The Determinants of Compensation Committee Membership

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This study extends the work of Kesner (1988) and Bilimoria and Piderit (1994) in examining the determinants of compensation committee composition. Consistent with their findings, my results suggest that the likelihood of compensation committee membership is significantly related to director type (i.e., outside vs. inside), length of board tenure, and the number of other directorships held. In addition, my results suggest that committee membership also depends on director age, and the number of other committee memberships served. Importantly, in contrast to the predictions of agency theory, I find that committee membership is only marginally related to director affiliation, and unrelated to outside director stock ownership. Together, these results provide mixed, somewhat weak evidence that firms staff their compensation committees with directors that are likely to protect shareholder interests.

Introduction

Executive compensation packages have long been criticised for being inflated, for allowing a weak pay-for-performance relationship, and for failing to build shareholder value. A clear implication of such criticisms is that compensation packages are principally designed in management's favour and against the best interests of shareholders because management influences the determination of executive compensation. These arguments suggest that the characteristics and incentives of the decision makers responsible for setting pay are crucial in understanding and evaluating such criticisms. Therefore, a study of the determinants of compensation committee membership is both necessary and interesting, since compensation committee members are ultimately the directors who set and monitor executive pay. The present study addresses this important topic by comparing the characteristics of a sample of committee-member directors to non-member directors, thus addressing concerns over committee composition and, by extension, over executive pay practices.

Prior research on compensation committee compensation

Research on the determinants of board committee membership has been sparse. Early observational research has attempted to describe board committee practices, and to prescribe desired board committee attributes. Vance (1983) suggests that committees have become an integral part of corporate governance mechanisms. He highlights the variation in committee size and meeting frequency across firms and suggests that committee member salaries should reflect individual director contributions and firm performance. Vance (1983) reports that almost all public firms, even then, delegated executive pay issues to a standing board committee. He further provides a description of the types of compensation agreements being adopted by compensation committees, and offers examples of successful and failing executive pay practices. Waldo (1985) similarly posits that board committees facilitate board effectiveness by offering greater efficiency and flexibility, thus contributing to the smoother functioning of the board. He further states

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that individual committee members are important in attaining effective corporate governance. Finally, Waldo (1985) points to ineffective compensation committee practices that allow managers to receive excessive perks and aim at boosting the managers' power and prestige rather than building shareholder value.

Kesner (1988) is the first to address the issue of committee composition empirically. Using Chi-squared and hierarchical log-linear methods, she identifies and analyzes four potential determinants of membership in the compensation, audit, nominating, and executive committees for 250 *Fortune 500* firms for 1983 (3,128 directors). For the compensation committee in particular, her results suggest that 1) committee members are more likely to be outside directors than non-members, consistent with outside directors being more effective monitors of management as suggested by agency theory. She also finds that 2) committee members are more likely to come from business occupations, and 3) that they are more likely to have a long tenure as directors, both consistent with director experience being a valued attribute for compensation committee service. Finally, 4) Kesner's (1988) results do not discern significant differences in gender between compensation committee members and non-members, suggesting women directors are not window dressing, but hold important positions on corporate boards. (Disproportionate gender differences are, however, detected for the nominating and executive committees).

Bilimoria and Piderit (1994) extend Kesner's (1988) work by employing logistic regression methodology to examine the determinants of membership in the compensation, audit, nominating, executive, finance, and public affairs committees, for the *Fortune 300* firms for 1984 (4,099 directors). Although their main focus is the existence of gender-related differences in committee membership, they highlight a set of experience-related director attributes as potentially important qualifications for committee membership. Specifically, like Kesner (1988) they find that, ceteris paribus, 1) outsiders are more likely to serve on the compensation committee than insiders and 2) that directors with a longer tenure on the board are more likely to serve on the committee than less seasoned directors. In contrast to Kesner (1988) they find that 3) directors with non-business occupations are preferred for committee service and that 4) after controlling for experience-based characteristics, men are preferred to women for compensation committee membership. Bilimoria and Piderit (1994) additionally document that the number of other directorships held by a director is a significant qualification for compensation committee membership.

The present study extends the stream of research on the characteristics of corporate committee members by focusing on the compensation committee, emphasising the decision control function of committee members under the auspices of agency theory. Specifically, it suggests that if such committees are to pursue shareholder interests well, then they should be staffed by independent outside directors who have a substantial equity investment in the firm. This proposition is motivated by criticisms of managerial opportunism surrounding the staffing of compensation committees. Further, director age and other committee service are posited as additional determinants of committee membership. The tests employ data on 6,607 directors for 1994, a sample that is larger and more recent than those used in prior studies. Next, the research proposition and its testable implications are discussed.

