

# Interlink between Corporate Governance and Firm Performance: A study on Indian Real Estate Industry

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## ABSTRACT

There have been both claims and counter claims as regards the interlink that exists between corporate governance and firm performance, although most of the prior studies have reported existence of a strong positive correlation between corporate governance and firm performance, meaning thereby that better the corporate governance, higher is the firm performance. This study which was undertaken by using the CMIE Prowess data base especially the ProwessIQ(1.91) on the Real Estate Industry in India comprising of 28 companies covering a period of 10 years 2008-09 to 2017-18, forming a panel data of 280 observations with 7 cross sections, reveals that corporate governance, measured in terms of Board Structure, Audit Committee, Shareholders' Grievances, Remuneration Committee, Nomination Committee and Disclosure Practices, has a positive effect on the firm's performance expressed in terms firm performance, namely, Tobin's Q, and Return on Assets (ROA).

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## 1. Introduction

Corporate governance, defined more precisely as 'a system by which companies are directed and controlled', is considered to have originated in the 19th century to propagate and promote the concept of 'incorporation' as a means of limiting liability (Vinten, 2001). It however gained more prominence in the Eighties due to the stock market crash across the globe, and the failure of corporate giants, primarily due to poor governance (Tricker, 2011). Prior studies on the interlink between corporate governance and firm performance have predominantly documented the existence of a strong positive association between corporate governance and higher firm performance (Yermack, 1996; Gompers et al., 2003; Cremers and Nair, 2005; Core et al., 2006; Bebchuk, et al., 2009, Gompers et al., 2003; Bebchuk and Cohen, 2005; La Porta et al., 2002, Klapper and Love, 2004, Durnev and Kim, 2005, Francis et al., 2005, Khanna et al., 2006, Drobetz et al., 2004, Beiner et al., 2006, Black et al., 2006, Balasubramaniam et al., 2009, Aggarwal et al., 2009 Bruno and Claessens, 2010, Chhaochharia and Laeven, 2009, Gregg, 2001; Hilmer, 1998; Kiel and Nicholson, 2000. Prior studies have also indicated that improved corporate governance practices have resulted in enhanced growth and development of the country's economy (Claessens, 2006; Clarke, 2004; Reed, 2002). Similar findings have also been reported by Balasubramaniam et al. (2008), Das and Dey (2016), Bualley et al. (2017), Khatab et al. (2011), Korrent et al. (2015). However, the studies made by Ehikioya (2009) and Bhagat and Black (2002) could not find any such relationship, leading to the contradiction in the claim if good corporate governance leads to better firm performance. Against this backdrop, the present paper examines if there exists any significant relationship between corporate governance and firm performance in the Indian context, especially in the Real Estate Industry.

## 2. Data source and methodology

Secondary data collected from the CMIE Prowess data base especially the ProwessIQ(1.91) forms the basic source of data for the study. The data has been collected for a period of 10 years from 2008-09 to 2017-18. Real Estate Industry has been chosen at random for the study. The companies included are: N C C Ltd, J K Cement Ltd., D C M Shriram Ltd., Delta Corp Ltd., Cochin Shipyard Ltd., Techno Electric & Engineering Co. Ltd, Indiabulls Real Estate Ltd., I R B Infrastructure Developers Ltd., K E C International Ltd., Akzo Nobel India Ltd., Prestige Estates Projects Ltd., Phoenix Mills Ltd., Dilip Buildcon Ltd., Aarti Industries Ltd., Reliance Infrastructure Ltd., Housing & Urban Development Corporation Ltd., P I Industries Ltd., G M R Infrastructure Ltd., N B C C (India) Ltd., A I A Engineering Ltd., Dalmia Bharat Ltd., A C C Ltd., Indiabulls Ventures Ltd., Container Corporation of India Ltd., D L F Ltd. and Ambuja Cements Ltd. These are the large cap and medium cap S&P BSE 500 companies.

The firms' performance has been measured in terms of Tobin's Q and Return on Assets (ROA). Tobin's Q = (Total market value of the firm + Total book value of the liabilities) / (Total Book value of the Assets + Total Book Value of the Liabilities). However, Return on Assets (ROA), has been taken at their respective calculated values as contained in the Prowess data base for the period.

