

Changing structure of Indian corporate Boards: 2006-2011

Dr. Sonia Sharma

Guru Gobind Singh college for Women, Sector-26, Chandigarh

Abstract

This study aims to examine the board characteristics of the BSE listed selected Indian companies for the period 2006-2011. Using a sample of 231 companies over a period of six years an effort has been made to see how these board characteristics have been changed over the period of study. It was also examined whether any significant changes in board characteristics have been triggered by the Satyam scandal. Among 11 board characteristics, 7 board characteristics i.e board size, board independence, board meetings, multiple directorships of inside and outside directors, ownership of nonexecutive directors and executive remuneration have changed significantly. While comparing board characteristics of sample companies in pre Satyam and post Satyam period, it was concluded that board independence, multiple directorships of inside and outside directors, promoter chairperson, non executive chair and executive remuneration have changed significantly. Therefore, it can be concluded that these changes were forced through regulations on companies and driven by their desire to improve their practices voluntarily so as to enjoy the benefits of globalization.

Key words: Board characteristics, board meetings, board size, Satyam Scandal

Introduction

The boards of directors are increasingly being recognised as a critical success factor for corporations. The board has to perform the functions of strategic decision making, establishing objectives, policy formulation and monitoring or evaluating the performance of the management of the company. Therefore, there is always an overwhelming need to ensure that they discharge their responsibilities properly to protect and promote the interests of all shareholders as well as other stakeholders. In a dynamic environment, the new challenges boards will be facing are likely to be even greater than those they faced during the 1980's and 1990's. This happened due to the continued globalisation of the economy and corporations and rapid advances in

information technology. Therefore, a number of the more promising initiative for empowering boards have now become widespread practices e.g. having a greater proportion of outside directors, selecting a broader profile of directors so that the board is more representative of the society, holding meetings only with outside directors, requiring directors to own the stock and comply with board governance guidelines. Corporate boards play an institutional role, governance role and strategic roles in the functioning of corporations (Goodstein et al., 1994). The effectiveness of boards depends upon board characteristics. This implies that certain board characteristics may lead to better corporate performance. Given the increasing importance of boards, it is important to

identify the board characteristics which make one board more effective than another. As the quality of governance depends upon the quality of board, in the same way the quality of board depends upon certain characteristics such as the structure of the board (duality or independent chairman position, board size, composition in terms of proportion of executive, non executive directors, independent directors on the board, knowledge and skills of members of board) and board functioning etc. The characteristics of boards have changed significantly, and the change was more significant between the years 2000 and 2003 as compared to the years 1997-2000 it was found by Chhaochharia and Grinstein (2007) who studied board characteristics in the S&P 500, Mid Cap 400 and Small Cap 600 firms in 1997, and then in 2000 and 2003. They found the heterogeneity in adoption of governance characteristics across industries and suggested that the larger firms were the first to change their characteristics. Ferrero et al. (n.d) investigated the effect of changes in board characteristics of the S&P 500 index for the period 2002-2008. High profile accounting irregularities have led to regulatory changes concerning about reforming the composition and quality of the board of directors.

Review of literature

The general consensus in the literature is that certain board characteristics are associated with the board's ability to monitor and advise management. Some of the research work done in this has been discussed below:

Chhaochharia and Grinstein (2007) studied changes in board characteristics in S&P 500, Mid Cap 400 and Small Cap 600 U.S. public firms between 1997 and 2003. Board characteristics included independent directors, independent committees, financial interest of the directors, board size, director age, director occupation, multiple directorships, CEO duality, and CEO participation in the nominating committee. It was observed that board characteristics have significantly changed during the study period. The boards became small and independent with less number of multiple directorships. Significant changes were observed between the year 2000 and 2003 in response to various corporate scandals and the new governance rules.

