Asian J Bus Ethics (2016) 5:149–164
DOI 10.1007/s13520-016-0061-7

Role of corporate governance on firm performance: a study on large Indian corporations after implementation of Companies' Act 2013

Arindam Das[1] · **Sourav Dey**[2]

Published online: 18 February 2016

Abstract Corporate governance involves balancing the interests of the many stakeholders in a corporation—from shareholders and management to customers and the larger society. Corporate governance also offers the framework for attaining a company's vision and mission, providing guidance and oversight on a broad spectrum—action plans and internal controls to performance measurement and corporate disclosure. Companies' Act 2013 has been introduced in India with the primary objective of improving corporate governance practices in Indian corporations. In this paper, we investigate the moderating role of corporate governance practices in large Indian corporations on firm performance, post introduction of Companies' Act 2013. Specifically, we study the influence of board's involvement in company's affairs, board's diversity, CEO duality, board compensation, and promoters' involvement in the board. We find sufficient evidence that board involvement and board diversity positively influence firm performance, while CEO duality, board compensation, and promoters' presence do not have an influence on firm performance.

Keywords Corporate governance · Firm performance · Board diversity · Board compensation · Board engagement · CEO duality

✉ Arindam Das
arindam.iift@gmail.com

Sourav Dey
sourav.dey2008@gmail.com

[1] Centre for Management Studies, Administrative Staff College of India, Raj Bhavan Road, Hyderabad 500082, India

[2] Cognizant Business Consulting, SIPCOT IT Park, Siruseri, Chennai, India

Introduction

The primary characteristics of effective corporate governance include transparency, management oversight and control, and protection of the rights of all shareholders and directors' involvement in independently reviewing and approving the corporation's strategy and major business plans and decisions. These factors are expected to contribute positively towards maximization of shareholder value through superior and sustained firm performance and value creation. However, in the past two decades, we have observed series of large-scale corporate scandals, frauds, and failures across the globe—from Enron and WorldCom in the US, Parmalat in Italy, Sanlu in China, and Satyam Computers in India, causing significant losses to shareholders of these companies. While developed countries like the USA have taken effective steps to improve the corporate governance standards and prevent such failures in future, similar initiatives in India or other developing countries are only gaining grounds now (Prasad 2014).

With the introduction of Companies' Act 2013 (CA2013), we expect significant improvement in corporate governance practices in India. This paper studies some of the key corporate governance practices of large Indian corporations post CA2013 implementation and evaluate their moderating role on firm performance.

Background and theoretical perspectives

Corporate governance is defined as the set of systems and processes by which companies are directed and controlled with the purpose of aligning the interest of individuals, corporations, and society, as much as possible (Cadbury 2000; Gregory 2000). The need of corporate governance arises out of the gap in professionally managed listed companies between the rights of shareholders and the operational control exercised by the management of the company. The principles of good corporate governance involve around accountability, transparency, effectiveness, remuneration, relationship with shareholders, probity, and focus on the sustainable success of an equity over the longer term. The OECD principles of good corporate governance comprise of the following elements: (a) alignment with the legal and regulatory requirements, (b) protection and facilitation of shareholders' rights, (c) equitable treatment of shareholders, and (d) disclosure and transparency of financial and operational information (OECD 1999). Thus, the board has an important role and fiduciary duty to ensure these principles are held appropriately in the firm, both in spirit and practice.

The stakeholder theory, which attempts to align the interests of managers and all, has been a subject of some investigation. John and Senbet (1998) have conducted a detailed study of corporate governance through the concept of stakeholder theory. They note the presence of many parties interested in the well-being of the firm, with many of them often holding competing interests. Moreover, shareholders might welcome investments in high yielding, but volatile projects. However, such investments might jeopardize the interests of debt holders, especially when the firm is teetering on the edge of bankruptcy. The study also emphasizes the absence of free market system, citing as an example the need to determine an optimal size of the board of directors, especially in view of the tendency for board size to exhibit a negative correlation with firm performance. Other non-market mechanisms reviewed by John and Senbet (1998) include the need for

designing a committee structure in a way that allows the setting up of specialized committees with different membership on separate critical areas of operations of the turn. Such a structure would allow, for instance, productivity-oriented committees and monitoring-oriented ones.

The multiplicity of stakeholders as enshrined in stakeholder theory was highlighted by Jensen (2001), who concurred with John and Senbet (1998) that certain actions of management might have conflicting effects on various classes of stakeholders. This implies that the managers have numerous of objective functions to maximize firm performance, something that Jensen sees as an important drawback of the stakeholder theory as it violates the proposition that a single-valued objective is a prerequisite for purposeful or rational behavior by any organization.

