Corporate Governance

Corporate governance as a value driver for firm performance: evidence from India

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Abstract

Purpose – *The study aims to examine corporate governance issues in India and establish the relationship between corporate governance and financial performance.*

Design/methodology/approach – *The sample comprises 141 companies belonging to the ''A'' group stocks listed in the Mumbai Stock Exchange of India. Considering the institutional uniqueness in India, a composite measure of corporate governance is developed comprising three indicators – legal, board and proactive indicators. Data on the three indicators and financial performance were procured from secondary sources. In the step-wise multiple regression analysis, the influence of these three indicators and the composite measure of corporate governance was examined on firm performance after controlling the confounding effects of firm size.*

Findings – *The board and the proactive indicators influence the firm performance significantly whereas legal compliance indicator does not do so. The composite corporate governance measure is a good predictor of firm performance.*

Originality/value – *This study has two contributions: one, it proposes a composite measure of corporate governance considering the unique institutional characteristics of the Indian economy. Two, the study establishes the predictability of the new measure of corporate governance on firm performance as a tool to boost investors' confidence and financial health of firms.*

Keywords *Corporate governance, Firm performance, Legal indicator, Board indicator, Proactive indicator*

Paper type *Research paper*

Introduction

Investors prefer to deal with companies with better governance practices. A firm with good corporate governance (CG) practices can raise fund for investment at a lower cost (Agrawal *et al.*, 1996) thereby strengthening its financial performance. Research distinguishes good governance from bad governance with the help of indicators such as the proportion of outside directors in the board, separation of the role of the chairman and the chief executive, and the likes. Number of research has attempted to construct various indices to assess CG with the help of such indicators (Bebchuk *et al.*, 2004; Brown and Caylor, 2004; Gompers *et al.*, 2003; Larcker *et al.*, 2005). Studies have examined the link between CG and financial performance, often with inconclusive results, by using different CG indicators (Chen *et al.*, 2007; Khanchel, 2007; Larcker *et al.*, 2005). Developments and research related to CG is more in developed countries compared to Asian countries (Lyngaas, 2003; Shleifer and Vishny, 1997) though instances of gross violations of CG standards in Asian countries such as the infamous case of Satyam in India (Chen, 2009) have raised concern among academicians and regulators alike. Only little research has looked at developing CG indices in the context of emerging economies such as India. There are also mixed findings on the direction of causality between firm performance and CG (Chidambaran *et al.*, 2006; Core *et al.*, 2006). In this context, this paper attempts to develop a CG measure in the Indian context and examines its relationship with firm performance.

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CG in India

After embracing globalization and liberalization in the early 1990 s, India has been aggressively transforming to a new economy by encouraging the participation of private sector companies in contrast to the dominance of state-owned-enterprises earlier. Effective monitoring of business organizations, however, has been a crucial task. Often Anglo-American models of CG are offered as solutions to this problem. However, structural characteristics of Indian economy and the CG problems are different from that in the USA and the UK. In developed countries CG issues mostly focus on disciplining the management, whereas in emerging countries such as India, the problem lies in limiting the expropriation of minority shareholders. The problem of dominant shareholders, with or without a higher stake, gives rise to serious CG issues in India (Varma, 1997). This, in turn, gives rise to attendant problems related to board functioning, role of audit committees, tunneling of funds among group companies, inadequate disclosure, expropriation of minority shareholders, and the likes.

Establishment of the Securities and Exchange Board of India (SEBI) in 1992 and its gradual empowerment has been an important step in the direction of disciplining corporate conduct in India. Various committees including the Kumar Mangalam Birla Committee and Narayana Murthy Committee have been constituted and their recommendations have been incorporated through the enactment of Clause 49 of the Listing Agreements. Indian companies have to submit a compliance report to the SEBI with respect to eight sub-clauses:

1. board of directors;
2. audit committee;
3. shareholders' grievance committee;
4. remuneration committee;
5. board procedure;
6. management;
7. shareholders; and
8. report on CG[1].

While examining CG issues in India, it is imperative to include these eight issues among other relevant issues.

CG indicators

Research on CG has mostly focused on examining structural dimensions of the board (Dalton *et al.*, 1998; Zahra and Pearce, 1989), board size, board independence, CEO duality, and activity of various board sub-committees (Chen *et al.*, 2007; Dwivedi and Jain, 2005). Few research has attempted to construct CG indices such as the multiple metrics suggested by Larcker *et al.* (2005) (38 governance measures), Bebchuk *et al.* (2004) (24 governance measures), Gompers *et al.* (2003) (24 governance measures) and Brown and Caylor (2004) (51 governance factors).

