



INVESTIGATING THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE INDEX AND FAMILY FIRMS' PERFORMANCE IN PAKISTAN

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ABSTRACT- In this study, the effect of the corporate governance index (CGI) on company success in Pakistan is investigated. The survey consists of family businesses that are publicly traded on the PSX, and the study employs the GMM estimation methodology. ROA measures the dependent variable e.g., firm performance and CGI comprising governance variables measure the independent variable. According to the results, the CGI-performance relationship is strongly positive for Pakistani family firms. The findings show that corporate governance mechanism is critical in preventing agency problems. The study adds to the current corporate governance literature and offers advice to policy makers and regulatory authorities in developing countries that are responsible for designing and implementing governance systems.

Keywords: Corporate governance, Ownership structure, Firm Performance, Pakistan stock exchange

I. INTRODUCTION

Corporate governance is described by Shleifer and Vishny (1997) as a collection of structures important to economic performance because of its effect on investors' decisions to provide financing to the company in the form of equity or debt. A responsible corporate governance process identifies who owns the company and lays out the rules for distributing financial benefits to fund providers, managers, and other stakeholders. Financial analysts and academics have paid close attention to the performance impacts of a firm's governing structure (Hassan & Halbouni, 2013; Arora & Sharma, 2016; Reddy et al., 2010; Balasubramanian et al., 2010; Mishra & Kapil, 2016), while accountants have focused on the earning management viewpoint (Waseemullah et al., 2015; Alves, 2011). To design efficient governance structures, a combination of governance mechanisms may be implemented, such as ownership structure and control, board of director composition, adoption of good corporate financial reporting standards, building mechanisms for timely disclosure of transparent information to concerned stakeholders, stock options and other motivation programs for management and employees (Holderness, 2003; Chen et al., 2003; Shukeri et al, 2012; Fauzi & Locke, 2012). As a result of good governance, the firm's image among fund providers and other interested stakeholders will improve, lowering the perception of risk.

Monitoring and incentives alignment are the main tools proposed by organization theorists to mitigate agency issues as proposed by Eisenhardt (1989) and Jensen and Meckling (1976). Cash flows to owners should be proportionate to their shareholdings, which is critical for the sound development of a financial sector. Cash flows are the primary source of motivation for an ultimate controller of a company whose interests are aligned with those of external shareholders. Monitoring becomes important for discouraging the capacity of an ultimate controller to expropriate company capital, especially for those companies with the potential to generate higher private benefits than cash flows. A successful corporate governance structure that plays the proper part for these companies is critical (Morck et al., 1988; Shleifer & Vishny, 1989; Ganguli, 2013; Waseemullah et al., 2017; Anderson & Reeb, 2003; Richter & Chakraborty, 2015).

Numerous studies are carried out in distinct and comparable demographic regions, and the majority of them show similar and varied behaviors in these areas. Some researchers create their own country-specific CG indexes or score sheets, while others use CG indexes created by other agencies and regulatory bodies (Black et al., 2003; Chen et al., 2003; Drobetz et al., 2003; Cheung et al., 2005; Zheka, 2006; Kanellos & George, 2007). A number of researchers attempted to ascertain the association between CG measurements and firm performance for instance (Klapper & Love, 2004; Hudson et al., 1992; Sanda et al., 2010;

Kyereboah-Coleman, 2007; Li, 2010; Kolobr, 2011; Heenetigala, 2011; Tornyeva & Wereko, 2012). To assess the relationship, some researchers use primary data while others use secondary data. Earlier research in developing countries such as Ghana, South Africa, Pakistan, Iran, Sri Lanka, and Turkey focused on the adoption, understanding, and early implementation of CG activities. These studies emphasize the importance of an efficient governance structure for both investors and regulatory bodies, demonstrating how governance processes affect efficiency.

The researchers hope to learn more about the effect of CG on firm performance in this study. The variables used in the CG index and the metrics used to rate the CG index are critical problems that must be closely handled because they may trigger discrepancies in the performance. The main contribution lies in employing the simplified CGI that takes into account all related variables that are essential in deciding the relationship in emerging markets (where the CG mechanism is weak), such as Pakistan. Many of the variables proposed by Pakistan's code of corporate governance in 2002 and 2012 are included in the CGI. Furthermore, family businesses are the most visible in Pakistan's corporate climate (Waseemullah, 2017; Waseemullah & Hasan, 2016; Waseemullah & Hasan, 2017; Waseemullah & Hasan, 2018). None of the previous research has looked at them in this light. The research will fill a void in the finance literature and offer theoretical support to regulatory bodies in responsible for corporate governance mechanisms in countries where the regime is still evolving.