Jensen (2001) formulated the enlightened stakeholder theory in order to bring to the fore the single-valued objective function that conforms to rationality. The enlightened stakeholder provides that managers should pursue the maximization of the long-run value of the firm. This is with the view to protect the interest of any major stakeholder, the violation of which leads to truncation of the objective of long-run value maximization of the firm.

According to a McKinsey global survey, it has been seen that currently, the board of directors spent a greater portion of their board's time on strategy and less on M&A than was the situation before. The board of directors in a private company spent a greater amount of time on strategy than public companies because in the public companies more time is focused into the following of compliance (McKinsey 2013).

The introduction of the CA2013 by the government of India has made some key changes with respect to the earlier Companies Act, 1956, in areas concerned with the management and administration of companies. These changes are aimed at ensuring higher standards of transparency and accountability and seek to align the corporate governance practices in India with global best practices, raising the bar on governance (Desai 2014; KPMG 2014). The important aspects in CA2013 that help companies assess the impact and develop a strategy around compliance and corporate governance are the following: (a) responsibility of independent directors, (b) a maximum cap of 15 on number of directors, (c) presence of at least one woman director, and (d) flexibility in participation in board meetings through audio or video conferences. In addition, CA2013 specifies that there must be at least four committees where board members should participate: audit committee, nomination and remuneration committee, corporate social responsibility committee, and stakeholder's relationship committee (KPMG 2014).

Research questions and hypotheses

In the context of the above-mentioned constructs and regulatory implications of CA2013, we frame our research questions around effectiveness of the corporate boards in ensuring the interests of companies' stakeholders. We analyze how factors like diversity of the board, involvement of board members in company's activities, CEO duality and board compensation contribute to firm's profitability, market capitalization, and returns to the shareholders.

Diversity of board members

The diversity of the board is measured through indicators such as presence of independent directors in the board, presence of women directors in the company board, directors' presence in other companies' boards, presence of promoters in the board, and board members' professional and educational background.

Presence of independent directors Independent directors are professionals who can easily achieve the supervising function, reduce the possibility of collusion of top executives, and prevent the abuse of company resources (Chiang and Chia 2005). CA2013 also ensures that the independent directors have no pecuniary relationship with, nor they be given any special incentives, which might force him/her to compromise independence.

The stewardship theory suggests that superior corporate performance is linked to a majority of inside directors as they work to maximize profit for shareholders (Donaldson and Davis. 1991; Donaldson 1990). Contrary to this, the agency theory suggests that a greater proportion of outside directors will be able to monitor any self-interested actions by managers and so will minimize the agency costs (Fama and Jensen 1983; Fama 1980).

The independent directors are expected to offer independent judgment on issues related to strategy, performance, and key appointments and take an objective view on the performance evaluation of the board. Key decisions on certain topics should be passed only if a majority of the independent directors of the board votes in support of the decision. The independent directors should be appointed for a specific duration during which he/she can be removed from his/her position only on specific grounds and after following due process (Balasubramanian 2010).

Presence of women directors The performance of a company is affected by the presence of heterogeneity across various organization levels, including the board level. Like managerial diversity, board diversity through presence of women directors is an important element of organizational behavior research. Female directors bring unique and valuable resources and relationships to their boards with their diverse experience, knowledge, and observational and perceptive strengths (Smith et al. 2006).

Directors' presence in others boards Directors' participation in other firm's board can strengthen the firm through cross-learning. As per resource dependence theory, outside directors provide access to resources needed by the firm. For example, outside directors who are also executives of financial institutions may assist in securing favorable lines of credit (Daily et al. 2003).

Presence of promoters in the board A large number of organizations in India have significant promoters' presence in its board, i.e., promoters and their family members hold several director positions in the board. It has been observed that the promoters who do not bring in diversity to the board may not be effective in creating value for shareholders (Carter et al. 2003). Observing the directors' lists of large companies in India, we notice that the family members of the promoters who become directors bring in negligible diversity to the board.

Board size Earlier research has shown that there is an inverse association between board size and firm value, and companies with small boards tend to exhibit favorable values for financial ratios and provide stronger CEO performance (Yermack 1996). However, we believe that a larger board brings in additional diversity in the board functions, which becomes more relevant in today's business scenario. While CA2013 provides guidelines on board size, our review of data on Indian corporations shows that there is significant variation in size of their boards, and there is little correlation between company size and board size.

Thus, in this study, we measure board diversity as a combined factor of presence of independent directors, presence of women directors, directors' presence in other boards, lack of promoters' presence in the board, and board size. We posit,

H1: Diversity of the board positively influences firm performance.