Research proposition

In public corporations, equity ownership is separated from control (Berle and Means, 1932). In effect the company's shareholders, acting as principals, delegate their decision rights to a group of agents (the managers) who run the firm on their behalf. This separation has given rise to agency theory, a framework describing the incentives and costs to managers and owners in this setting (see Jensen and Meckling, 1976). The basic premise of agency theory is that the quality of management is not perfectly observable by shareholders, making it possible for managers to act in self-interest at the expense of shareholders. Managerial preferences differ from shareholder preferences in terms of risk, payout policy, and decision-making horizon. Agency costs are the costs that are borne by the firm in designing and implementing incentive alignment mechanisms that help to alleviate conflicts between shareholders and managers.

The board of directors has evolved as a market-induced low-cost means for monitoring management and controlling such conflicts. The board is bestowed a monitoring role by law, and corporate directors are legally liable to the shareholders they represent. (For a review of the literature on the control role of corporate boards see Dalton et al., 1998.) One important decision control function performed by the board is the determination of executive compensation policy. In all large corporations and the majority of smaller ones, this function is delegated to an executive compensation committee which, with rare exceptions, consists of members of the board of directors. In theory, compensation committees are responsible for management development and performance evaluation. Specifically, these committees should set performance targets, grant employment contracts, and determine eligibility for plan participation. Their principal goal should be to focus management attention and direct management behaviour to firm objectives. In doing so, committees need to clearly identify the key parts of a compensation package and their purpose, and how those parts interact with corporate strategy. In general, executive compensation policy as set by the committees should clearly signal priorities and general corporate philosophy. In light of the compensation committee's importance, this study identifies and empirically examines a set of potential determinants for compensation committee membership. Below, I discuss each of these determinants in some detail.

1. Director Affiliation

Outside directors of the board, who have top level control rights, play a crucial role in decision control because they are not directly affiliated to management like inside directors. According to Fama and Jensen (1983), outside directors often take an outside directorship in order to signal that they are decision experts, they understand the importance of diffuse and separate decision control, and they are able to work with such decision control systems. Therefore, even though opportunities for colluding with top management exist, human capital considerations induce outside directors to guard shareholder interests by exercising effective decision control.

However, an apparently puzzling result has been the lack of a positive relationship between the percentage of outsiders serving on the board and firm performance (see, for example, Bhagat and Black 1997). A useful insight towards understanding the role of board composition is offered by Baysinger and Hoskisson (1990). They argue that insiders possess information that is valuable in setting strategy and in making R&D investment decisions. Thus, both insiders and outsiders possess qualities that are favoured for board service. Klein (1996) draws on this distinction and suggests that appreciation of the importance of insiders and outsiders requires learning about the inner workings of the board since board committees are designed to perform specific decision management and decision control functions. That is, the role of insider directors is likely to be more important in decision management functions and the role of outside directors in decision control functions. Consistent with these arguments, Klein's (1996) evidence uncovers a positive relationship between firm performance and insider representation in investment and finance committees. By extension, outside directors are expected to be most effective in those board tasks that require good decision control as in hiring and firing top level managers and in setting their compensation.

Empirical evidence from the Finance literature is generally in line with outside directors being important in settings requiring good decision control skills. For example, Weisbach (1988) documents that the presence of outsiders on the board increases the probability the CEO will be replaced following poor performance. Byrd and Hickman (1992) study takeovers via the tender offer method hypothesising that the success of such transactions depends on the board's wisdom and care to protect shareholder interests. They document that tender-induced abnormal returns for bidders are significantly more positive when the board's decision is more likely to have been influenced by outside directors. Finally, Cotter, Shivdasani and Zenner (1997) document a similar result in their study of tender offer targets.

Consistent with the monitoring effectiveness of outsiders, research by Kesner (1988) and Biliomoria and Piderit (1994) confirms that outside directors are preferred for compensation committee service. Similarly, this study posits that the determination of executive compensation policy is a decision control function that may best be performed by a firm's outside directors. Independent board compensation committees are advocated by the National Association of Corporate Directors and the SEC. In fact, heightened compensation disclosure rules, adopted in 1992, and revisions in the Federal Tax Code that became effective in 1994 increased pressure on corporations to maintain compensation committees that are comprised exclusively of outsiders.