Guest (2008) studied the trends and determinants of board size and composition in UK firms from 1981-2002. The results of Logit regression was revealed that UK board structures were determined by CEO influence, but not by the costs and benefits of monitoring. CEOs were able to influence a small board consisting of less number of outside directors. It was found that proportion of outside directors was increased, but there was decline in the number of inside directors and board size. These trends were similar to those followed in the US. It was concluded that in the UK, soft regulations have done little for the efficient structuring of boards.

Liu and Fong (2010) identified the board characteristics of medium and large Chinese companies for the years 2004 and 2006. Board characteristics included board size, independent directors, CEO duality, equity based compensation for directors,

establishment of board committees. Significant differences were found in the board characteristics of Chinese companies in terms of equity-based compensation for board members, and delay in the establishment of board committees. It was suggested that prototype of an effective board may vary from one industry to another industry.

Oba et al. (2010) evaluated power dynamics in the boardroom of 151 family-owned and listed Turkish companies. The results confirmed that minority stakeholders were not represented in the boardroom and only 25 percent of the companies evaluating board members on a periodic basis. The findings of this study were also revealed that the CEO had a dominant role in agenda setting and insiders have more opportunities to exercise their potential power in the boardroom than non executive directors. It showed that boards were responsible only for setting of agendas, but not involved in control.

Chakrabarti et al. (2011) examined the effect of corporate governance failure on the corporate boards in India's fourth largest software company, Satyam Computers. They examined the board characteristics of more than 2,500 Indian public companies for the period 2006-2010. Board characteristics included board composition, director quality, remuneration etc. It was observed that changes in board characteristics varied with firm characteristics. It was concluded that after the Satyam scandal, board size and remuneration were increased but the percentage of independent directors were decreased. The corporate failure also

highlighted the ineffectiveness of monitoring by independent directors. Therefore, monitoring has been increased through other channels like increase in board size and attendance in board meetings in post Satyam scandal period.

Najjar (2012) investigated a sample of 120 UK firms which for the period 2003-2008. The study applied multinomial logistic modeling and conditional logistic modeling to investigate the frequency of board meetings. Board meetings were determined by the internal governance mechanism including board size, independent directors, audit committee diligence CEO duality and firm specific factors. The results indicated that larger boards with more independent directors meet more frequently. It was found that internal governance factors provided better internal monitoring, and increased number of board meetings. The study showed that the frequency of board meetings decreased with firm size and growth opportunities, suggesting that large firms were more exposed to external monitoring.

Cashman et al. (2013) examined 25 board characteristics in a sample of 10,787 firm-year observations for the period 1998-2008. Tobin's q was taken as a firm performance measure. They have studied the influence of model specification using 25 board characteristics and found that the statistical significance of board characteristics was highly sensitive to model specification. By using the extreme bound analysis and principal component analysis it was concluded that only 4 out of the 25 board characteristics were robustly related to Tobin's q. There is considerable evidence regarding the changes in board

characteristics over the period of time due to regulatory changes and corporate scandals.

From the review of literature, it is seen that different authors have used different board variables. In general, the purpose of most of the studies was to use the board characteristics to proxy for board ability as the effectiveness of boards depends upon board characteristics. Therefore, on the basis of literature, some important board characteristics have been identified which includes board size, board independence, presence of nonexecutive and promoter chairperson, CEO duality, number of board meetings, multiple directorships of inside and outside directors, non executive director's ownership and director's remuneration.

Need and Objectives of the study

In India, major impetus for investigating the governance mechanisms was driven by private companies as Indian economy is integrating with the world market and these companies for their significant growth depends on the sources of finance from outside world. To attract foreign investment Indian companies have to follow a more transparent approach to corporate operations. Therefore, there is a need to investigate all the aspects of board and its impact on performance in India. The following specific objectives were framed for the present study:

1. To analyse the board characteristics of sample companies over the period of study.
2. To examine the changes in board characteristics of sample companies from pre Satyam to post Satyam period.

Hypotheses formulation

H0₁: There is no significant change in the board characteristics of sample companies over the period of study.