Involvement of board members

Research shows that involvement of board members in firm's activities varies widely across individuals within a board and across boards as well. While minute tracking of company's operational activities is undesirable, it is expected that directors leverage their experience, knowledge, and judgment to steer the company towards its objectives. We look at two factors, attendance in board meetings and presence in board committees, as measures for board members' involvement.

Attendance in board meetings Board meeting time is an important resource in improving the effectiveness of boards (Conger et al. 1998). Lipton and Lorsch (1992) suggest that the greater frequency of board meetings is likely to result in superior performance. Attendance in the board meetings is the main channel through which directors get the required information required to carry out their duties. Lack of attendance in the board meetings may lead the directors to give improper advice related to strategy of the firm, and they will be ineffective to monitor and guide the management.

Presence of directors in committees The presence of the directors in the different board committees can help to keep a monitor of the different management activities of the firm. The committees can be benefited by the presence of several directors, as the committees will get an expert advice on the various aspects of governance. This leads us to take a deep dive into the "busyness hypothesis" (Ferris, Jagannathan, and Pritchard 2003). Some studies have reported that directors with multiple appointments have a positive impact on firm performance (Ferris et al. 2003; Harris and Shimizu 2004; Miwa and Ramseyer 2000).

As in opposition to this view, it is often argued that a large of appointments for directors can lead to over commitment and thereby reducing their ability to have a keen focus on matters related to company management.

Thus, board members' involvement in firm's activities is measured through two factors, attendance in board meetings and presence of directors in committees and we posit,

H2: Focus and attention from directors on firm operations positively influence firm performance.

CEO duality

Duality refers to a board leadership structure in which one person fulfills the role of both the chairperson of the board and the CEO/managing director. Previous studies bring in a debate on CEO duality where a group believes that CEO duality leads to a superior performance of the firm as the CEO gets the right of clear-cut leadership for purposes of strategy formulation and implementation (Anderson and Anthony 1986). The other group of people argues that duality would lead to less effective leadership, as it would reduce the independence of the board. It is also argued that in case of duality, there is a chance that a rivalry is created between the chairperson and the CEO. There might be confusion as the company would have two spokespersons, and the leadership might be diluted.

According to the agency theory, an agency problem exists when an agent has established goals which conflict with that of a principal. Likewise, in working as a chairperson, the CEO is bound to get more power, and this might weaken the control of the board over the firm.

History has shown that duality has often resulted in decline in the performances of the firm such as Westinghouse, Sears, General Motors, and IBM (White and Ingrassia 1992). Likewise, the non-duality of the Compaq Computers is referenced as a reason of success for the Compaq Computers. Therefore, we posit,

H3: CEO duality negatively influences firm performance.

Board compensation

Past trends from India suggest the fact that earlier government interventions placed limitations on corporate sector pay in India that were unrealistic which led to the off-the-records methods for compensating executive directors. Fortunately, scenario has changed now for the better. In India, the remuneration packages of the directors need to be individually approved by the shareholders in a general meeting (Balasubramanian 2010).

Managerial compensation in India has two components—salary- and performance-based commission—as well as retirement and other benefits and prerequisites. An analysis of about 300 Indian firms suggests that the average total compensation of Indian CEOs has risen almost threefold between 1998 and 2004 (Chakrabarti et al. 2008). During this period, the proportion of profit-based commission has risen steadily, and the proportion

of CEOs with commission as part of their pay package has risen from 13.4 to 25.6 %. CEO pay has thus clearly becomes more performance-based over the past decades.

The executive compensation literature (Murphy 1999; Zhu et al. 2009) suggests that compensation should be related to measures of stock-based performance, not only because this is the desired by shareholders but also because high stock returns should signal positive information on the actions taken by managers. It is advised that the remuneration committee takes full control of the remuneration process, policies, and practices. In particular, remuneration committees should jealously guard their initiation rights over executive remuneration (Balasubramanian 2010). On the other hand, board members' compensation can be an important motivating factor for them to get involved in improving company's performance. Thus, we posit,

H4: Board compensation positively influences firm performance.

Data and methodology

We have chosen 75 large-cap companies from India, listed in Bombay Stock Exchange's BSE 100 index for this study and looked at these companies' board activities and performance over fiscal year 2014. The companies represent various sectors from banking and manufacturing to retail and information technology. The reason for choosing large corporations is that they are expected to have more established and structured board-level activities. Centre for Monitoring Indian Economy's (CMIE) Prowess database and annual reports of the companies for FY2014 have been used to retrieve all firm-level information (financial as well as board related).