II. LITERATURE REVIEW

Gompers, Ishii, and Metrick (2003) created a CGI that includes all of the provisions of the "Institutional Investors Research Center" (IIRC). They divide companies into two categories: democracies (shareholder-friendly) and dictatorships (manager-friendly), and find that democracies have better financial efficiency, higher Tobin's q, and abnormal returns than dictatorships. Kanellos and George (2007) found similar findings using data from 262 listed companies in Greece. In Greece, they also find that governments have a higher Tobin's q than dictatorships. On a data collection of firms in Ukraine, Zhaka (2006) established a CGI and finds a strong positive CGI-performance relationship.

Cheung et al. (2011) investigated changes in firm governance efficiency and their effect on potential results. They discovered that improving governance efficiency increases the firm's potential business worth. According to Epps and Cereola (2008), the association between governance ranking and operational efficiency is negligible. MacAulay et al. (2009) investigate the association between CGI and results in Canada from 2003 to 2007. They find that the relationship's strength is greater in 2003 and 2004, but lower in 2005 and 2007.

Arora and Bodhanwala (2018) use a sample of BSE-listed companies from 2009 to 2014. They use the technique of Varshney et al. (2012) to build CGI. The governance component is divided into four categories: board composition, shareholding, corporate management sector, and market competitiveness. ROA, EPS, and RONW are the dependent variables. The findings support the existence of a connection between CGI and firm success in India.

Kapil and Mishra (2019) taking ROA, ROE & Tobin's Q as performance measures attempt to examine the effect of CG practices on firm performance. They find that performance impacts of CG variables are stronger when dependent variable is market performance measure e.g., Tobin's Q than accounting performance measures' e.g., ROA & ROE. Board size is positively related whereas CEO duality is negatively related with performance. Further, board independence and board meetings show positive relationship with firm value.

Javid and Saboor (2015) build a CGI with 21 proxies and try to figure out how CGI affects firm results. The survey includes 58 manufacturing PSX listed companies from 2009 to 2013. ROA, ROE, and Tobin's Q are among the success indicators. They discover a connection between CGI and company results. Furthermore, all three indices, such as the board of director's index, ownership index, and transparency index, have a significant positive impact on firm results. The results in OLS, fixed effect model, and random effect model are all similar. For the period 2003-2005, Javid and Iqbal (2008) look at 50 non-financial PSX listed companies. They split the CGI into three main sub-indices: the BOD index, the ownership index, and the accountability, accountability, and audit index. There are 22 governance proxies in the CGI. Tobin's Q is a metric for measuring efficiency. CGI seems to have a positive relationship in Pakistan, according to the

results. The BOD index and the ownership index are also positively linked to company results, while the accountability and openness index has little impact on performance metrics.

Hypothesis: There is a significantly positive relationship between corporate governance index and firm performance in Pakistan.

III. RESEARCH METHODOLOGY

Data and methods

A sample of 184 non-financial family firms listed in PSX covering 2004-2012 period. The Generalized Method of Moments is used to estimate the relationship between CGI and firm performance. This technique is used to avoid the endogeneity problems associated with the regression models.

Variables

Firm performance is dependent variable. ROA is used as a measure of financial performance of the firm. CGI is independent variables and firm size, leverage and growth are control variables.

Econometric models

$$ROA_{it} = B_0 + \beta_1 CGI_{it} + \beta_2 Size_{it} + \beta_3 Leverage_{it} + \beta_4 Growth_{it} + \varepsilon_{it}$$

Figure 1: Variables and definitions

ROA	Earnings before tax/total assets
CGI	Score of CG practices
Size	Ln total assets
Leverage	Total debts/total assets
Growth	$(Sales_t - Sales_{t-1}) / Sales_{t-1}$

IV. RESULTS AND ANALYSIS

Table 1 presents descriptive statistics for variables. Mean (median) value is 0.0335 (0.0293) with standard deviation of 0.1070. Average value of CGI is 46.5931. The CGI figures show reasonable commitment of firms in adopting corporate governance practices in Pakistan. Table 2 gives correlations among the variables. CGI is significantly positively related with ROA. The results suggest that CG improves firms' performance. The correlations among the independent variables is not too high indicating that multicollinearity problem is not troublesome. The VIF values validate the results as these are near to unity for all of variable as reported in Table 3.