H0₂: There is no significant change in board characteristics of sample companies from pre Satyam to post Satyam period.

Research methodology

Sample selection and period of the study

This study has been confined to all the companies that are included in the S&P BSE 500 index for six financial years from 2006 to 2011. Firstly, all the financial companies were excluded from the sample as the presentation of data in the financial statements of these companies are different from that of the non-financial companies. Moreover, the exclusion of these companies makes the sample uniform and helps to reduce biases due to a mix of incompatible sectors. Secondly, public sector companies were also excluded because of their different governance mechanism. Thirdly, companies with different financial year's means other than 31st march were also excluded from the sample. Fourthly, those companies whose corporate governance reports were not available for any one of the years under study have been excluded. Finally, the companies which have not disclosed any of the board characteristics in their corporate governance reports were excluded. After making all exclusions final sample includes only 231 companies.

Sources of data

The data for this study has been collected from multiple sources of secondary data.

The corporate governance reports were obtained from the PROWESS database to collect the information regarding board characteristics. Some of the corporate governance reports which were not available in proless database were downloaded from the company's official website.

Variables Specification

- Board size (BSIZE) refers to the number of members serving on the board of directors.
- Presence of promoter chairperson (PCH) was represented by a dummy variable which takes a value of 1 if the chairperson is also the promoter of the company and zero otherwise.
- Presence of non executive chairperson (NEDCH) was represented by a dummy variable which takes a value of 1 if the chairperson is a non executive director of the company and zero otherwise.
- The degree of board independence (BIND) was measured by the proportion of independent non-executive directors on the board relative to the total board size.
- CEO Duality (CEOD) refers to a situation where same person serves as the chairman of the board and CEO of the company. CEO duality was represented by a dummy variable which takes a value of 1 if the CEO was also the chairperson of the board and zero otherwise
- Board meetings (BMEET) were measured as the number of board meetings held during the year.

- Multiple directorships of inside (MID) and outside directors (MOD) were measured as the average number of positions held by them on the boards of other companies.
- Nonexecutive director's Ownership (OWN) refers to the total number of shares held by non executive directors.
- Executive Remuneration (EXREM) was measured as the average remuneration or monetary fees, including salaries, bonuses and commission paid to executive directors in a year.

1. Statistical tools for analysis

The first objective of the study was to analyse the board characteristics. To study the board characteristics over the years summary statistic of mean and S.D were applied. For analyzing the board characteristics, both parametric *t-test* and wilcoxon matched pairs nonparametric test has been used. *T-test* is used to compare means of the same or related subject over time or in different circumstances when there are two experimental conditions and the same participants take part in both conditions. The non parametric wilcoxon matched pairs test analyses the differences between the paired observations, taking into account the magnitude of the differences. Firstly the results of the FY 2006 have been compared with the FY 2011 and secondly results of FY 2005-06 were compared with 2006-07 and FY 2007-08 to FY 2008-09 and so on. For examining the effect of Satyam scandal on board characteristics the total time period of six years (i.e. FY 2006 to FY 2011) has been divided into two parts. The

FY2006 to FY 2008 has been considered as a pre Satyam period and FY 2009 to FY 2011 (Chakrabarti et al., 2011) has been considered as a post Satyam period.

Analysis and Interpretation

a) Analysis of Board Characteristics over the period of study

Both the parametric (Paired *t-test*) and non parametric tools (wilcoxon matched signed rank test) have been applied to find out whether any significant change has taken place in board characteristics of sample companies over the period of study. The

statistical results for the FY2006 vis-à-vis FY2007, FY 2007 vis-à-vis FY 2008, FY2008 vis-à-vis FY 2009, FY 2009 vis-à-vis FY2010 and FY 2010 vis-à-vis FY 2011 has been given in *Annexure B*. However, statistically significant differences have been discussed in this section.

Table 1 showed the results testing the changes that have occurred in the board characteristics during the FY 2006 vis-à-vis FY 2011.