Multivariate regression has been used to analyze the data with separate multiple regression model for each dependent variable.

The variables used for multivariate regression is listed in Table 1. We have chosen three dependent variables, viz., profit after tax (PAT), Tobin's Q, and equity dividend to represent diverse aspects of firm performance. While PAT represents financial performance of the firm, Tobin's Q represents market valuation of the firm for the future, i.e., how the market perceives the future value of the firm, including how it may leverage its intangible assets. Equity dividend on the other hand represents the returns shareholders get from the firm.

The following independent variables have been used to test hypothesis 1 for board diversity: Presence of Independent Directors, presence of women directors, presence of promoters in board, and size of the board. Hypothesis 2 has been tested through these two independent variables: attendance in board meetings and presence of directors in committees. Hypothesis 3 on CEO duality has been tested through the variable chairperson = CEO/MD, and hypothesis 4 has been tested through the variable log of per capita board compensation.

In order to ensure robustness of our tests, we control for firm-specific and industry-specific factors, we use the following control variables: industry category code, age of the firm, and log of size.

Table 1 Variable definitions

Variable	Variable Type	Definition
Equity dividend as percentage of PAT	Dependent	Total dividend paid to common stockholders in the financial year/profit after tax for the financial year
Tobin's Q	Dependent	Approximated Tobin's Q = (MVE + PS + DEBT)/TA where MVE is the product of firm's share price and the number of common stock shares outstanding, PS is the liquidating value of preferred stock, DEBT is the firm's short-term liabilities net of its short-term assets, plus the book value of the firm's long-term debt, and TA is the book value of total assets of the firm
PAT	Dependent	Reported profit after tax for the financial year
Industry category code	Control	Primary industry of the firm
Age of the firm	Control	Age of the firm in number of years
Log of size	Control	Natural logarithm of total assets at the end of the financial year
Log of per capita board compensation	Independent	Natural logarithm of (total compensation paid to the board/number of board members)
Directors' participation in other boards	Independent	Average of firm's directors' External Participation Index (Director's External Participation Index = number of external boards where the director is present/average of number of external board pres ence by all directors in the sample set)
Attendance in board meetings	Independent	Average number of board meetings attended by directors/total num ber of board meetings during the financial year
Presence of directors in committees	Independent	Average number of committees where directors are present/total number of board committees in the firm during the financial year
Size of the board	Independent	Total number of board members
Presence of promoters in board	Independent	Number of promoter directors/total number of board members
Chairperson = CEO/ MD	Independent	Indicator if chairperson of the board is also the chief executive/ managing director of the company
Presence of women directors	Independent	Number of women directors/total number of board members
Presence of independent directors	Independent	Number of independent directors/total number of board members

Results and discussion

We have run three separate multiple regressions, one for each dependent variable, using SPSS®. Table 2 provides descriptive statistics of the dataset used for this analysis. We notice that equity dividend as a percentage of PAT shows a very high standard deviation. This can be explained by the fact that firms in India adopt very different dividend payout policies, irrespective of their profitability. It is also true that shareholders rarely look at dividend as an important source of value when they hold stock.

Table 3 provides bivariate correlation among variables. The bivariate correlations are not found to be significant, and we continue our subsequent analysis with all the variables identified for the study.

Table 2 Descriptive statistics

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Industry category code	75	4.347	2.452	.422	.277	−.951	.548
Age of the firm	75	55.213	37.319	1.465	.277	3.004	.548
Log of size	75	26.432	1.926	−.981	.277	4.352	.548
Equity dividend as percentage of PAT	75	105.395	649.447	8.637	.277	74.731	.548
Tobin's Q	75	2.388	2.300	1.393	.277	1.332	.548
PAT	75	0.127	0.145	2.084	.277	12.372	.548
Log of per capita board income	75	14.825	3.507	−3.140	.277	11.104	.548
Directors' participation in other Boards	75	1.053	0.695	1.392	.277	3.528	.548
Attendance in board meetings	75	0.752	0.166	−2.474	.277	9.712	.548
Presence of directors in committees	75	0.377	0.187	−.063	.277	.958	.548
Size of the board	75	13.253	3.966	.485	.277	.283	.548
Presence of promoters in board	75	0.108	0.138	1.077	.277	−.165	.548
Chairperson = CEO/MD	75	0.307	0.464	.856	.277	−1.303	.548
Presence of women directors	75	0.063	0.068	.779	.277	−.379	.548
Presence of independent directors	75	0.473	0.188	−.909	.277	1.115	.548
Valid N (listwise)	75						

Table 4 provides the output of step-wise multiple regression to predict equity dividend as percentage of PAT through independent and control variables mentioned above. The control variables are entered in step 1, and independent variables are entered in step 2. The independent variables predict equity dividend as percentage of PAT statistically significantly with $F(12, 62) = 2.265$, $p = 0.019$, Adjusted $R^2 = .17$. However, only one variable, Director's Participation in Other Boards, has been found to be statistically significantly with $p = 0.000$.