Table 1: Descriptive statistics for family firms 2004-2012

Variable	ROA	CGI	Size	Leverage	Growth
Mean	0.0335	46.5931	7.7756	0.6623	0.1669
Median	0.0293	47.0000	7.7827	0.6364	0.1372
Maximum	0.3085	75.5000	10.9515	1.9989	0.9951
Minimum	-0.2578	15.0000	2.5486	0.0316	-0.6126
Std. Dev.	0.1070	10.7235	1.4276	0.3090	0.3402
Observations	964	964	964	964	964

Table 2: Correlation

Variable	ROA	CGI	Size	Leverage	Growth
ROA	1				

CGI	0.3214***	1			
	0.0000	-----			
Size	0.1768***	0.3554***	1		
	0.0000	0.0000	-----		
Leverage	-0.3941***	-0.1645***	-0.1358***	1	
	0.0000	0.0000	0.0000	-----	
Growth	0.2550***	-0.0022	0.0239	-0.1101***	1
	0.0000	0.9453	0.4595	0.0006	-----

***, ** & * denote significance at 1, 5 & 10% level.

Table 3: Variance Inflation Factor

Variable	Coefficient Variance	Centered VIF
CGI	0.0000	1.1637
Size	0.0000	1.1531
Leverage	0.0000	1.0478
Growth	0.0000	1.0130
Constant	0.0000	NA

Table 4 demonstrates regression results of GMM. The regression results show the effect of CGI along with control variables. The results show that CGI is significantly positively related with ROA. The coefficient value of CGI is 0.0027 with p-value of 0.006. These findings suggest a strong positive effect of CGI on firm performance in Pakistan. These results support the findings of earlier studies like Gompers et al. (2003) and Varshney et al. (2015) among others. As far as control variables' relationships with ROA is concerned, size variable doesn't show

Table 4: GMM Regression Results

Variable	Model
CGI	0.0027***
	0.0006
Size	0.0077
	0.4334
Leverage	-0.1106***
	0.0002
Growth	0.0620***
	0.0000

Constant	-0.0911 <i>0.5040</i>
J-statistics	5.4768
Prob. J-statistics	0.1400

***, ** & * denote significance at 1, 5 & 10% level.

Table 5: OLS Regression Results

Variable	Model	Model
CGI	0.0026*** <i>0.0000</i>	0.0025*** <i>0.0000</i>
Size	0.0028 <i>0.2138</i>	0.0075*** <i>0.0024</i>
Leverage	-0.1118*** <i>0.0000</i>	-0.1106*** <i>0.0000</i>
Growth	0.0689*** <i>0.0000</i>	0.0695*** <i>0.0000</i>
Constant	-0.0442 <i>0.0314</i>	-0.1272 <i>0.0000</i>
Sectoral dummies	<i>Included</i>	<i>Not Included</i>
Adjusted R-squared	<i>0.2688</i>	<i>0.3048</i>
F-statistics	<i>89.5091</i>	<i>84.6223</i>
Prob. F-statistics	<i>0.0000</i>	<i>0.0000</i>

***, ** & * denote significance at 1, 5 & 10% level.

significant relationship. Leverage is significantly negatively related whereas growth is significantly positively related with ROA. The results are consistent with earlier studies.

In order to check the robustness, OLS regression analyses are also done. The results are reported in Table 5. The finding confirms the above presented GMM results. The coefficient of CGI is significantly positively related with ROA in both regressions models before and after including the sectoral dummies. Similarly, the coefficient signs of control variables e.g., size, leverage & growth remain consistent. The relationships are still positive for size & growth and negative for leverage.

V. CONCLUSION

The study sheds light into a major issue of CGI-performance relationship in family firms that most common in corporate sector of Pakistan (Waseemullah, 2017). The study develops CGI covering three categories including board of directors, reporting and disclosure & transparency. The estimation is done using GMM. The findings of 964 annual observations show that corporate governance has a significant impact on firm success. The findings show that CGI has a favorable impact on ROA. The ramifications of these findings for policymakers and managers are also important.

This is a positive sign for policymakers, as SECP introduced legislation in 2002, which were amended in 2012. The findings suggest that family businesses in Pakistan are serious about adopting corporate

governance principles. After a period of early understanding of corporate governance practices, the corporate governance system is improving and looking forward. In Pakistan, regulatory bodies seem to be successful in implementing corporate governance standards. However, the findings highlight the need for an appropriate oversight mechanism to protect foreign shareholders, with a special emphasis on corporate ownership of Pakistani group companies.