Corporate Governance Score (CGS) for each of the 28 companies has been calculated based on data compiled from the respective company's Annual Reports. In all, six dimensions of corporate governance have been considered for the calculation of CGS. They are: (i) Board Structure, (ii) Audit Committee, (iii) Shareholders' Grievances, (iv) Remuneration Committee, (v) Nomination Committee and (vi) Disclosure Practices with assigned weightage of 25, 15, 20, 10, 10, and 20 respectively. Reliability of the distribution of the weightage as

above has also been checked through calculation of Cronbach's Alpha value. All the parameters and sub parameters included in the CGS have Cronbach's Alpha values ranging from 0.869 to 0.956, against the standard Cronbach's Alpha value of 0.700 to be reliable. As the data used in the study are panel data, stationarity of data has also been checked by using Harris Tzavalis (Unit Root) Test of data stationarity, p-value is less than 0.05 at 5% level of significance. p-value less than 0.05 at 5% level of significance indicates that the data is stationary and therefore fits for panel construction and analyses. Statistical tools, namely, ANOVA and Regression analysis have been used for data analyses.

**3. Objective**

The broad objective of this study has been to examine the interrelationship that exists between corporate governance and firm performance. As already stated in the aforesaid paragraphs, the performance has been measured in terms of Tobin's Q and Return on Assets (ROA).

**4. Analysis and findings**

Analysis of variance (ANOVA) and Regression were conducted on the panel data comprising of 280 observations (i.e., 28 companies X 10 years) with 7 cross sections (i.e., 6 Corporate Governance parameters X 1 Performance parameter). The results have been displayed in Table 1.1, and Table 1.2, respectively.

**Table-1.1**  
**ANOVA and Regression of Corporate Governance in relation to Tobin's Q**

ANOVA						
Source	SS	df	MS			
Model	13635.4288	33	413.194811			
Residual	10275.31	246	41.7695529			
Total	23910.7388	279	85.7015727			
REGRESSION						
Number of observations		280				
F(33, 246)		9.89				
Prob> F		0.0000				
R-squared		0.5703				
Adj R-squared		0.5126				
Root MSE		6.4629				
Tobin's Q	Coef.	Robust Std. Err	t	P> t	95% Conf. Interval	Interval
CG1	1.981185	.3404276	5.82	0.000	1.31066	2.651709
CG2	3.171033	.7571843	4.19	0.000	1.679642	4.662424
CG3	-1.609004	.5716412	-2.81	0.005	-2.734939	-.4830685
CG4	1.974297	.792072	2.49	0.013	.4141888	3.534405
CG5	-.4191991	.8630405	-0.49	0.628	-2.11909	1.280692
CG6	.4673433	.3911938	1.19	0.233	-.3031732	1.23786
Cons	-53.8799	6.631384	-8.12	0.000	-66.94143	-40.81837

Note: CG1=Board Structure, CG2= Audit Committee, CG3= Shareholders Grievance, CG4= Remuneration Committee, CG5= Nomination Committee, and CG6= Disclosure Practices

Source: Own computed figures based on collected data

It is seen from Table 1.1 that the F value is 0.000 which is less than 0.05 at 5 % level of significance. F value less than 0.05 at 5 % level of significance indicates that there exists a strong relationship between corporate governance and firm performance, measured in terms of Tobin's Q. The extent of relationship is also seen to be significant with R-Square of 0.5703, indicating that performance of Real Estate Industry measured in terms of Tobin's Q is influenced by corporate governance to an extent of 57.03%.

As regards the effect of individual parameters of corporate governance on the firm performance, i.e, Tobin's Q of Real Estate Industry, it is observed that Audit Committee(CG2) has the highest influence, followed by Board Structure (CG1), Remuneration Committee (CG4), Disclosure Practices (CG6), Nomination Committee(CG5), and Shareholders Committee (CG3).