Table 5 provides the output of step-wise multiple regression to predict Tobin's Q through independent and control variables mentioned above. As before, the control variables are entered in step 1, and independent variables are entered in step 2. The independent variables predict Tobin's Q statistically significantly with $F(12, 62) = 5.553$, $p = 0.000$, adjusted $R^2 = .425$. The variables that have been found statistically significant are Director's Participation in Other Boards ($p = 0.045$) with negative impact, Attendance in Board Meetings ($p = 0.001$), and Size of the Board ($p = 0.015$). Presence of Women Directors is marginally significant with $p = 0.075$.

Table 6 provides the output of step-wise multiple regression to predict PAT through independent and control variables mentioned above. The independent variables predict PAT statistically significantly with $F(12, 62) = 2.680$, $p = 0.006$, adjusted $R^2 = .216$. However, only one variable, Presence of Women Directors, has been found to be statistically significantly with $p = 0.011$.

The above results indicate that we can reject hypotheses H3 and H4. Contrary to some of the past research, we find no influence of CEO duality and board compensation on any of our firm performance measure.

Table 3 Bivariate correlation

Correlations														
Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Industry category code														
2. Age of the firm	−.146													
3. Log of size	−.136	.171												
4. Equity dividend as percentage of PAT	.121	−.051	−.092											
5. Tobin's Q	.149	.137	−.415	−.061										
6. PAT	.157	−.113	.209	−.089	.336									
7. Log of per capita board income	.172	−.103	.213	−.134	.145	.276								
8. Attendance in board meetings	.111	.004	.286	.008	.242	.317	.482							
9. Presence of directors in committees	.014	−.199	.017	.141	.087	−.056	.258	.490						
10. Directors' participation in other boards	.025	−.257	−.048	.364	.026	.177	.183	.441	.364					
11. Size of the board	−.049	.385	.538	−.118	−.068	.105	.053	−.148	−.360	−.280				
12. Presence of promoters in board	.080	−.271	−.296	.099	.252	−.011	.159	.120	.214	.285	−.274			
13. Chairperson = CEO/MD	.143	.066	.170	.173	−.113	.157	−.120	−.096	−.275	−.112	.148	−.085		
14. Presence of women directors	−.139	−.102	.061	−.105	.176	.341	−.031	.147	.010	.289	.078	.105	−.110	
15. Presence of independent directors	.128	−.198	.032	.058	.229	.355	.468	.490	.168	.328	−.167	.156	.039	.241

Table 4 Multivariate regression model for equity dividend

Multivariate regression model—dependent variable: equity dividend as percentage of PAT						
Model summary						
Model		*R*	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1		.145	.021	−.020	656.031	1.741
2		.552	.305	.170	591.582	
ANOVA						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	655073.892	3	218357.964	.507	0.678
	Residual	30556713.747	71	430376.250		
	Total	31211787.639	74			
2	Regression	9513720.269	12	792810.022	2.265	0.019
	Residual	21698067.370	62	349968.829		
	Total	31211787.639	74			
Coefficients						
Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. error	Beta		
1	(Constant)	656.498	1086.385		.604	.548
	Log of size	−24.737	40.449	−.073	−.612	.543
	Age of the firm	−.392	2.091	−.023	−.187	.852
	Industry category code	28.612	31.639	.108	.904	.369
2	(Constant)	213.040	1136.356		.187	.852
	Log of size	−4.213	52.189	−.012	−.081	.936
	Age of the firm	1.385	2.207	.080	.628	.532
	Industry category code	28.664	30.618	.108	.936	.353
	Log of per capita board income	−44.248	25.864	−.239	−1.711	.092
	Directors' participation in other boards	468.966	123.237	.502	3.805	.000**
	Attendance in board meetings	−801.089	657.213	−.205	−1.219	.227
	Presence of directors in committees	636.695	477.945	.184	1.332	.188
	Size of the board	11.933	25.919	.073	.460	.647
	Presence of promoters in board	120.685	565.757	.026	.213	.832
	Chairperson = CEO/MD	244.379	165.185	.175	1.479	.144
	Presence of women directors	−2159.323	1159.615	−.226	−1.862	.067
	Presence of independent directors	460.274	485.488	.133	.948	.347

We also fail to reject hypotheses H1 and H2 as we have found that some of the variables for board diversity and board involvement do influence our firm performance measures. The following section discusses the influence of these significant variables in detail.