This study proposes three indicators of CG considering the typical characteristics of Indian economy (see Appendix, Table AI). First, the legal compliance indicator which consists of two sub-indicators. There is a lot of thrust on legal issues in India particularly after the infamous financial scams in the stock market in 1990 s and in few reputed companies more recently. The stock market scam in 1990 s was a precursor to formulation of SEBI guidelines. Considering various legal parameters that are applicable to Indian companies, the proposed legal compliance indicator includes issues such as adverse auditor's report and default in tax payment. Second, much in line with previous research, we have included the board of directors as one of the indicators. It includes a comprehensive list of nine sub-indicators related to board issues such as composition and size of board, its independence, and so on. Third, the proactive indicator consists of two sub-indicators – a firm's initiatives towards publishing CG reports and providing earnings forecast to investors.

The sub-indicators within each CG indicator are aggregated to form the respective indicator. The indicators, in turn, are aggregated to form a composite CG measure. Subsequently, the influence of each of the CG indicators and of the composite CG measure on firm performance is studied.

Firm performance

Traditionally most of the managerial performance measures have been based on financial measures of performance (Eccles, 1991; Nanni *et al.*, 1992). Different accounting ratios[2] are often used to measure financial performance. These measures include return on assets (ROA), return on equity, and return on sales. Out of these measures, ROA is found to be a better measure as it captures the performance of the management and is not contaminated by the differential degree of leverage present in firms. Some researchers operationally define financial performance as ROA (Berman *et al.*, 1999; Venkatraman and Ramanujam, 1986). Theoretically ROA is positively correlated with the stock price. Hence, ceteris paribus, a higher ROA implies higher value creation for shareholders.

CG and firm performance

Well governed companies have better credibility for which it becomes easier for them to obtain funds from financial institutions at a lower rate compared to less governed companies. Using Akerlof's (1970) model of information asymmetry, we argue that better governed companies have lower information asymmetry that sends positive signals to investors who, in turn, willingly supply funds at a low cost to such companies. Shareholders prefer to invest in a company with lower cost of capital as that leads to higher enterprise value and stock price for a given cash flow projection. Evidence suggests that investors pay a premium for stocks of well governed companies (Agrawal *et al.*, 1996; Coombes and Watson, 2000). Effective CG mechanisms ensure better resource allocation and management, raising the return to capital. Companies with the highest rankings in good governance practices also have the highest financial performance (*Business Week*, 2000). Evidence suggests that EVA and MVA are influenced by most of the governance variables (Coles *et al.*, 2001). Firms with better CG practices deliver greater stock returns, have higher values of Tobin's Q and higher ratios of cash flow to assets in comparison to their counterparts with worse CG practices (Nandelstadh and Rosenberg, 2003). Positive association has been established between quality of corporate disclosure and bond ratings (Sengupta, 1998). Companies that comply with CG standards such as the Cadbury Committee recommendations in the UK experience improved performance in comparison to firms that do not (Dahya and McConnell, 2007).

Strong correlations have been established between CG and stock price performance, valuations and financial ratios in the context of emerging markets. Companies ranked in the top quarter of CG rankings yield a better average return on capital employed compared to firms in the bottom half of such rankings (CLSA, 2000). Properly designed mandatory CG reforms also increase share prices in emerging markets such as India (Black and Khanna, 2007). Past studies give mixed support for a favorable relationship between family ownership, a characteristic feature of Indian companies, and firm performance (Yeh *et al.*, 2001). Hence, the following hypothesis is proposed:

H1. The better the CG practices in a firm, the better will be the firm performance.

Legal compliance indicators and firm performance

Fair and transparent legal and judicial systems give confidence to foreign investors. Legal rules and quality of law enforcement with respect to investor protection have an effect on the size of capital markets (La Porta *et al.*, 1997). India ranks much lower compared to developed countries such as Australia and Singapore with respect to several indicators of the CG environment, rule of law and its enforcement (La Porta *et al.*, 1996). In large family-owned and -controlled firms, found mostly in emerging economies including India, legal expropriation of minority shareholders by controlling shareholders (La Porta *et al.*, 2002) is a serious issue. Pyramid structure of management, a characteristic feature of many Indian companies, is negatively related to firm performance in countries with weak regulatory system (Peng and Jiang, 2006). In such case, a strengthened institutional framework can help correcting CG problems. We have included two indicators to capture the extent of legal compliance by firms in India – adverse auditor's report and tax liability of firms.