Table 1: Results for Changes in Board Characteristics (FY 2006 vis-à-vis FY 2011)

Board Characteristics	FY2006		FY2011		T-Test		Wilcoxon	
	Mean	S.D	Mean	S.D	t-statistics	p-Value	z- Score	p-Value
BSIZE	9.46	2.66	9.74	2.73	-1.95**	0.052	-1.86**	0.050
OUTD	72.87	12.84	73.47	12.88	-0.98	0.325	-0.66	0.509
BIND	53.26	12.94	54.73	10.57	-1.86*	0.064	-2.19**	0.028
BMEET	7.06	2.96	6.00	2.09	5.21***	0.000	-5.04***	0.000
MID	3.81	3.28	4.45	3.56	-2.97***	0.003	-2.25**	0.024
MOD	4.81	2.54	4.61	2.21	1.61*	0.107	-1.31	0.188
OWN	0.78	2.57	0.88	2.39	-0.53	0.595	-1.67*	0.094
EXREM	109.44	144.77	263.88	314.79	-9.26***	0.000	-11.49***	0.000
	Frequency of 1's	Frequency of 0's	Frequency of 1's	Frequency of 0's	t-Statistic	p-value	z-score	P-value
PCH	163 (71%)	68 (29%)	168 (73%)	63 (27%)	-1.148	0.252	-1.147	0.251
NEDCH	129 (56%)	102 (44%)	126 (54%)	105 (46%)	-0.577	0.565	-0.577	0.564
CEOD	63	168	66	165	-0.654	0.51	-0.655	0.513

	(27%)	(73%)	(29%)	(71%)		4		
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***, **, and* denote statistical significance at 1%, 5%, and 10% respectively.

The test of significance is two tailed.

The results are obtained using SPSS 17.0

Table 1 shows the distribution of board characteristics of the sample companies. It shows that the average board size (BSIZE) over the years 2006-2011 has increased from 9.46 in 2006, to 9.74 in 2011. The differences are significant at 5 percent level. The significant change has also been found in case of FY 2006 to FY 2007 and FY 2007 to FY2008. While considering promoter as chairperson (PCH) the results reported that there is promoter chair present in 163 (71%) companies in the year 2006 which has increased to 168 (73%) in 2011. Significant change has also been found in FY2006 to FY 2007. In 129 (56%) companies chairperson is non executive director (NEDCH) in the FY 2006 but this figure has slightly decreased to 126 (54%) in the FY 2011. The results of paired *t-test* and wilcoxon revealed significant change in the presence of non executive chairperson in the FY2006 to FY 2007 and FY 2007 to FY 2008. However the differences are not significant when FY 2006 is compared with the FY 2011. The proportion of outside directors (OUTD) has increased from 73 to 74 percent but the difference is not found to be significant. The results of the paired *t-test* for board independence (BIND) revealed that there is a significant change in the proportion of independent directors on the board from the FY2006 to FY2011 with a mean change of 1.44 at 10 percent and 5 percent level of significance. The same significant change has been found in FY 2009 to FY 2010. Table 3.4 shows that in 2006 the average percentage of independent

directors serving on a board is 53.29 percent. It has increased to 54.73 percent in the FY 2011. The results showed that around 50 percent of the companies have majority of independent outside directors in the sample. These changes are in tune with the new recommendations on corporate governance regarding revamping of board structure of the companies to bring independence in the board. The results of this study are consistent with the results found in Ernst and Young report (2013) which showed that board independence has increased from 76 percent to 78 percent during the period 2007-2012 in US companies. Only 63 (27%) companies have a CEO duality (CEOD) in 2006 but in 2011 CEO duality has increased to 28.6%. It was found significant in FY2006 to FY2007 only.