Diversity of board members: influence of presence of women directors

A study in 2008 on top European firms found that women tend to have better attendance records at board meetings than their male counterparts (Adams and

Table 5 Multivariate regression model for Tobin's Q

Multivariate regression model—dependent variable: Tobin's Q					
Model summary					
Model	*R*	*R* square	Adjusted *R* square	Std. error of the estimate	Durbin-Watson
1	.481	0.232	0.199	2.058	
2	.720	0.518	0.425	1.744	1.875
ANOVA					
Model	Sum of squares	df	Mean square	F	Sig.
1 Regression	90.671	3	30.224	7.136	.000
Residual	300.730	71	4.236		
Total	391.402	74			
2 Regression	202.749	12	16.896	5.553	.000
Residual	188.652	62	3.043		
Total	391.402	74			
Coefficients					
Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	14.919	3.408		4.377	0.000
Log of size	−0.523	0.127	−0.438	−4.120	0.000
Age of the firm	0.014	0.007	0.230	2.158	0.034
Industry category code	0.116	0.099	0.123	1.166	0.247
2 (Constant)	16.998	3.351		5.073	0.000
Log of size	−0.900	0.154	−0.754	−5.849	0.000
Age of the firm	0.010	0.007	0.167	1.577	0.120
Industry category code	0.032	0.090	0.034	0.356	0.723
Log of per capita board income	0.032	0.076	0.049	0.421	0.675
Directors' participation in other boards	−0.742	0.363	−0.224	−2.042	0.045*
Attendance in board meetings	6.530	1.938	0.471	3.369	0.001**
Presence of directors in committees	0.635	1.409	0.052	0.451	0.654
Size of the board	0.190	0.076	0.328	2.490	0.015*
Presence of promoters in board	1.984	1.668	0.119	1.189	0.239
Chairperson = CEO/MD	0.088	0.487	0.018	0.180	0.858
Presence of women directors	6.198	3.419	0.183	1.813	0.075
Presence of independent directors	1.025	1.432	0.084	0.716	0.477

Ferreira 2009). Specifically, they found that the likelihood that a female director has attendance problems is lower than that of a male director; male directors have fewer attendance problems when there is greater proportion of female directors on the board; firms with more diverse boards provide their directors with more pay-performance incentives; and firms with more diverse boards have more board meetings.

Studies have also found that women are more likely to sit on audit, governance, and nominating committees. Gender-diverse boards allocate more time and effort to monitoring, and diverse boards are more likely to hold CEOs accountable for poor stock-drive performance. Such an atmosphere of accountability would undoubtedly change the decisions the board makes (Leblanc and Gillies 2010).

Our findings on Indian firms are in line with these observations. Two of our firm performance variables, Tobin's Q and PAT, are significantly and positively influenced by the presence of women directors. This is particularly significant for Indian corporations as we notice that even after incorporation of CA2013, which insists on at least one woman director on company's board, a large number of Indian companies failed to act on time.

Diversity of board members: influence of board size

As boards are considered to be important decision-making groups, size can affect the decision-making process and effectiveness of the board. (Dwivedi and Jain 2005). One group of researchers (Dalton et al. 1998; Pearce and Zahra 1992) predicts board size to have a positive association with firm performance. According to the supporters of this view, if the board size is large, then there will be a conglomeration of a large variety of people. These people will bring in new varieties of ideas and thoughts and can have a different view of thinking which might add value to the performance of the board. A larger board size might create greater connections and links and hence access to more resources. Smaller boards are assumed to have inadequate recognition of the need to initiate or support strategic change, a lack of clear understanding of alternatives, and/or lack of confidence in recommending strategic change (Goilden and Zajac 2001). The contrarian view is that if the size of the board is big it might lead to the dilution of responsibilities. There might be no clear-cut definition of responsibilities among the board members. Due to larger board size, individual board members might not be able to display their potential among the large number of board members.

Therefore, it is possible that an inverted "U" relationship exists, whereby the addition of directors adds to the skills mix and performance of board and firm till it reaches a point where the adverse dynamics of a large board outweigh the additional benefits of a greater skills mix, as suggested by Jensen (1993).

In our study of large Indian corporations, board size only influences Tobin's Q positively and significantly. Tobin's Q is a representation of market's assessment of the firm, including its future prospects and provides a measure of the management's ability to generate future income stream from an asset base (Short and Keasey 1999). Therefore, a large and illustrious board may demonstrate actions that the market desires and appreciates and therefore has a positive influence on market's view of the firm's worth.