First, in emerging economies such as India though institutional mechanisms are sound, the application and implementation of laws often fall far from expectation (La Porta *et al.*, 2002). Indian companies prepare financial statements by using the principles of generally accepted accounting principles laid down by the accounting standards setting board of the Institute of Chartered Accountants of India (ICAI). Though India was supposed to adopt the IFRS norms after 2011 in a phased manner, as of now companies follow the accounting standards set up by the ICAI. In case a company follows doubtful accounting practices, the auditors of the company are supposed to bring it to the notice of the shareholders by qualifying the financial statements. Second, as an ideal corporate citizen, a company should pay all its legal dues to the government in time. However, sometimes companies default on the payment of taxes and duties, and show the amount in records as a contingent liability. This inflates their reported income. Most studies on the development of a CG measure in the context of developed countries do not include above issues as they have stronger institutional frameworks with better enforcement mechanism. But such factors do play a significant role in India because of weak enforcement of laws and reporting standards. Hence:

H1a. The better the legal compliance by firms, the better will be the firm performance.

Board of directors and firm performance

Board is an important control point that alleviates agency problems and helps companies to create value for shareholders (Fama and Jensen, 1983; Jensen, 1993; Leighton and Thain, 1995; Williamson, 2002). Past research has included board indicators such as CEO duality (Dey, 1994; Fama and Jensen, 1983), board compensation schemes (Leighton and Thain, 1995; Baker *et al.*, 1988), board ownership of the firm (Jensen, 1993; Monks, 1995), and the proportion of internal versus external directors (Fama and Jensen, 1983; Dey, 1994) to capture board effectiveness. This study includes nine sub-indicators by taking clue from past research and SEBI's recommendations to capture board effectiveness in Indian companies – promoter's stake, CEO duality, board size, number of independent directors in the board, percentage of independent directors in the audit committee, number of board meetings, number of other companies' boards in which the directors are members, frequency of attendance in the board meetings, and performance based compensation of the CEO.

Promoters' stake and firm performance

One of the key CG issues in India is the conflict of interest between promoters and other shareholders. Research shows that higher management stake aligns interests of shareholders with that of the management (Kaplan, 1994; Murphy, 1985). Influence of family owned business, moderated by the appointment of family CEOs and pyramiding structures, is positive on firm performance (Peng and Jiang, 2006).

CEO duality and firm performance

Separation of the role of the CEO from that of the chairman of the board reduces agency cost (Jensen, 1993). Conferring duties of CEO and chairman on one individual makes it difficult for a board to replace a poorly performing CEO (Shivdasani and Zenner, 2004) and the board may not be able to address the problems of poor firm performance (Goyal and Park, 2002). Past research gives mixed findings about the influence of CEO duality on firm performance. Studies find that firms with separated functions outperform firms with combined functions (Pi and Timme, 1993; Yermack, 1996), some others find an exactly opposite result (Schmid and Zimmermann, 2005), while a third group finds no significant difference between the two (Baliga *et al.*, 1996; Brickley *et al.*, 1997). However, in less developed countries, where legal and regulatory institutions are not very efficient, having a family CEO is value-enhancing (Peng and Jiang, 2006).

Board size

Large boards suffer from diffusion of responsibility, and aversive attitude towards monitoring managerial performance and risk taking (Hermalin and Weisbach, 2001). However, with too few members, the board may find it difficult to staff various sub-committees such as the audit committee or remuneration committee. In large boards, members with diverse backgrounds bring knowledge and intellect to the board room (Dwivedi and Jain, 2005). Ideal size of a board is often recommended to be between seven, eight (Jensen, 1993), or ten (Lipton and Lorsch, 1992). The Articles of Association of companies in India fix the maximum number of directors for Indian companies under Sections 258-259 of the Indian Companies Act, 1956. Board size varies depending on the size and requirement of a company. Studies establish a positive association between board size and firm performance (Dalton *et al.*, 1998; Pearce and Zahra, 1992).

