

## **Board Changes in Response to Extremes in Performance**

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### **Abstract**

This study contrasts changes in board structure in firms at the extremes of industry-adjusted performance. We find pervasive changes in board size, composition, and director pay for firms whose stock market performance ranks in the uppermost and lowest deciles of industry-adjusted returns over the period 2001-2005. Our evidence shows that these companies tended to change their board's size, added outsiders to the board, and increased director pay. Significant differences between the two groups are documented, with poor performers making more dramatic changes in all three of these governance metrics. We failed to find changes in other structural characteristics such as classified boards and shareholdings of directors.

### **Introduction**

Getting the incentives right, effective monitoring, and the review of corporate strategy are the province of corporate boards. In an era reeling from a financial crisis that arguably could have been avoided with good governance, the examination of boards and their efficacy remains an important work-in-progress. The purpose of this paper is to add to the existing knowledge of governance and changes in governance by examining changes made to the boards of directors by firms that are experiencing extremes in stock market performance. Our paper is motivated by the lack of both theoretical and empirical work in understanding the composition, and what factors bring about changes in the composition, of boards. In addition, the underlying notion that a firm's activities and results (particularly if they are undesirable) should have implications for that firm's board of directors (such as those underlying the Sarbanes Oxley Act of 2002) also suggests that governance changes, specifically through changes in the composition of the board of directors, should result from the activities and outcomes of a firm.

Our results show that while both extreme good and extreme poor performing firms make changes to their boards, the poor performing firms make significantly more changes. Specifically, poor performing firms make significantly more changes (in total) to their boards than good performing firms. When we look at the specifics of those changes, poor performing firms that add board positions add significantly more positions, as compared to good performing firms that add positions. Similarly, poor performing firms that delete board positions delete significantly more board positions, as compared to good performing firms that delete positions. In addition, while both extreme performing groups add outsiders to their boards, poor performing firms add significantly more outsiders, and while both extreme performing groups increase director pay over the time period we analyze, poor performing firms increase director pay significantly more than good performing firms. We interpret the bulk of these results as poor performing firms making changes to their overall governance structure in an attempt to change the course of the recent performance of their firms.

## Literature Review

Formal economic theory on the composition of boards (and indeed, on boards in general) is limited. The primary theoretical work with respect to understanding the composition of boards along with factors that potentially lead to changes in the composition of boards is in Hermalin and Weisbach (1998). In this paper, they develop a model that analyzes the factors that a typical board faces in the hiring and firing of management. They show theoretically, among other things, that the probability of independent directors being added to the board increases following poor performance. Ironically, this result is consistent with an earlier empirical finding of theirs, where Hermalin and Weisbach (1988) find empirically that following poor results, insider directors leave boards and outside directors are asked to join. Additional theoretical work beyond Hermalin and Weisbach (1998) in this area is limited; thus, we will continue to discuss empirical findings germane to our research question.

Additional empirical work documents changes as a result of poor performance. For example, the work of Denis and Sarin (1999) documents that significant change in board composition is likely to occur following poor performance. Boeker and Goodstein (1991) investigate a sample of 290 California hospitals to show that while hospitals change their boards in response to environmental contingencies, hospital performance, particularly poor performance, is a moderating factor in that effort. With respect to positive performance, both Hermalin and Weisbach (1988) and Denis and Sarin (1999) also show that insiders are added by CEO's of good performing corporations. In periods of good performance, these 'top' CEO's are hypothesized to have greater influence, enabling them to hand-pick new and friendly directors.

While both the theoretical and empirical literature in this area is limited, there are clearly contrasting hypotheses. First, good performers tend to add insiders, while poor performers will increase independence by adding outsiders and possibly eliminating some inside directors. In this paper, we empirically maximize the power of the experimental design by contrasting the governance-based responses of firms in the extremes of the performance distribution. Good performance is defined as being in the highest decile of stock market returns within the firm's industry, while poor performers are those firms in the bottom decile. In addition, our sample includes not only general board variables such as size and independence, but also individual director characteristics. This allows us to take a much more detailed look into the component changes that firm's make within their boards, as opposed to the overall structural changes. For example, both top-performing and poor-performing firms might not change the overall size of their boards in response to their extremes in performance, but if one group changes the composition of board (changing individual members without changing the overall size of the board) more than the other, that result can only be identified by looking at individual director characteristics, and how those characteristics changed after an extreme performance result.