**Table-1.2**  
**ANOVA and Regression of Corporate Governance in relation to ROA**

ANOVA			
Source	SS	df	MS
Model	.51973925	33	.015749674



5. Bebchuk, L., and A. Cohen, 2005, The costs of entrenched boards, *Journal of Financial Economics* 78, 409-433.
6. Beiner, S., Drobetz, W., Schmid, M.M. and H. Zimmermann, 2006, An integrated framework of corporate governance and firm valuation, *European Financial Management* 12, 249-283.
7. Bhagat, S., and B. Black. (2002). The non-correlation between board independence and long- term firm performance. *Journal of Corporation Law* 27 (Winter): 231-274.
8. Black, B.S., Kim, W., and H. Jang, 2006, Does corporate governance affect firms' market values? Evidence from Korea, *Journal of Law, Economics and Organization* 22, 366-413.
9. Blundell, R., and S. Bond, 1998, Initial conditions and moment restrictions in dynamic panel
10. Bruno, V., and S. Claessens, 2010, Corporate governance and regulation: can there be too much of a good thing?, *Journal of Financial Intermediation*, forthcoming.
11. Bualley, A., Hamdan, A., and Zureigat, Q. (2017). Corporate Governance and Firm performance: Evidence from Saudi Arabia. *Australian Accounting, Business and Finance Journal*, 11(1).
12. Chhaochharia, V., and L. Laeven, 2009, Corporate Governance Norms and Practices, *Journal of Financial Intermediation* 18, 405-431.
13. Claessens, S. (2006), *Corporate Governance and Development*, Oxford University Press, Oxford.
14. Clarke, T. (2004), 'Introduction: theories of governance-Reconceptualizing corporate governance theory after the Enron experience', in Clarke, T. (ed.), *Theories of Corporate Governance: The Philosophical Foundations of Corporate Governance*, Routledge, London, pp. 1-30.
15. Core, J., Guay, W.R. and T. O. Rusticus, 2006, Does weak governance cause weak stock returns? An examination of firm operating performance and investors' expectations, *Journal of Finance* 61, 655-687
16. Cremers, M., and V.B. Nair, 2005, Governance mechanisms and equity prices, *Journal of Finance* 60, 2859-2894.
17. Das, A. and Dey, S. (2016). Role of corporate governance on firm performance: A Study on large Indian corporations after implementation of Companies's Act, 2013.
18. Drobetz, W., Schillhofer, A. and H. Zimmermann, 2004, Corporate governance and expected stock returns: evidence from Germany, *European Financial Management* 10, 267-93.
19. Durnev, A., and E. H. Kim, 2005, To steal or not to steal: firm attributes, legal environment and valuation, *Journal of Finance* 60, 1461-1493.
20. Ehikioya, B.I. (2009), "Corporate governance structure and firm performance in developing economies: evidence from Nigeria", *Corporate Governance*, Vol. 9 No. 3, pp. 231-43.
21. Francis, J., Khurana, I., and R. Pereira, 2005, Disclosure incentives and effects on cost of capital around the world, *The Accounting Review* 80, 1125-1162.
22. Gompers, P.A., Ishii, J., and A. Metrick, 2003, Corporate governance and equity prices, *The Quarterly Journal of Economics* 118, 107-155.
23. Gompers, P.A., Ishii, J., and A. Metrick, 2003, Corporate governance and equity prices, *The Quarterly Journal of Economics* 118, 107-155.
24. Gregg, S. (2001), *The Art of Corporate Governance: A Return to First Principles*, Centre for Independent Studies, St Leonards, NSW.
25. Hilmer, F.G. (1998), *Strictly Boardroom: Improving Governance to Enhance Company Performance*, 2nd edn, Information Australia, Melbourne.
26. Khanna, T., Kogan, J., and K. Palepu, 2006, Globalization and similarities in corporate governance: A cross country analysis, *Review of Economics and Statistics* 88, 69-90.
27. Khatab, H., Masood, M., Zaman, K., Saleem, S. & Saeed, B., (2011). Corporate Governance and Firm Performance: A Case Study of Karachi Stock Market. *International Journal of Trade, Economics and Finance*, 2(1). 39-43.
28. Kiel, G. & Nicholson, G. (2002), 'Real world governance: driving business success through effective corporate governance', *Mt Eliza Business Review*, vol. 5, no. 1, pp. 17-28.
29. Klapper, L. and I. Love, 2004, Corporate Governance, Investor protection and performance in emerging markets, *Journal of Corporate Finance* 10, 703-728.
30. Korrent, D., Dundek, I., Calopa, M. K. (2014). Corporate Governance Practices and Firm Performance measured by Croatian Corporate Governance Index (CCGI). *Economic Research*, 27(1), 221-231.
31. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and R. Vishny, 2002, Investor protection and corporate valuation, *Journal of Finance* 57, 1147-1170.
32. Reed, D. (2002), 'Corporate governance in developing countries', *Journal of Business Ethics*, vol. 37, no. 3, pp. 223-247.
33. Yermack, D., 1996, Higher market valuation for firms with a small board of directors, *Journal of Financial Economics* 40, 185-211.