Board composition: number of independent directors in the board

Boards with a majority of independent directors are more effective in monitoring management (Bhagat and Black, 2002), more likely to replace poorly performing CEOs (Weisbach, 1988), and have lesser instances of fraud (Uzun *et al.*, 2004). In India where majority of the companies are promoter based, promoters controlling as high as 50 percent shares of the company, a ''really independent'' board is required to uphold the interests of the minority shareholders. As per Clause 49 of the Listing Agreement if the chairman of an Indian company is the executive director, then at least 50 percent of the members in the board should be independent directors. Companies having a non-executive chairman should have at least one-third independent directors in the board. Studies report a positive association between the proportion of independent non-executive directors and accounting measures of performance (Byrd and Hickman, 1992).

Board composition: percentage of independent directors in the audit committee

The Birla committee and the Naresh Chandra committee constituted by the SEBI in India recommend that the audit committee should have three non-executive directors as members with at least two independent directors, all members in the audit committee should be financially literate and at least one of the non-executive members in the committee should have financial and accounting knowledge, and the chairman of the committee should be an independent director. Firms with independent board audit committees have fewer instances of corporate fraud (Uzun *et al.*, 2004).

Number of board meetings

Number of board meetings is a good proxy for the monitoring effort of directors (Vafeas, 1999). Frequent board meetings are taken as a proxy for enhanced board oversight of senior management (Davila and Penalva, 2005). More frequent are the meetings, faster is the recovery from poor firm performance (Vafeas, 1999). Section 285 of the Indian Companies Act lays down that a board must meet at least once in every three months and there should be at least four board meetings in a year.

Number of other companies' boards in which the directors are members

Guidelines on CG should consider the cross-board phenomenon while defining the eligibility criteria for appointment of independent directors. When the same person is the board member in several boards, independence of judgment of the board member may be questioned. When two persons serve as independent directors and CEOs of two companies interchangeably (Garg, 2007), quality of decision making gets affected. Cross-board phenomenon is quite common in India because of the limited pool available for the position of independent directors. Hence, it is important to examine its influence on firm performance.

Frequency of attendance in the board meetings

Frequency of attendance in the board meetings by independent directors suggests that they are more serious and active in monitoring the management. Evidence suggests that when the directors attend at least 75 percent of the meetings, it leads to enhanced firm valuation (Brown and Caylor, 2004).

Performance-based compensation of the top management

One way of aligning interests of the management with that of the shareholders is to make managers' compensation a function of firm performance (Kaplan, 1994; Murphy, 1985). Management compensation should be related to measures of stock-based performance, not because this is desired by shareholders, but because high stock returns signal positive information on the actions taken by managers (Murphy, 1999).

Past research has established positive relationship between board capital and firm performance (Dalton *et al.*, 1999; Pfeffer, 1972). The afore-mentioned nine indicators of board performance, individually and aggregately, influence firm performance. Hence, we hypothesize that:

H1b. The more effective are the board indicators, the better will be the firm performance.

Proactive approach towards CG

Proactive postures by agents with respect to issues such as providing earnings forecast or giving additional information in the annual reports such as CG reports send positive signal to the market. Sometimes managers have some information related to the business which shareholders do not have. Access to such information can facilitate better decision making by shareholders. Of late many Indian companies have started giving estimates of future earnings. As it is not legally mandatory to provide such information, such gestures send positive signal to the market about a firm's credibility and better CG practice. There is also growing importance of socially responsible investment among investors that emphasizes environmental, social and governance (ESG) factors in investment analysis and portfolio construction. According to the Social Investment Forum (2012) at the end of 2011, nearly 3.31 trillion US dollars in assets were being socially managed representing nearly 11.3 percent of all managed assets. Publication of CG or CSR reports or inclusion of ESG initiatives in the annual report boosts the confidence of shareholders. Only few companies in India belonging to selected industries such as oil, steel and chemicals provide social reporting (KPMG, 2005). The Birla committee in India has recommended for inclusion of a management discussion and analysis report in the annual report giving information about matters such as industry structure and developments, opportunities and threats, risks and concerns, and outlook to the shareholders. Till September, 2002, only 41 percent of the listed companies had reported on this issue[3]. Hence we propose the following hypothesis:

H1c. The more proactive will be the disclosures made by the firm, the better will be its performance.

Methodology

Large Indian companies were selected from the Prowess database of Centre for Monitoring of Indian Companies (CMIE), which has data on promoters' stake, stock price, beta, CG reports, and companies that belonged to the ''A'' group stocks listed in the Mumbai Stock Exchange of India. ''A'' group stocks are the large-capital stocks with most liquidity and are widely tracked by analysts and stock market investors. There were 141 such companies belonging to 18 categories of industries from which the requisite data were obtained. The average sales generated by the companies in the sample were 83,218.43 crore[4] Indian rupees and average net income was 6,479 crore Indian rupees. The promoters had an equity stake in 56 percent of the companies whereas institutional investors had an equity stake in 24 percent of the companies (please see Table I for details).