## Methodology

Our sample is drawn from The Corporate Library (TCL). TCL focuses on governance information including detailed director characteristics and also contains corporate performance metrics. We sort firms in the TCL database into the 48 industry specifications identified in Fama and French (1997) and then decile rank firms, within each industry specification, by the

cumulative 4-year return, 2001-2005, reported in the database. We require at least 20 firms in each industry specification for that industry to remain in our sample. For the remaining industries, we identify top (bottom) performers as those firms in the top (bottom) return decile of each industry specification. Initially, the top and bottom performance samples each included 173 firms. In order to document changes of board characteristics, the 346 corporations' board compositions were examined in both 2005 and in 2001. The lack of availability of some firms in the TCL database in 2001 reduced the sample to 75 top-performers and 102 bottom-performers, which constituted our final dataset for analysis.

Table 1 describes the board characteristics of our sample, chronicles changes in these variables over time, while contrasting those characteristics between the high- and low-performing firms. Top performers had boards with fewer directors in both periods, although the difference between the groups lost its statistical significance in 2005 as the top-performing group added directors at a faster pace than the bottom-performers. An interesting result is that classified boards<sup>1</sup> were consistently more common among top performers than bottom performers. This statistically significant result is contrary to some governance literature that associates classified boards with managerial entrenchment and poor governance (e.g., DeAngelo and Rice, 1983). The sample also uncovers the same trend toward declassification of boards that Lee (2011) reported. Table 1 also provides evidence that 'busy' directors may not be 'effective' directors. In each period, bottom performers were monitored by directors who were more likely to be splitting their director duties across multiple firms ('busy' being defined here as serving on more than 4 boards). Finally, in conformance with the agency arguments of Jensen and Meckling (1976), bottom performing firms had more directors with virtually zero financial alignment with the shareholders whom they represented, a tendency that became more prevalent over time.

	Top Performers (n=75)	Bottom Performers (n=102)	Difference
Board Positions - 2001	8.52	9.38	0.86**
Board Positions - 2005	8.89	9.45	0.56
% of firms with Classified Boards - 2001	74.90%	58.40%	(16.5%)***
% of firms with Classified Boards - 2005	68.20%	53.40%	(14.8%)**
% of Directors on > 4 Boards - 2001	4.16%	7.09%	2.93%**
% of Directors on > 4 Boards - 2005	12.10%	17.65%	5.55%**
% of Directors with Zero Shares Owned - 2001	8.40%	13.07%	4.67%*
% of Directors with Zero Shares Owned - 2005	11.86%	17.76%	5.90%*

\*\*\*, \*\*, \* denotes significance at the 1%, 5%, and 10%, respectively.

<sup>1</sup> Classified boards are sometimes called staggered boards because the election of directors is staggered over time. Typically, in any year one-third of the directors are elected, arguably protecting board continuity but also possibly acting as a mechanism for discouraging a takeover of the company.

## Results

Table 2 provides a more detailed look at the changes in board structure over time and whether those changes differed between the performance-based groups. As noted in the analysis of Table 1, having a larger board may prove to be counter-productive. It's therefore surprising that over the five-year period average board size increased among both groups, with approximately 45% of the sample adding positions, regardless of performance. On the other hand, a stark contrast is revealed by examining which group tended to drop positions. Here, one-third of the bottom decile chose to drop positions, while only one-fifth of the top companies elected to decrease the size of their boards, a difference that is significant at the 5% level. In addition, among the firms that added positions, the poor performing firms added significantly more positions than the top performers. This result is replicated for firms deleting positions, where, for firms that eliminated director positions, the poor performing group took the more radical steps as these corporations dropped significantly more positions than did the best performers. Finally, a comparison of individual directors reveals overall director turnover, regardless of changes in the number of board positions, of about 36% among the top firms and nearly 56% for the lowest performing group, also a statistically significant difference. Apparently, directors of the under-performing group were often discouraged from running for re-election, resigned, or were somehow ousted.