The research is confined to non-financial businesses, with financial businesses entirely ignored. Only accounting-based results, such as return on investment, was included in the study. Tobin's Q or other market-based success metrics may be used in future research. In a family business, the ownership-control gap is particularly pronounced. In emerging economies like Pakistan, more research is needed into how ownership-control inequality affects the relationship between corporate governance and success.

REFERENCES

1. Alves, S. M. G. (2011). The Effect of the Board Structure on Earnings Management: Evidence from Portugal. *Journal of Financial Reporting and Accounting*, 9(2), 141-160.
2. Anderson, R.C. and Reeb, D.M. (2003). Founding-Family Ownership and Firm Performance: Evidence from the S & P 500. *The Journal of Finance*, 58(3), 1301-1328.
3. Arora, A. and Sharma, C. (2016). Corporate Governance and Firm Performance in Developing Countries: Evidence from India. *Corporate Governance*, 16(2), 420-436.
4. Arora, A., & Bodhanwala, S. (2018). Relationship between corporate governance index and firm performance: Indian evidence. *Global Business Review*, 19(3), 675-689.
5. Balasubramanian, N., Black, B.S. and Khanna, V. (2010). The Relation between Firm-Level Corporate Governance and Market Value: A Case Study of India. *Emerging Markets Review*, 11(4), 319-340.
6. Black, B., H. Jang, and W. Kim (2003). Does Corporate Governance Affect Firm Value? *Stanford Law School* (Working Paper 327).
7. Chen, C. R., Guo, W., & Mande, V. (2003). Managerial ownership and firm valuation: Evidence from Japanese firms. *Pacific-Basin Finance Journal*, 11(3), 267-283.
8. Chen, K. C., Wei, K. C., & Chen, Z. (2003). Disclosure, Corporate Governance, and the Cost of Equity Capital: Evidence from Asia's Emerging Markets. *Social Science Research Network*.
9. Cheung, Y. L., Connelly, J. T., Jiang, P., & Limpaphayom, P. (2011). Does corporate governance predict future performance? Evidence from Hong Kong. *Financial Management*, 40(1), 159-197.
10. Cheung, Y. W., Chinn, M. D., & Pascual, A. G. (2005). Empirical exchange rate models of the nineties: Are any fit to survive? *Journal of International Money and Finance*, 24(7), 1150-1175.
11. Drobetz, W., Schillhofer, A., & Zimmermann, H. (2003). Corporate governance and firm performance: Evidence from Germany. *Basel, Switzerland: University of Basel. Mimeographed document. <http://www.cofar.uni-mainz.de/dgf2003/paper/paper146.pdf>*.
12. Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
13. Epps, R. W., & Cereola, S. J. (2008). Do institutional shareholder services (ISS) corporate governance ratings reflect a company's operating performance?. *Critical Perspectives on Accounting*, 19(8), 1135-1148.
14. Fauzi, F. and Locke, S. (2012). Board Structure, Ownership Structure and Firm Performance: A Study of New Zealand Listed-Firms. *Asian Academy of Management Journal of Accounting of Finance*, 8(2), 43-67.
15. Ganguli, S.K. (2013). Capital Structure-Does Ownership Structure Matter? Theory and Indian Evidence. *Studies in Economics and Finance*, 30(1), 56-72.
16. Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, 118(1), 107-156.
17. Hassan, M. K. and Halbouni, S. S. (2013). Corporate Governance, Economic Turbulence and Financial Performance of UAE Listed Firms. *Studies in Economics and Finance*, 30(2), 118-138.
18. Heenetigala, K. (2011). *Corporate governance practices and firm performance of listed companies in Sri Lanka* (Doctoral dissertation, Victoria University).
19. Holderness, C. G. (2003). A survey of blockholders and corporate control. *Economic Policy Review*, 9(1), 51-64.
20. Hudson, C.D., Jahera, J.S. and Lloyd, W.P. (1992). Further Evidence on the Relationship between Ownership and Performance. *Financial Review*, 27(2), 227-239.