The average number of board meetings (BMEET) has decreased from 7 to 6 meetings. It suggests statistically significant change at 1 percent in board meetings over the period of study from the FY 2006 to FY 2011. However significant changes have also been noticed in the FY 2007-08, FY2008-09, FY2009-10 and FY2010-11. The average directorships of inside directors (MID) have increased from 3.81 in the year 2006 to 4.45 in the year 2011. The differences are significant at 1 percent and 5 percent level between 2006 and 2011. Same significance levels have been found in the year 2008-09. In case of multiple directorships of outside directors it has

decreased from mean directorship of 4.81 in the year 2006 to 4.61 in the year 2011. But the change is significant at 10 percent level of significance in case of paired *t-test* results.

A slight change has been reported in the ownership of nonexecutive directors (OWN) over the study period from the year FY 2006 to FY2011. The change has been found to be statistically significant. The results of the analysis showed that in the FY 2006 average ownership of 0.78 percent has increased to 0.88 percent of the total shares. The mean executive remuneration (EXREM) has increased from ₹ 109.48 lakhs in the FY 2006 to ₹ 263.884 lakhs in FY 2011. Statistically significant increase has been found in executive remuneration at 1 percent level of significance over the period of the study. The increase in pay came as the economy, and corporate profits rebounded from the financial crisis and recession of the last decade as suggested by Ernst and Young report (2013).

The results of both paired *t-test* and wilcoxon test shows that board characteristics viz., board size (BSIZE),

board independence (BIND), board meetings (BMEET), multiple directorships of inside (MID) and outside directors (MOD), non executive director's ownership (OWN) and executive remuneration have shown statistically significant increase during FY 2006 to FY 2011. Overall, statistically significant differences have been found over the period of study especially relating to board size, board independence and board remuneration.

b) Analysis of Board Characteristics Before and After the Satyam Scandal

In this the board characteristics of sample companies have been analysed before and after the Satyam scandal. Since the Satyam crisis occurred in January 2008 therefore the FY 2006 through FY 2008 as the “before” (pre- Satyam) period and the three years FY2009 to FY 2011 as the “after” (post-Satyam) period. Table 2 shows the mean values of the board characteristics during FY 2006-08 and FY 2009-10 (i.e. pre- Satyam scam period and post-Satyam period). Paired *t-test* and wilcoxon test has been used to identify the significant differences between pre and post Satyam period.

Table 2: Results for Changes in Board Characteristics in Pre Satyam Period to Post Satyam Period

Board Characteristics	FY 2006-08		FY2009-11		t-test		Wilcoxon test	
	Mean	S.D	Mean	S.D	t-statistics	p-value	z-score	p
BSIZE	9.603	2.566	9.740	2.663	-1.47	0.143	-1.55	0.120
PCH	0.718	0.432	0.728	0.437	-0.741	.459	-0.665	0.506
NEDCH	0.363	0.409	0.457	0.494	5.85** *	.000	5.5***	0.000
OUTD	72.897	12.041	73.124	12.354	-0.54	0.586	-0.48	0.627
BIND	52.817	11.544	54.151	9.680	-	0.013	-	0.019

					2.49**		2.34**	
CEOD	0.290	0.436	0.294	0.444	-.329	.743	-0.311	0.756
BMEET	6.770	2.150	6.178	1.899	4.605* **	0.000	-1.12	0.260
MID	4.023	3.108	4.452	3.423	- 3.16** *	0.002	- 5.18** *	0.000
MOD	4.802	2.348	4.652	2.258	1.780*	0.076	- 2.61** *	0.009
OWN	0.846	2.224	0.908	2.360	-0.43	0.662	-1.17	0.239
EXREM	150.79 5	179.251	239.84 7	278.665	- 8.41** *	0.000	- 10.7** *	0.000

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively.

The test of significance is two tailed.