	Top Performers (n=75)	Bottom Performers (n=102)	Difference
% of firms Adding Board Positions	45.30%	46.50%	1.20%
% of firms Deleting Board Positions	21.30%	33.67%	12.37%*
# of Board Positions Added (from firms adding positions)	1.52	1.95	0.43**
# of Board Positions Deleted (from firms deleting positions)	1.50	2.53	1.03***
Overall % Change in Board Members	35.50%	55.73%	20.23%***
% Change in Classified Boards	6.70%	4.95%	1.85%
% Change in Board Outsiders	10.39%	14.54%	4.15%**
% Change in Director's Pay	25.91%	58.96%	33.05%***
Change in Board Multiple Directorships	0.60	0.66	0.06*
Change in % Directors with Zero Shares Owned	3.39%	4.69%	1.30%
Change in % Directors that are Female	2.99%	2.17%	(0.82%)

\*\*\*, \*\*, \* denotes significance at the 1%, 5%, and 10%, respectively.

While both groups followed a trend toward greater outsider representation on their boards (possibly as a result of requirements of the Sarbanes-Oxley Act of 2002), poor performers were more aggressive in moving their boards toward independence, a strategy consistent with many studies of board governance efficacy (see Byrd and Hickman, 1992, or Hermalin and Weisbach, 1998). This result is contrary, however, to both Hermalin and Weisbach (1988) and Denis and Sarin (1999), given that there is no evidence that 'top CEO's' are able to stack the boards of top

performers with inside directors. As mentioned above, however, this could be the result of the time-period during which we study director changes. The Sarbanes-Oxley Act of 2002 was promulgated during our sample time period and required all members of the Audit Committee to be classified as outside members of the board. This likely skewed the percentage change in board outsiders higher (than in a normal time period) as firms replaced their inside audit committee board members with outsiders.

Other results from Table 2 indicate that directors' pay increased more dramatically for the poor performing firms, raising the question of whether management is attempting to co-opt directors or is increasing pay in order to attract better directors. In addition, director experience, as represented by directors with multiple directorships, also increased significantly more for poor-performers than for the top-performing firms. Again, both of these results could indicate an attempt by the firm to alter the composition of the firm to change the results of the recent past.

<b>Table 3</b>						
<b>Changes in Other Corporate Governance Variables, by Firm Performance</b>						
<b>from 2001 to 2005</b>						
				Top Performers (n=75)	Bottom Performers (n=102)	Difference
	% Change in Insider Ownership			20.80%	17.15%	3.65%
	% Change in Institutional Ownership			15.98%	6.03%	(22.01%)*
	% of firms Changing Auditor			32.08%	31.68%	(0.40%)

\*\*\*, \*\*, \* denotes significance at the 1%, 5%, and 10%, respectively.

In Table 3, changes in some non-board governance characteristics are documented. There is no difference in the change of insider ownership, indicating that neither group of insiders is apparently more inclined to trade given their superior knowledge of the firm. Both groups experienced net sales of their shares by their management team. Neither group was more prone to change auditors during these periods of extreme performance. One significant difference is not surprising: Institutions were net purchasers of top performers' shares and net sellers of the poor-performing corporations over the study period. This is consistent with other empirical results on changes in institutional ownership as a result of firm performance.

### Conclusion

These results paint a picture of boards being fairly actively restructured, especially those for poor-performing firms. For example, only 33% of the best firms kept their boards size constant over the period and even fewer of the poor performing group (20%) decided that the size of their board was ideal. While this data indicates that better-performing firms often ignored the adage, "if it ain't broke, don't fix it," the worst performers apparently attempted to actively respond to their poor results. The idea that governance structure is a tool in the strategic arsenal of corporations appears to be well-accepted judging by these results.

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