Importantly, this study distinguishes between independent and management-affiliated outside directors. The basic premise is that different outside directors are detached from management's influence to different degrees. Thus, one outside director may be more suitable for compensation committee service than another, depending on that director's relationship to management. Baysinger and

Butler (1985) suggest that outside directors who are employed as management consultants, bankers, and lawyers, may develop a fiduciary relationship to management. Because of this association, whether actual or potential, they are not as well-suited to perform decision control tasks such as the determination of pay. Empirical evidence in other contexts supports the notion that management-affiliated outsiders are not as effective in guarding shareholder interests as independent outsiders. For example, Hermalin and Weisbach (1988) distinguish between independent outside directors and affiliated outsiders in identifying the determinants of board composition. Mallette and Fowler (1992) find that the separation between independent and affiliated outside directors is important in explaining the likelihood that the board decides to adopt a poison pill. Byrd and Hickman (1992) find that the separation between independent and affiliated outside directors is important in explaining the stock market reaction to the announcement of a takeover. In a similar spirit, this study suggests that, if shareholder interests are to be protected best, independent outside directors should be more likely to serve on the compensation committee than management-affiliated outside directors.

2. *Director stock ownership*

A second potential determinant of committee membership may be each director's equity investment in the firm. As directors develop shareholder-like interests, they become more likely to protect shareholder interests (see Jensen and Meckling, 1976, for the development of arguments explaining the importance of ownership in resolving agency conflicts). There has been much empirical research supporting this contention. For example, Beatty and Zajac (1994) highlight the importance of director ownership in providing appropriate incentives to protect shareholders in IPO's. Vafeas (1999) finds evidence that director incentive plans attempt to, and succeed in, raising the amount of equity investment that is held by outside directors. Shivdasani (1993) finds that a value-enhancing disciplinary takeover becomes more likely when outside directors have high stakes in the firm, consistent with ownership protecting shareholder interests. Finally, Elson (1993) documents that firms that have compensation committee members with high equity ownership are less likely to overcompensate corporate executives than a group of control firms, pointing to director ownership as a solution to the executive overcompensation problem. Drawing on this research I argue that, if shareholder interests are to be served best, the likelihood of committee membership should rise with a director's equity investment in the firm.

In addition to the two committee determinants discussed above, the empirical tests control for a number of other director attributes that may explain committee membership: Additional board seats and board tenure, also identified by prior work and, additionally, other committee memberships and director age which are included as control variables. A brief description of these controls is provided below.

3. *Additional board seats*

The number of directorship posts in other boards has been suggested as an empirical proxy measuring the value of director reputation capital. In this view, holding many board seats helps to align director and shareholder incentives. The reason is that directors with a more valuable reputation capital are less likely to collude with management in setting compensation and are therefore better monitors, because their own human capital is at stake. Shivdasani (1993) shows that the likelihood of a hostile takeover bid increases with the number of other directorships held by outside directors, consistent with reputation capital and the corporate control market being complements. Kaplan and Reishus (1990) and Gilson (1990) also provide empirical evidence on the importance of reputation capital in the market for directors. Interestingly, focusing on the effects of social capital on the quality of compensation decisions, Belliveau, O'Reilly, and Wade (1996) document that CEOs with higher social capital than the corresponding committee chairpersons receive higher compensation, on balance.

Alternatively Davis (1991), among others, suggests that the number of other directorships also proxies for the strength of an interlocking relationship between the firm and the business community. Studying a sample of firms adopting potentially value-diminishing poison pills, he finds the pill's rapid spread to be related to a combination of ownership structure and other firm-level factors and, importantly, to an interlock network diffusion process. Simply put, he concludes that the interlock network, measured by aggregate board seats, provides a social context favouring the managerial elite. Both agency theory and institutional forces would predict that directors with more board seats would be more likely to serve on the compensation committee, albeit for different reasons (i.e., whether to guard shareholder interests and protect their reputation, or to maintain managerial dominance in line with a social class perspective).

4. Director tenure

Another potential determinant of committee membership is board tenure. There are conflicting predictions about the true impact of this variable. One view is that longer director tenure enhances director effectiveness as directors gain greater expertise and become more committed to the organisation. Kosnik (1990), for example, finds that directors with longer board tenure lengths are more likely to resist greenmail transactions that are potentially value-decreasing. By contrast, Dobrzynski, Schroeder, Miles and Weber (1989) and Mason and Wallace (1987) report that directors with excessive tenure lengths may become increasingly complacent toward management, thus tolerating poor performance. In light of this evidence the impact of board tenure on committee membership is not a priori clear.