Measures

CG indicator

In order to understand the effect of CG on financial performance, each of the three indicators – legal, board, and proactive was examined (see also Appendix, Table AI):

1. *Legal compliance indicator.* This indicator consists of the following two indicators which upon aggregation give the legal compliance indicator:
   - Adverse auditor's report: If a company gets adverse auditor's report a score of 0 is assigned else it gets a score of 1.
   - Default in the payment of tax, duties, etc.: In case a company defaults or shows a disputed tax liability figure as a contingent liability, the variable takes a value of 0, else it takes a value of 1.
2. *Board efficiency indicator.* This indicator consists of the following nine sub-indicators which are aggregated to give the board efficiency indicator:
   - *Promoter's stake*. A value of 1 is assigned if the promoter's stake is equal to or greater than 51 percent in the company, else it takes a value of 0.
   - *Number of directors*. The average size of the board in the sample is 10.17 with a standard deviation of 2.96. A value of 1 is assigned if the board size of a company is lower than the mean plus one standard deviation, else 0.
   - *Number of independent directors in the board*. A value of 1 is assigned to this variable, if the company satisfies the criteria set out in Clause 49, else 0 is assigned.
   - *Percentage of independent directors in the audit committee*. A score of 0 is assigned to companies who do not meet the criteria set by SEBI, remaining companies are assigned 1.

Table I Sample profile of surveyed firms

Type of industry	*Number of companies*	*Average promoter's stake (%)*	*Equity stake Average institutional investors' stake (%)*	*Others' stake (%)*	*Average sales (Rs. crores)*	*Average net income (Rs. crores)*
Automobile	10	42	28	30	71,078.89	9,721.96
Cement	7	45	35	20	80,709.37	5,323.83
Chemicals	11	56	22	22	15,175.62	984.30
Communication	4	81	6	13	41,753.21	6,693.13
Computer hardware	1	16	36	48	28,346.34	1,797.55
Consumer electronics	2	52	16	31	12,466.25	1,328.79
Diversified	4	60	19	21	17,090.45	335.48
Drugs	12	50	28	22	20,940.60	-399.97
FMCG	7	54	50	-4	31,081.38	3,216.58
Food and beverages	8	37	38	25	24,890.79	2,329.49
Machinery	12	57	28	15	21,659.83	3,837.86
Metal	17	69	16	14	107,975.37	13,220.80
Oil and gas	10	68	19	13	50,969.20	7,985.57
Power generation	3	86	9	5	16,224.69	1,064.42
Real estate	3	37	33	30	158,958.89	28,747.87
Services	5	98	0	1	15,044.63	1,240.83
Textile	12	43	24	34	5,485.99	218.66
Others	13	53	29	18	778,080.23	28,974.90
Total	141					
Average		56	24	20	83,218.43	6,479.00

- *Number of board meetings*. In the sample companies, boards met on an average of 7.14 times in a year (with a standard deviation of 2.95). A value of 1 is assigned if the number of board meetings is lower (greater) than mean minus (plus) one standard deviation, otherwise it takes a value of 0.
- *Number of other companies' boards in which the directors are members*. For each director in each company, the total number of other companies in which she/he serves as a director is calculated. Average number of different companies in which the directors of a particular company function as directors is also calculated. A value of 1 is assigned to those companies where this number is less than the mean, else a value of 0 is assigned.
- *Frequency of attendance in the board meetings*: For each director in a company, the total percentage of attendance in board meetings is calculated. Then the average board meeting attendance score for each company by taking the average for all directors in a company is calculated. A score of 1 is assigned to a company if the average value is greater than the mean of the sample, otherwise it takes a value of 0.
- *CEO duality*. A value of 1 is assigned when the CEO is not the chairman of the board for a large company or when the CEO of the company is also the chairman of the board of a small company (Chen *et al.*, 2007), else a value of 0 is assigned. In a smaller company, the same person can occupy both positions, whereas in a large company the two posts could be occupied by two different individuals or if the board has a non-executive chairman (Palmon and Wald, 2002). A company is considered small if its market capitalization is lower than the average of the small-capital index of Bombay Stock Exchange.
- *Performance based compensation of the CEO*. A value of 1 is assigned to this variable if a company follows a performance-based compensation system, else it takes a value of 0.