Involvement of board members: influence of attendance in board meetings

Regular meeting attendance is considered a hallmark of the conscientious director. It matters a lot and there is widespread perception that high-profile board members rarely show up for board meetings and when they do show up, they are not prepared (Sonnenfeld 2002).

Research also indicates that the frequency of board meetings attended by directors themselves has a positive and significant effect on a firm's profitability. However, the authorized meeting attendance is negatively correlated with performance. This negative effect is statistically significant and economically comparable to the positive effect of directors' own attendance (Chou et al. 2013).

Our findings are in line with these observations. We find that Tobin's Q is positively and significantly influenced by director's attendance in board meetings. As explained

Table 6 Multivariate regression model for PAT

Multivariate regression model—dependent variable: PAT					
Model summary					
Model	*R*	*R* square	Adjusted *R* square	Std. error of the estimate	Durbin-Watson
1	.308	0.095	0.057	0.141	
2	.584	0.342	0.214	0.129	1.946
ANOVA					
Model	Sum of squares	df	Mean square	F	Sig.
1 Regression	0.149	3	0.050	2.489	.067
Residual	1.416	71	0.020		
Total	1.565	74			
2 Regression	0.534	12	0.045	2.680	.006
Residual	1.030	62	0.017		
Total	1.565	74			
Coefficients					
Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
1 (Constant)	−0.398	0.234		−1.702	0.093
Log of size	0.019	0.009	0.255	2.211	0.030
Age of the firm	−0.001	0.000	−0.132	−1.144	0.257
Industry category code	0.010	0.007	0.172	1.497	0.139
2 (Constant)	−0.292	0.248		−1.178	0.243
Log of size	0.004	0.011	0.058	0.383	0.703
Age of the firm	0.000	0.000	−0.122	−0.991	0.325
Industry category code	0.007	0.007	0.113	1.004	0.319
Log of per capita board income	0.007	0.006	0.159	1.172	0.246
Directors' participation in other boards	0.002	0.027	0.011	0.084	0.933
Attendance in board meetings	0.213	0.143	0.243	1.485	0.143
Presence of directors in committees	−0.151	0.104	−0.194	−1.450	0.152
Size of the board	0.001	0.006	0.035	0.229	0.820
Presence of promoters in board	−0.079	0.123	−0.076	−0.644	0.522
Chairperson = CEO/MD	0.046	0.036	0.148	1.291	0.201
Presence of women directors	0.661	0.253	0.309	2.616	0.011*
Presence of independent directors	0.068	0.106	0.088	0.642	0.523

before, Tobin's Q is a representation of market's assessment of the firm and if market notices active participation by board members in board meetings, it influences market's view of the firm's worth positively.

Involvement of board members: influence of directors' participation in other boards

We find conflicting results on directors' participation in other boards. Based on past research, we have argued that if board members were also members in other companies' boards, then they would get a higher level of exposure on governance issues,

challenges, and solutions. This would not only broaden their world-view but would also enable them to make better decisions and guide company's management better. However, we find that director's participation positively influences equity dividend and negatively influences Tobin's q. Further research is required to understand the moderating role of director's participation in other boards on firm performance.

Summarizing, our key findings show that if the board size if large, board attendance is maintained well and there are women directors on the board, then the board brings in a positive outlook for the company and that in turn raises the value of the firm in the eyes of the shareholders.

Conclusions

The introduction of CA2013 in India has specific objectives from corporate governance perspectives. They are around responsibility of independent directors, board size, presence of woman directors, and participation in board meetings. Our objective in this study was to assess the role of these factors on firm performance. Based on firm-level data of large Indian corporations, we find evidence that director's diversity as well as director's involvement in the company affects company's performance—measured through financial performance, market valuation, and returns to the shareholders. A relatively larger board is viewed more positively. The presence of women board members brings in balance to the board composition and conveys the message of good corporate governance and firm's ethical behavior. In addition, active participation in board meetings is also seen as positive influencer.

This study has been limited to firm-level data of FY2014, after introduction of CA2013. We can extend this study to evaluate the effect of CA2013 on firm performance by analyzing similar data before and after introduction of CA2013.

References

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics, 94*(2), 291–309.

Anderson, C. A., & Anthony, R. N. (1986). *The new corporate directors: Insights for board members and executives*. New York: Wiley.

Balasubramanian, N. (2010). *Corporate governance and stewardship: emerging role and responsibilities of corporate boards and directors*. New Delhi: Tata McGraw Hill Education.

Cadbury, S. A. (2000). The corporate governance agenda. *Corporate Governance: An International Review, 8*(1), 7–15.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review, 38*(1), 33–53.