21. Javid, F., & Saboor, A. (2015). Impact of Corporate Governance index on Firm Performance: Evidence from Pakistani manufacturing sector. *Journal of Public Administration and Governance*, 5(2), 1-21.
22. Javid, A. Y., & Iqbal, R. (2008). Ownership concentration, corporate governance and firm performance: Evidence from Pakistan. *The Pakistan Development Review*, 47(4), 643-659.
23. Jensen M. and Meckling W. (1976). Theory of the firm: Managerial behavior, agency costs and capital structure. *Journal of Financial Economics*, 3(4), 305-360.
24. Kanellos, T., & George, T. (2007). Corporate governance and firm performance: Results from Greek firms. *Munich Personal Repect Archive*, 6414.
25. Kapil, S. and Mishra, R. (2019). Corporate Governance and Firm Performance in Emerging Markets: Evidence from India. *Theoretical Economics Letters*, 9(6), 2033-2069.
26. Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of corporate Finance*, 10(5), 703-728.
27. Kolobe, K. (2011). *The impact of reported corporate governance disclosure on the financial performance of companies listed on the JSE* (Doctoral dissertation, University of Pretoria).
28. Kyereboah-Coleman, A. (2007). *Relationship between corporate governance and firm performance: An African perspective* (Doctoral dissertation).
29. Li, X. (2010). *Corporate governance, firm performance, and executive compensation: Evidence from China* (Doctoral dissertation).
30. MacAulay, K., Dutta, S., Oxner, M., & Hynes, T. (2009). The impact of a change in corporate governance regulations on firms in Canada. *Quarterly Journal of Finance and Accounting*, 48(4), 29-52.
31. Mishra, R.K. and Kapil, S. (2016). Study on Corporate Governance Mechanisms. *International Journal of Indian Culture and Business Management*, 12(2), 179-203.
32. Morck, R., Shleifer, A. and Vishny, R.W. (1988). Management Ownership and Market Valuation: An Empirical Analysis. *Journal of Financial Economics*, 20(1), 293-315.
33. Reddy, K., Locke, S. and Scrimgeour, F. (2010). The Efficacy of Principle-Based Corporate Governance Practices and Firm Financial Performance: An Empirical Investigation. *International Journal of Managerial Finance*, 6(3), 190-219.
34. Richter, A., & Chakraborty, I. (2015). Promoter Ownership in Publicly Listed Firms in India: Does Group Affiliation Matter?. *Institute of Development Studies Kolkata Occasional Papers*.
35. Sanda, A. U., Mikailu, A. S., & Garba, T. (2010). Corporate governance mechanisms and firms' financial performance in Nigeria. *Afro-Asian Journal of Finance and Accounting*, 2(1), 22-39.
36. Shleifer, A. and Vishny, R.W. (1989). Management Entrenchment: The Case of Manager-Specific Investments. *Journal of Financial Economics*, 25(1), 123-139.
37. Shleifer, A., & R. Vishny (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(2), 737-783.
38. Shukeri, S.N., Shin, O.W. and Shaari, M.S. (2012). Does Board of Director's Characteristics Affect Firm Performance? Evidence from Malaysian Public Listed Companies. *International Business Research*, 5(9), 120-127.
39. Tornyeva, K., & Wereko, T. (2012). Corporate Governance and Firm Performance: Evidence from the Insurance Sector of Ghana. *Corporate Governance*, 4(13), 95-107.
40. Varshney, P., Kaul, V. K., & Vasal, V. K. (2015). Corporate Governance Index and Firm Performance: Empirical Evidence from India. *LBS Journal of Management & Research*, 13(2), 59-75.
41. Waseemullah & Hasan, A. (2016). Investigating the group diversification premium and discount in Pakistan. *The Pakistan Development Review*, 289-308. Retrieved April 10, 2021, from <http://www.jstor.org/stable/44986489>
42. Waseemullah & Hasan, A. (2017). Ownership structure, excess control and firm performance: A focus on the internal corporate governance system of the family firms in Pakistan. *Paradigms*, 11(2), 141-150.
43. Hasan, A. (2018). Business Group Affiliation and Firm Performance-Evidence from Pakistani Listed Firms. *The Pakistan Development Review*, 57(3), 351-371.
44. Waseemullah, Ali, S., & Mehmood, S. (2017). Impact of excess control, ownership structure and corporate governance of firm performance of diversified group firms in Pakistan. *Business & Economic Review*, 9(2), 49-72.
45. Waseemullah, Safi, I., & Shehzadi, A. (2015). Earnings Management and Firm Evidence from Pakistani listed firm. *The Pakistan Development Review*, 57(3), 351-371.
46. Waseemullah. (2017). *Understanding the Dynamics of Business Groups in Pakistan-A Focus on the Financial Performance and Dividend Policy* (Doctoral dissertation, CAPITAL UNIVERSITY).
47. Zheka, V. (2006). Corporate governance and firm performance in Ukraine. *Heriot-Watt University Centre for Economic Reform and Transformation Discussion Paper*, 5, 1-68.