The results are obtained using SPSS 17.0

Table 2 shows the distribution of board characteristics in the sample. It shows that the pre Satyam board size (BSIZE) has increased from 9.60 to 9.74 in the post Satyam period. However the difference is not significant at the 5 percent level. No significant change has been found in the presence of promoter chairperson (PCH). In case of non executive chair (NEDCH) there has been change in pre Satyam to post Satyam period at 1 percent level of significance. The proportion of outside directors (OUTD) has increased from 72.89 percent to 73.12 percent in the post Satyam period, but the differences are not found to be significant. The results of the paired *t-test* for board independence (BIND) revealed that there has been a significant change in the proportion of independent directors on the board from pre Satyam period to post Satyam period with a mean change of 1.33 at the 5 percent level of significance. Table 3.5 shows that in the pre Satyam period the average percentage of independent directors serving on a board was 52.81 percent. It increased to 54.15

percent in the post Satyam period. The average number of board meetings (BMEET) has decreased from 6.77 to 6.17 when compared with the pre Satyam period. However, no statistical significant change was found in the number of board meetings. The average directorships of inside directors (MID) have increased from 4.02 in the pre Satyam period to 4.45 in the post Satyam period. The differences are significant at 1 percent and 5 percent level of confidence. Multiple directorships of outside directors (MOD) has decreased from mean directorship of 4.80 in the pre Satyam period to 4.65 in the post Satyam period and the change has been significant at 10 percent and the 1percent level of significance in the case of both paired *t-test* as well as wilcoxon results.

Further, the change has also been reported in the ownership of nonexecutive directors (OWN) in the post Satyam period. But the change has not been found to be statistically significant. The analysis shows that average ownership of 0.84 percent increased to 0.90

percent of the total shares. The mean executive remuneration (EXREM) has increased from ₹ 150.79 lakhs to ₹ 293.84 lakhs in post Satyam period. Statistically significant increase has been found in executive remuneration at 1 percent level of significance over the pre and post period of the Satyam scandal.

Overall, significant differences have been found in pre Satyam period to post Satyam period especially, relating to board independence, presence of non executive chairperson, board meetings, multiple directorships of inside and outside directors and executive remuneration.

Conclusion

With regard to changes in board characteristics, it can be concluded that significant variations have been found in the board characteristics over the period of study. The results supported that board size, board independence, board meetings, multiple directorships of inside and outside directors, ownership of nonexecutive directors and executive remuneration have changed significantly. The results of this study are consistent with Chhaochharia and Grinstein (2007) who found significant changes in board characteristics between the years 2000 and 2003, in response to various

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corporate scandals and the new governance rules.

While comparing board characteristics of sample companies in pre Satyam and post Satyam period, it was concluded that the period of this study coincided with the recent accounting scandals and the global financial crisis, resulting in change in board characteristics. The results supported that board independence; multiple directorships of inside and outside directors, promoter chairperson, non executive chair and executive remuneration have changed significantly. In case of non executive chair (NEDCH) there has been change in pre Satyam to post Satyam period at 1 percent level of significance. As put forth by Chakrabarti et al. (2011) Satyam scandal caused a substantial change in board's structure. Therefore, it can be concluded that these changes were forced through regulations on companies and driven by their desire to improve their practices voluntarily so as to enjoy the benefits of globalization.

Findings of this study could be beneficial for general and institutional investors also. Various institutional investors look for the board effectiveness of the company before making investment in it.

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ANNEXURE B

RESULTS OF PAIRED T-TEST AND WILCOXON SIGNED RANK TEST FOR BOARD CHARACTERISTICS

Table B1: Results of Paired T-Test and Wilcoxon Signed Rank Test for Board Size

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistics	p-value	Decrease	Increase	Ties	z-score	p-value
2006-07	-0.130	1.096	-1.802*	0.073	38	55	138	-1.82*	0.068
2007-08	-0.160	1.152	-2.11**	0.036	44	60	127	-2.09**	0.036
2008-09	0.069	1.246	0.845	0.399	65	50	116	-0.920	0.358
2009-10	-0.117	1.146	-1.551	0.122	48	62	121	-1.244	0.213
2010-11	0.065	0.904	1.092	0.276	53	44	134	-1.165	0.244

