0.0000	-0.0000	-0.0000	0.0000
	(0.615)	(0.638)	(0.331)	(0.164)
FGR	-0.0123***	-0.0107***	-0.0123***	-0.0121***
	(0.000)	(0.000)	(0.000)	(0.000)
lnTA	0.0013***	0.0012***	0.0021***	0.0014***
	(0.000)	(0.000)	(0.000)	(0.000)
INSDOWN	0.0000***	0.0000***	0.0000	0.0000***
	(0.000)	(0.000)	(0.106)	(0.006)
ROE	-0.0000*	-0.0000*	-0.0000*	-0.0000
	(0.051)	(0.056)	(0.072)	(0.120)
FAMILY	0.0113***	0.0108***	0.0131***	0.0116***
	(0.000)	(0.000)	(0.000)	(0.000)
Cons	-0.0131***	-0.0157***	-0.0102***	-0.0212***
	(0.001)	(0.000)	(0.000)	(0.000)
Observations	434	434	434	434
No. of Instruments	76	76	76	76
No. of Groups	70	70	70	70
AR (1)	-2.46	-2.50	-2.53	-2.48
[P-Value]	(0.014)	(0.012)	(0.011)	(0.013)
AR (2)	-0.54	-0.57	-0.47	-0.55
[P-Value]	(0.592)	(0.569)	(0.636)	(0.585)
Hansen test	60.02	60.65	60.47	61.77
[P-Value]	(0.684)	(0.663)	(0.669)	(0.625)
Difference in Hansen test	61.73	63.01	56.34	60.48
[P-Value]	(0.450)	(0.405)	(0.645)	(0.495)
F-Significance	(0.000)	(0.000)	(0.000)	(0.000)

Table 10: Regression Results for Corporate Governance Score, Sub-score, Firm Specific Characteristics, and Weighted Average Cost of Capital (Medium Sample)

Variables	Model (1)	Model (2)	Model (3)	Model (4)
WACC	0.9255***	0.9259***	0.9262***	0.9239***
LI.	(0.000)	(0.000)	(0.000)	(0.000)
CGS	-0.3825**			
	(0.000)			
BRDSCR		-0.2206***		
		(0.004)		
AUDSCR			-0.2592***	
			(0.007)	
DESSCR				-0.3741***
				(0.000)
DR	-0.5658***	-0.5404***	-0.4542***	-0.5624***
	(0.000)	(0.000)	(0.000)	(0.000)
FRMAGE	-0.0009	-0.0012	-0.0009	0.0004
	(0.405)	(0.292)	(0.355)	(0.732)
FGR	-0.5197***	-0.5049***	-0.4903***	-0.5494***
	(0.000)	(0.000)	(0.000)	(0.000)
InTA	-0.1448***	-0.1536***	-0.1393***	-0.1139***
	(0.000)	(0.000)	(0.000)	(0.000)
INSDOWN	-0.0004	-0.0001	-0.0002	-0.0007
	(0.400)	(0.892)	(0.646)	(0.154)
ROE	-0.0966***	-0.0939***	-0.0884***	-0.0857***
	(0.000)	(0.000)	(0.000)	(0.000)
FAMILY	-0.0364	-0.0373	-0.0416	-0.0198
	(0.257)	(0.269)	(0.163)	(0.482)
Cons	1.9133***	1.8922***	1.7621***	1.5004***
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	835	835	835	835
No. of Instruments	66	66	66	66
No. of Groups	143	143	143	143
AR (1)	-1.04	-1.04	-1.04	-1.05
[P-Value]	(0.029)	(0.029)	(0.029)	(0.029)
AR (2)	-1.44	-1.47	-1.59	-1.36
[P-Value]	(0.150)	(0.141)	(0.112)	(0.172)
Hansen test	68.13	70.96	69.86	65.90
[P-Value]	(0.128)	(0.086)	(0.101)	(0.172)
Difference in Hansen test	54.77	56.66	54.20	52.02
[P-Value]	(0.265)	(0.211)	(0.283)	(0.357)
F-Significance	(0.000)	(0.000)	(0.000)	(0.000)