3. *Proactive indicator.* This indicator consists of the following two indicators which are aggregated to form the proactive indicator:
   - *Earnings forecast score*. A value of 1 is assigned to those companies which provide earnings forecasts and 0 to the other companies.
   - *Additional information in the annual report*. A score of 1 is assigned to those companies that provide additional value-added information such as the CG or CSR report and 0 to other companies.
4. *Measures of financial performance*. ROA has been used as the measure of financial performance. ROA is defined as the after-tax net operating income divided by the total operating assets (Copeland *et al.*, 2000). Net operating income is computed as the operating earnings before income and taxes, before extra-ordinary items, and prior-period adjustment. Prowess database of CMIE has an item called EBIT (earnings before interest and tax) prior to extra-ordinary items. It has been used as a proxy for net operating income. Marginal tax rate has been used to compute ROA. While computing operating assets, capital work-in-progress has been excluded.
5. *Control variable*. Financial performance of a firm is affected by its size (Fama and French, 1992). Hence, firm size is used as a control variable in the regression analysis to arrest any confounding effect it might have on ROA. Market capitalization is considered as a proxy for firm size[5] (see Figure 1).

Results

Pearson correlations among the studied variables, legal indicator, board indicator, proactive indicator, composite CG measure and financial performance are given in Table II. Initial correlation results in Table II suggest that except the legal indicator, the remaining two indicators – board and proactive – are significantly related to ROA. The composite CG measure is similarly found to be related to ROA.

Figure 1 Conceptual model for investigation

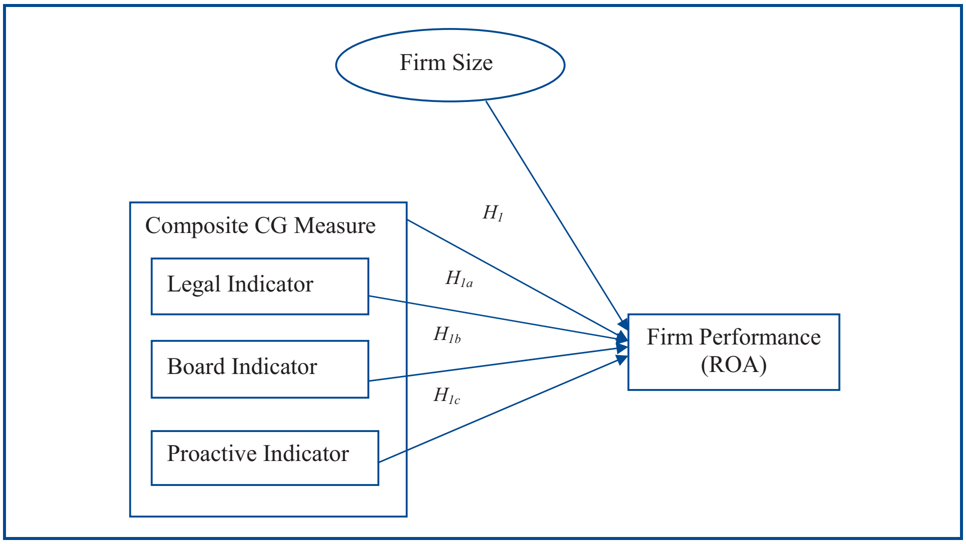

Table II Descriptive statistics and correlation among ROA, firm size, legal indicator, board indicator, proactive indicator, and composite CG indicator

Sl. no.	*Variables*	*Mean*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*
1	ROA	0.27	0.20	1	0.15*	0.05	0.16*	0.27****	0.25***
2	Firm size	6.92	2.28		1	−0.21**	−0.26***	0.40****	−0.11
3	Legal compliance	1.87	0.73			1	0.11	−0.03	0.48****
4	Board	5.87	1.29				1	0.14*	0.83****
5	Proactive	0.57	0.73					1	0.50****
6	Composite CG	8.31	1.78						1

Notes: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; **** $p < 0.001$; $N = 141$

Regression results confirm the correlation results among the variables (please see Table III). In the stepwise regression, after controlling the confounding effect of firm size in the first step, when the legal compliance indicator is entered in the next step, it does not predict ROA. On the contrary when board and proactive variables are entered in the second step, both variables significantly influence ROA. Results of step-wise regression of the composite