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively
 The test of significance is two- tailed
 The results are obtained using STATA (12.0)

Table B2: Results of Paired T-Test and Wilcoxon Signed Rank Test for Promoter Chairperson

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistic	p-value	Decrease	Increase	Ties	z-score	p-value
2006-07	-0.026	0.159	-2.477**	0.014	0	6	225	-2.44**	0.014
2007-08	0.013	0.218	0.904	0.367	7	4	220	-0.905	0.366
2008-09	-0.013	0.255	-0.774	0.440	6	9	216	-0.775	0.439
2009-10	0.004	0.147	0.446	0.656	3	2	226	-0.447	0.655
2010-11	0.000	0.093	0.000	1.000	1	1	229	0.000	1.000

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively
 The test of significance is two- tailed
 The results are obtained using STATA (12.0)

Table B3: Results of Paired T-Test and Wilcoxon Signed Rank Test for Non Executive Chairperson

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistic	p-value	Decrease	Increase	Ties	z-score	p-value
2006-07	0.229	0.461	7.567***	0.000	57	4	170	-6.78***	0.000

2007-08	-0.225	0.429	-7.97***	0.000	1	53	177	-7.07***	0.000
2008-09	-0.017	0.186	-1.417	0.158	2	6	223	-1.414	0.157
2009-10	-0.009	0.132	-1.000	0.318	1	3	227	-1.000	0.317
2010-11	0.009	0.093	1.417	0.158	2	0	229	-1.414	0.157

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively
 The test of significance is two- tailed
 The results are obtained using STATA (12.0)

Table B4: Results of Paired T-Test and Wilcoxon Signed Rank Test for Proportion of Outside Directors

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t- statistic	p- value	Decrease	Increase	Ties	z-score	P- value
2006-07	-0.115	6.228	-0.272	0.786	61	73	97	-0.792	0.428
2007-08	0.162	6.404	0.385	0.700	55	60	116	-0.177	0.859
2008-09	-0.115	6.344	-0.276	0.783	67	64	100	-0.115	0.909
2009-10	-0.017	5.748	-0.047	0.962	57	67	107	-0.204	0.838
2010-11	-0.513	4.872	-1.600*	0.111	52	56	123	-1.038	0.299

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively
 The test of significance is two- tailed
 The results are obtained using STATA (12.0)

Table B5: Results of Paired T-Test and Wilcoxon Signed Rank Test for Board Independence

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t- statistic	p- value	Decrease	Increase	Ties	z-score	P - value
2006-07	0.929	9.536	1.481	0.140	71	69	91	-1.071	0.284
2007-08	-0.423	7.829	-0.822	0.412	54	68	109	-1.464	0.143
2008-09	-0.412	8.845	-0.709	0.479	62	76	93	-1.168	0.243
2009-10	-1.312	7.871	-2.534**	0.012	45	67	119	-2.67***	0.007
2010-11	-0.222	6.807	-0.497	0.620	48	54	129	-1.157	0.247

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively
 The test of significance is two- tailed
 The results are obtained using STATA (12.0)

Table B6: Results of Paired T-Test and Wilcoxon Signed Rank Test for CEO Duality

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S. D	t- statistics	p-value	Decrease	Increase	Ties	z-score	P- value

2006-07	-0.030	0.217	-2.127**	0.035	2	9	220	-2.111**	0.035
2007-08	0.009	0.186	0.706	0.481	5	3	223	-0.707	0.480
2008-09	-0.013	0.174	-1.135	0.258	2	5	224	-1.134	0.257
2009-10	0.017	0.186	1.417	0.158	6	2	223	-1.414	0.157
2010-11	0.004	0.114	0.577	0.565	2	1	228	-0.577	0.564

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively

The test of significance is two- tailed

The results are obtained using STATA (12.0)

Table B7: Results of Paired T-Test and Wilcoxon Signed Rank Test for Board Meetings