Table 11: Regression Results for Corporate Governance Score, Sub-score, Firm Specific Characteristics, and Weighted Average Cost of Capital (Small Sample)

Variables	Model (1)	Model (2)	Model (3)	Model (4)
WACC	0.9119***	0.9138***	0.7132***	0.9106***
L1	(0.000)	(0.000)	(0.000)	(0.000)
CGS	-0.6058***			
	(0.000)			
BRDSCR		-0.0359		
		(0.612)		
AUDSCR			-0.9703	
			(0.311)	
DESSCR				-0.1943***
				(0.000)
DR	-0.5774***	-0.4518***	-0.0506***	-0.4945***
	(0.000)	(0.000)	(0.005)	(0.000)
FRMAGE	-0.0058	-0.0054	0.0041913	-0.0068
	(0.475)	(0.494)	(0.884)	(0.463)
FGR	-0.0603***	-0.0866***	-0.1828***	-0.2115***
	(0.006)	(0.000)	(0.000)	(0.000)
lnTA	-0.5641***	-0.5104***	-0.2661***	-0.5017***
	(0.000)	(0.000)	(0.000)	(0.000)
INSDOWN	0.0034**	-0.0007	0.0087*	-0.0012
	(0.019)	(0.561)	(0.065)	(0.478)
ROE	0.0045	0.0041	0.0064	0.0016
	(0.220)	(0.200)	(0.604)	(0.665)
FAMILY	-0.6673***	-0.4591***	-7.3756***	-0.4936***
	(0.000)	(0.000)	(0.000)	(0.000)
Cons	5.5071***	4.7283***	9.0527***	4.7958***
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	399	399	399	399
No. of Instruments	54	55	54	54
No. of Groups	87	87	87	87
AR(1)	-0.99	-1.00	-1.00	-1.00
[P-Value]	(0.032)	(0.031)	(0.031)	(0.031)
AR(2)	1.12	1.07	1.00	1.11
[P-Value]	(0.261)	(0.283)	(0.315)	(0.269)
Hansen test	48.30	51.31	27.49	48.15
[P-Value]	(0.303)	(0.240)	(0.976)	(0.309)
Difference in Hansen test	43.30	41.13	17.10	37.50
[P-Value]	(0.293)	(0.377)	(0.999)	(0.538)

Table 12: Regression Results for Joint CG-Insiders' Ownership and Weighted Average Cost of Capital

Variables	Model 8.1_pood	Model 8.1_large	Model 8.1_medium	Model 8.1_small
WACC	0.7837*** (0.000)	0.5439*** (0.000)	0.9241*** (0.000)	0.6673*** (0.000)
L1	-0.0922*** (0.000)	0.0360*** (0.000)	-0.3921*** (0.000)	-0.1024*** (0.002)
FRMAGE	-0.0091 (0.407)	-0.0000 (0.834)	-0.0016 (0.237)	-0.0227 (0.479)
FGR	-0.6233*** (0.000)	-0.0094*** (0.000)	-0.4509*** (0.000)	-0.1833*** (0.000)
lnTA	-0.3263*** (0.000)	0.0011*** (0.000)	-0.1531*** (0.000)	-0.4108*** (0.000)
ROE	-0.0006*** (0.001)	-0.0000 (0.488)	-0.0714*** (0.000)	0.0027 (0.714)
FAMILY	-2.1299*** (0.000)	0.0130*** (0.000)	0.0031 (0.928)	-3.3879*** (0.000)
D_High*Med	-0.2746 (0.244)	-0.0027 (0.127)	-0.3253*** (0.000)	-0.1437 (0.886)
D_High*Pred	0.5236*** (0.009)	0.0217*** (0.000)	-0.0787 (0.186)	0.0276 (0.974)
D_Low*Low	-0.0884 (0.170)	0.0000 (0.996)	-0.0486 (0.215)	-0.1967 (0.219)
D_Low*Med	0.3498** (0.031)	0.0104*** (0.000)	-0.0711** (0.035)	0.9421*** (0.000)
D_Low*Pred	0.9839*** (0.000)	0.0010 (0.417)	0.0264 (0.451)	0.5423** (0.029)
Cons	4.3924 (0.000)	-0.0181 (0.000)	1.7883 (0.000)	11.3399 (0.000)
Observations	1668	454	335	399
No. of Instruments	103	78	69	55
No. of Groups	200	70	143	87
AR (1)	-1.04	-2.49	-1.03	-1.01
[P-Value]	(0.300)	(0.013)	(0.304)	(0.313)
AR (2)	1.00	-0.90	-1.38	0.99
[P-Value]	(0.051)	(0.037)	(0.016)	(0.032)
Hansen test	86.12	62.52	66.66	28.75
[P-Value]	(0.596)	(0.564)	(0.156)	(0.940)
Difference in Hansen test	77.03	39.89	48.20	17.68
[P-Value]	(0.634)	(0.407)	(0.384)	(0.996)
F-Significance	(0.000)	(0.000)	(0.000)	(0.000)