Table III Regression results of ROA, and individual and composite CG indicators

DV	*Step*	*IV*	*B*	*SEB*	*β*	*R^2*	*F*
ROA	1	Constant	0.18	0.05			
		Firm size	0.01	0.01	0.15*	0.02	3.25
	2	Constant	−0.03	0.12			
		Firm size	0.01	0.01	0.13	0.10	3.86***
		Legal compliance	0.02	0.02	0.07		
		Board	0.03	0.01	0.16*		
		Proactive	0.05	0.03	0.19***		
ROA	1	Constant	0.18	0.05			
		Firm size	0.01	0.01	0.15*	0.02	3.25
	2	Constant	−0.10	0.10			
		Firm size	0.02	0.01	0.18**	0.09	7.21****
		Composite CG	0.03	0.01	0.27****		

Notes: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$; **** $p < 0.001$; DV = Dependent variable, IV = Independent variable, B = Beta, SEB = Standard error of beta, β = Standardized beta, R^2 = Coefficient of determination

CG measure and the ROA, after partialling out the confounding influence of firm size, also show the latter as a strong predictor of ROA. Results support *H1*, *H1b* and *H1c* whereas *H1a* is rejected.

Discussion

A weak relationship between legal indicator and financial performance implies that existing legal compliance mechanism in Indian firms is not adequate to boost investors' confidence that would subsequently improve the bottom line of firms. Weak enforcement of laws coupled with institutional void (Khanna and Palepu, 1997) dwindle investors' confidence on firms (La Porta *et al.*, 1996, 2002). As many as 34 of the 141 surveyed firms in our study have reported some form of disputed tax liability in the balance sheet. Such findings suggest that despite mandatory requirements, some companies have a tendency to default in tax payments. Even when a firm has complied with all legal requirements, market reads it as a mere compliance exercise. Accounting fraud in the Indian company Satyam Computer Services Ltd. in 2009, a leading global consulting and information technology services provider, is a case in point. Though Satyam had complied with all legal requirements on papers and was even conferred with the Golden Peacock Global award for excellence in CG (*Financial Express*, 2008), serious violations in accounting standards were unearthed later that shook the confidence of investors on the existing legal compliance mechanism in India (Chen, 2009).

A significant relation between the board efficiency indicator and financial performance shows that enactment of Clause 49 of the Listing Agreement with respect to board efficiency and additional reporting requirements under the management clause set out by the SEBI has resulted in better board governance. Companies that have adhered to the provisions in the Clause report a higher ROA. Such results are consistent with findings from countries such as the UK, where it is found that companies that comply with the Cadbury Committee recommendations with respect to board functioning experience improved performance in comparison to firms that do not (Dahya and McConnell, 2007). This also substantiates past research findings (Dalton *et al.*, 1999; Pfeffer, 1972) about a positive relation between board and firm performance. This finding is, however, different from earlier views of Chakrabarti (2005) about ineffective boards in India and of Garg (2007) about a negative relationship between board attributes such as board size and board independence, and firm performance. This may be due to the fact that earlier studies (Dwivedi and Jain, 2005; Garg, 2007) have included only few indicators to assess board efficiency in Indian context whereas this study includes a broader range of issues taking into consideration key board indicators identified by the past research and SEBI guidelines to assess the board effectiveness in India.

A significant relationship between the proactive indicator and financial performance establishes that firms that provide advanced earnings forecasts and other value added information report higher ROA. Results are consistent with past studies that firms that establish relationship with stakeholders beyond market transactions gain competitive advantage over their competitors (Barney and Hansen, 1994). Any proactive initiative such as reporting on CSR or sustainable development sends a positive signal to the market about the firm. Signaling theory suggests that when stakeholders do not have complete information about a firm they interpret any information they receive from the firm as signals (Breaugh, 1992). Any positive signal about a firm enhances the firm value and boosts the confidence of investors on the company. Companies with poor social orientations are being screened out by long-term institutional investors in the USA and the UK (Cox *et al.*, 2004; Graves and Waddock, 1994) who prefer companies with a focus on ESG issues (Social Investment Forum, 2012). Though, Indian companies are yet to catch up with rest of the world in this aspect (KPMG, 2005), a favorable relation between the proactive indicator and financial performance suggests positive outcome of such a strategy. A case in point is the Tata group of companies in India which publishes CSR and sustainability reports regularly besides making such issues a part of the annual report. The group is considered one of the most reputed global brands (Sharma, 2011) because of such initiatives.