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistic	p-value	Decrease	Increase	Ties	z-score	P value
2006-07	0.264	2.650	1.515	0.131	92	89	50	-0.850	0.395
2007-08	0.355	2.221	2.429**	0.016	115	78	38	-2.97***	0.003
2008-09	0.281	2.349	1.821**	0.070	93	66	72	-1.880*	0.060
2009-10	-0.212	1.950	-1.653*	0.100	68	89	74	-1.955**	0.051
2010-11	0.381	1.936	2.990***	0.003	97	62	72	-3.02***	0.002

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively

The test of significance is two- tailed

The results are obtained using STATA (12.0)

Table B8: Results of Paired T-Test and Wilcoxon Signed Rank Test for Multiple Directorships of Inside Directors

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistic	p-value	Decrease	Increase	Ties	z-score	P-value
2006-07	-0.117	2.147	-0.832	0.406	81	90	60	-1.255	0.209
2007-08	-0.395	1.934	-3.104***	0.002	59	96	76	-3.484***	0.000
2008-09	-0.102	1.661	-0.939	0.348	79	90	62	-0.892	0.372
2009-10	-0.047	1.795	-0.402	0.688	64	80	87	-0.789	0.430
2010-11	0.024	1.744	0.217	0.828	75	76	80	-0.092	0.927

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively

The test of significance is two- tailed

The results are obtained using STATA (12.0)

Table B9: Results of Paired T-Test and Wilcoxon Signed Rank Test for Multiple Directorships of Outside directors

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistics	p-	Decrease	Increase	Ties	z-score	p-

Change				value				value	
2006-07	0.039	1.449	0.412	0.681	99	105	27	-0.091	0.927
2007-08	-0.031	1.085	-0.435	0.664	98	115	18	-0.951	0.342
2008-09	0.057	1.251	0.695	0.488	99	116	16	-0.010	0.992
2009-10	0.164	1.019	2.449**	0.015	114	87	30	-2.094**	0.036
2010-11	-0.024	1.036	-0.365	0.715	108	95	28	-0.347	0.728

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively

The test of significance is two- tailed

The results are obtained using STATA (12.0)

Table B10: Results of Paired T-Test and Wilcoxon Signed Rank Test for Ownership of Non Executive directors

Years/ change	T-Test				Wilcoxon Test				
	Mean	S. D	t-statistic	p- value	Decrease	Increase	Ties	z-score	p- value
2006-07	-0.075	1.998	-0.575	0.566	46	52	133	-0.931	0.352
2007-08	-0.019	1.4832	-0.196	0.845	57	43	131	-0.697	0.486
2008-09	-0.067	1.9782	-0.521	0.603	51	54	126	-0.024	0.981
2009-10	0.065	1.1023	0.904	0.367	65	35	131	-2.96***	0.003
2010-11	0.000	1.0042	0.001	0.999	57	41	133	-1.867**	0.062

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively

The test of significance is two- tailed

The results are obtained using STATA (12.0)

Table B11: Results of Paired T-Test and Wilcoxon Signed Rank Test for Executive Remuneration

Years/ Change	T-Test				Wilcoxon Test				
	Mean	S.D	t-statistic	p- value	Decrease	Increase	Ties	z-score	P- value
2006-07	-45.94	117.01	-5.968***	0.000	37	186	8	-9.98***	0.000
2007-08	-32.14	121.73	-4.014***	0.000	49	175	7	-7.56***	0.000
2008-09	-19.74	121.721	-2.465**	0.014	66	157	8	-5.36***	0.000
2009-10	-41.08	154.821	-4.033***	0.000	46	177	8	-7.44***	0.000
2010-11	-15.59	139.471	-1.699*	0.091	60	162	9	-5.26***	0.000

***, **, and* denote statistical significance at 1%, 5%, and 10% respectively

The test of significance is two- tailed

The results are obtained using STATA (12.0)