Corporate Governance Index

SUB INDEX-BOARD COMPOSITION		
1	Percentage of Independent Non-Executive Directors (INED's) on Board	Four marks if there are $\frac{3}{4}$ INED's, three marks if $\frac{2}{4}$ are INED's; and one mark if less than 50 percent are INED's
2	Presence of Independent Non-Executive Chairman	Four marks if the chairman is elected from among INED's, zero marks if not
3	Size of Board/Total Number of Directors on the Board	Four marks for boards with 8 or fewer directors, 3 marks for board with 9-11 directors, 2 marks for boards with 12-14 directors and 1 mark for boards with 15 or more directors.
4	Is the Role of Chairman and CEO Split?	Four Marks if the Roles are Split, Zero Marks for Dual Roles
5	Number of Board Meetings Held During the Year	Four marks if the information is disclosed, and the board meets at least four times a year. One marks if they meet less often or if there is only partial information about the number of meetings. Zero mark if the company does not disclose how often its directors met last year
6	Percentage of Total Director's Attendance at Board Meetings	Four marks if the ratio of attendance is $\frac{3}{4}$, three marks if the ratio of attendance is $\frac{2}{4}$, and one marks if there is less than 50 percent attendance
7	Percentage of Board Meetings Attended by INED's	Four marks if the ratio of attendance is $\frac{3}{4}$, three marks if the ratio of attendance is $\frac{2}{4}$, and one marks if there is less than 50 percent attendance
8	Minority Shareholders Representation on Board	Four marks for boards with minority shareholder representation and zero marks if no representation
9	Gender Diversity on Board	Four marks if one-third of the board or more are women. Three marks if 25% or more are women. One marks if there is at least one woman on the board. Zero marks if there are no women
10	Does the Company Have a Formal System to Evaluate the Performance of the Board and Individual Directors?	Four marks if there is a formal board evaluation and a formal individual director evaluation. Two marks if there is a formal board assessment, but not an assessment of individual directors. Zero marks if there is no evaluation or there is only vague description of how the assessment is done with no details of the process used.

1	Does the Company Have an Audit Committee?	Four marks if the company have formed an audit committee and zero marks for absence
2	What Percentage of Audit Committee Constitute INED's?	Four marks if the committee is fully independent, three marks if there are majority INED's, and one mark if less than 50 percent are INED's
3	Independence of Audit Committee Chairman	Four marks if the chairman is independent, zero marks for executive director
4	Whether a system is in place to protect Whistle Blowers	Four marks if yes, zero if no
SUB INDEX- DISCLOSURE		
1	Does the Company Disclose Board Members Biographies? Does it list the other boards its directors sit on?	Two marks for each
2	Does the Company have a Policy For Handling Conflict of Interest	Four marks for disclosure zero for absence
3	Does the Board of Directors Provide a Code of Ethics or Statement of Business Conduct for all Directors and Employees?	Four marks for disclosure zero for absence
4	Disclosure of the Attendance Record of Each Director at Committee Meetings	Four marks for disclosure zero for absence