The significant relationship between the composite CG measure and financial performance establishes that companies with good governance systems record better financial performance compared to companies with poor governance records (Mohanty, 2003). Because ROA has a positive impact on the share price through its impact on the enterprise value, this implies that one of the ways to increase the ROA and hence shareholders' value is to improve the CG practices of the company. Results are consistent with past research findings that companies with good governance practices have better financial performance (*Business Week*, 2000). It also supports earlier research that properly designed mandatory CG reforms increase share prices (Black and Khanna, 2007) and lead to improved firm performance (Dahya and McConnell, 2007) in the Indian context.

Limitations and future research direction

This study has few limitations. First, this study develops CG indicators for large ''A'' group companies in India. We have excluded smaller companies and large service companies from our sample. This might have contributed to data inconsistency. Second, the data were collected from 18 categories of industries. Issues faced by each category being unique and different, an aggregate analysis across multiple categories of industries might have missed industry-specific issues. However, CG issues included in the study, being generic and prescriptive in nature, would hold good across industry categories. Third, while developing the composite CG measure, we could not include few key variables such as firm's policy towards insider trading, presence of anti-takeover devices, default in payment of interest to creditors, and the likes for the lack of availability of such data in the Indian context. Future research may include such factors while constructing the CG measure and study its influence on firm performance. As the existence of a single largest shareholder creates CG related problems due to the large concentration of family businesses in India, future research can expand the CG measure by adding promoter related issues as the fourth indicator.

Conclusions

This study develops a CG measure considering the institutional factors in India. Most of the past research on CG has focused on the effectiveness of the board in alleviating the CG related problems. However, in emerging economies where market imperfections and complex pyramid structures in business groups exist, CG should not be looked as a function of only traditional board indicators. In this paper, we have enriched the board measure by adding the equity stake of promoters in the board indicator in addition to several other sub-indicators. Proactive indicators have a significant role in reflecting CG practices in firms. The strong influence of the proactive indicator on firm performance calls for creation of socially desirable funds in India that would focus on investing in companies with better CG records. The legal compliance indicator may not be a sufficient indicator for CG in Indian context. A largely ineffective legal compliance indicator suggests that India indeed has to take stronger initiatives to ensure a more robust legal environment in order to boost investors' confidence. This is particularly important as the weak law enforcement and ineffective regulatory and compliance mechanisms are leading to growing incidence of corporate fraud in India (KPMG, 2012). A positive relation between the CG measure and firm performance can motivate Indian companies to adopt better CG practices that can improve the overall CG map in the country.

Notes

1. By 2003, of the 1848 listed companies, barely 50 percent reported on these indicators (www.sebi.org.in).
2. See, for example, Chapter 13 of Anthony and Reece (1995).
3. Source: www.sebi.org.in
4. 1crore = 10million
5. Size is estimated as the natural logarithm of market capitalization measured in Indian rupees crores.

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Appendix

Table AI CG indicators

Indicator	*CG indicators* *Sub-indicators*	*Measurement*
Legal compliance indicator	Adverse auditor's report	1 if the auditors have not qualified the annual report, 0 otherwise
	Default in payment of taxes	1 if the company has not defaulted in the payment of the legal dues, 0 otherwise
Board efficiency indicator	Promoter's stake	1 if the promoter's stake is greater than or equal to 51 per cent, 0 otherwise
	Number of directors in the board	1, if this number is less than the mean + one standard deviation of the entire sample, else 0
	Percentage of independent directors in the board	1, if it follows Clause 49 of the listing agreement, else 0
	Percentage of independent directors in the audit committee	1, if it follows Clause 49 of the listing agreement, else 0
	Number of board meetings	1, if the number of meetings is less (greater) than mean minus (plus) one standard deviation of the sample data, 0 otherwise
	Number of other companies' boards in which the directors are member	1, if it is less than the mean of the sample, 0 otherwise
	Frequency of attendance in the board meetings	1, if it is greater than the mean of the sample, 0 otherwise
	CEO duality	1, if it is a small company and the CEO is also the chairman or if it is a large company and the CEO is not the chairman, 0 otherwise
	Performance based compensation of the CEO	1, if the company has performance-based evaluation system, else 0
Proactive indicator	Providing earnings forecast by the management	1, if the company provides earnings forecasts, else 0
	Additional information in the annual report	1, if the company provides additional value-relevant information in the annual report, else 0

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