Chakrabarti, R., Megginson, W., & Yadav, P. K. (2008). Corporate governance in India. *Journal of Applied Corporate Finance, 20*(1), 59–72.

Chiang, H. T., & Chia, F. (2005). An empirical study of corporate governance and corporate performance. *Journal of American Academy of Business, 6*(1), 95–101.

Chou, H., Chung, H., & Yin, X. (2013). Attendance of board meetings and company performance: evidence from Taiwan. *Journal of Banking & Finance, 37*, 4157–4171.

Conger, J. A., Finegold, D., & Lawler, E. E. (1998). Appraising boardroom performance. *Harvard Business Review, 76*, 136–164.

Daily, C. M., Dalton, D. R., & Cannella, A. A. (2003). Corporate governance: decades of dialogue and data. *Academy of Management Review, 28*(3), 371–382.
Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Number of directors and financial performance: a meta-analysis. *Academy of Management Journal, 42*(6), 674–686.
Desai (2014). Companies act series. Nishith Desai Associates. Available at: http://www.nishithdesai.com/information/research-and-articles/nda-hotline/companies-act-series.html. Last Accessed 23 Sep 2015.
Donaldson, L. (1990). The ethereal hand: organizational economics and management theory. *Academy of Management Review, 15*(3), 369–381.
Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management, 16*(1), 49–64.
Dwivedi, N., & Jain, A. K. (2005). Corporate governance and performance of Indian firms: the effect of board size and ownership. *Employee Responsibilities and Rights Journal, 17*(3), 161–172.
Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88*, 288–307.
Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*, 301–325.
Ferris, S. P., Jagannathan, M., & Pritchard, A. C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *Journal of Finance, 58*, 1087–1111.
Goilden, B. R., & Zajac, E. J. (2001). When will boards influence strategy? Inclination × power = strategic change. *Strategic Management Journal, 22*, 1087–1117.
Gregory, H. J. (2000). *International comparison of corporate governance guidelines and codes of best practice*. New York: Weil. Gotshal & Manges LLP: i.
Harris, I. C., & Shimizu, K. (2004). Too busy to serve? An examination of the influence of overboarded directors. *Journal of Management Studies, 41*(5), 775–798.
Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance, 48*(3), 831–880.
Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of App lied Corporate Finance, 14*(3), 8–21.
John, K., & Senbet, L. W. (1998). Corporate governance and board effectiveness. *Journal of Banking and Finance, 22*, 371–403.
KPMG (2014). Companies act 2013 raising the bar on governance. KPMG. Available at: http://www.kpmg.com/IN/en/Documents/Companies_Act_2013_Raising_the_bar_on_Governance.pdf. Last Accessed 23 Sep 2015.
Leblanc, R., & Gillies, J. (2010). *Inside the boardroom: How boards really work and the coming revolution in corporate governance*. Toronto: Wiley.
Lipton, M., & Lorsch, W. J. (1992). "A modest proposal for improved corporate governance". *Business Lawyer, 48*(1), 59–77.
McKinsey (2013). Improving board governance: McKinsey global survey results. McKinsey & Company. Available at: http://www.mckinsey.com/insights/strategy/improving_board_governance_mckinsey_global_survey_results. Last Accessed 23 Sep 2015.
Miwa, Y., & Ramseyer, J. M. (2000). Corporate governance in transitional economies: lessons from the prewar Japanese cotton textile industry. *The Journal of Legal Studies, 29*(1), 171–203.
Murphy, K. J. (1999). Executive compensation. *Handbook of Labor Economics, 3*, 2485–2563.
Organisation for Economic Co-operation and Development. (1999). *OECD principles of corporate governance*. Paris: OECD.
Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies, 29*, 411–438.
Prasad, R. S. (2014). Corporate governance in India: challenges for emerging economic super power. *Business Studies Journal, 6*(2), 1–17.
Short, H., & Keasey, K. (1999). Managerial ownership and the performance of firms: evidence from the UK. *Journal of Corporate Finance, 5*, 79–101.
Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *International Journal of Productivity and Performance Management, 55*(7), 569–593.
Sonnenfeld, J. A. (2002). What makes great boards great. *Harvard Business Review, 80*(9), 106–113.
White, J. B., & Ingrassia, P. (1992). Eminence grise: behind revolt at GM, lawyer Ira Millstein helped call the shots. *Wall Street Journal*.
Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185–211.
Zhu, Y., Tian, G. G., & Ma, S. (2009). Executive compensation, board characteristics and firm performance in China: the impact of compensation committee. In *22nd Australasian Finance and Banking Conference*.