5. Other committee memberships

A third control variable is the number of other firm committees served by each director. Since committee membership is a time-consuming task, directors are expected to share committee responsibilities in accordance with the equal division of labour among directors. By contrast, it is also possible that committee membership signals director power. Therefore, directors who serve on one board committee may be more willing to serve on other committees to accumulate more power in the organisation. The empirical relation between other committee memberships and compensation committee membership is an open question.

6. Director age

The final potential determinant of committee membership examined here is director age. As directors grow older, they amass greater experience and become more knowledgable about the business environment, thus becoming more capable of making business decisions such as determining executive pay. Therefore, the likelihood that a director serves on the committee is expected to rise with director age. In addition, director age is likely correlated with affiliation, tenure, and directorships held, and it is therefore an important control variable in measuring the marginal effect of other director attributes on committee membership.

The data

The sample comprises 576 of the largest U.S. publicly traded firms that reported having a standing compensation committee in 1994. Large public corporations are the usual targets in the public debate on executive pay, and most shareholder activist groups point to these firms' executives in arguing for additional compensation rules. Information for the subsequent tests is collected for the 1993 fiscal year from Compustat and from the 1994 proxy statements.

The empirical analysis focusing on the determinants of compensation committee composition is performed on the 6,607 directors serving on the boards of the 576 sample firms. For each director, the following information is collected: a) the director's occupation category as a measure of director independence, b) the director's relative ownership position as a proxy for shareholder-like interests (computed as the number of shares owned divided by the number of shares outstanding at the end of the 1993 fiscal year), c) the director's board tenure (in years) is used as a proxy for the director's firm-specific knowledge, d) the number of other directorships proxying for director experience and human capital value, and control variables e) director age (in order to avoid spurious relationships between other director characteristics and committee membership) and f) the number of other committee memberships in the firm that proxies for the time available for committee service and for the member-director's political power in the firm.

Director occupation categories are formed as follows: 1) the firm's CEO, 2) other firm executives and members of their families, 3) retired firm employees and employees of subsidiaries, 4) management consultants, auditors, and lawyers, 5) executives in industrial for-profit organisations, 6) executives in financial for-profit organisations (commercial and investment bankers, and insurance executives), 7) retired executives and professional directors, 8) decision makers in non-profit organisations (military men, politicians, educators etc.), and 9) private investors. Director categories 1–3 are classified as insider directors, and categories 4 and 6 comprise "grey" directors who may not be independent of management's influence due to a potential fiduciary relationship with the firm; the remaining director categories comprise independent outside directors.

Variable definitions and methodology

In order to assess the likelihood that a director serves on the compensation committee, the following logistic regression model is estimated for the 6,607 directors of firms with standing compensation committees:

$$Y = b_0 + b_1 \text{INSIDER} + b_2 \text{SHARES} + b_3 \text{TENURE} + b_4 \text{DSHIPS} + b_5 \text{AGE} + b_6 \text{COMMITS}$$

where Y=log[p | (1-p)] when p is the likelihood that a director serves on the compensation committee. The variable INSIDER is set equal to one if the director belongs to director categories 1,2, or 3 as described in section 2, and zero otherwise. It is expected that insiders are less likely to serve on compensation committees than outsiders signifying the importance of director independence in exercising this monitoring function. Next, the variable SHARES is the log of one plus the percentage of common stock held by each director.[1] The likelihood of committee membership should increase as a director's equity investment increases since directors will be better monitors as they develop more shareholder-like interests in the firm. TENURE is the number of years a director has served on the firm's board and is also expected to have a positive sign, underlining the importance of firm-specific knowledge and experience in serving on the compensation committee. DSHIPS is the number of all other directorships held by a director and is also expected to be positively related to the likelihood of committee membership in line with directors that have more valuable reputation capital having stronger incentives to monitor management well. The variable AGE equals director age in years and is expected to be positively related to committee membership. Finally, the variable COMMITS equals the number of additional board committees on which a director serves. There are mixed predictions about the impact of this variable in the model.

This logit model is estimated twice more after excluding the INSIDE variable; once for insiders only (director categories 1–3), and once for outsiders (director categories 4–9). The expectation is that the suggested determinants of committee membership will be more pronounced in the case of outsiders where a director's monitoring quality may be proxied well by ownership, experience and reputation capital. In the case of insiders, strong personal interests in the determination of executive pay are likely to confound the relevance of these director qualities.

Results

In order to identify the people serving on corporate compensation committees the study uses the dataset of 6,607 directors serving on the boards of the 576 sample firms. Turning our attention to the full sample of directors in table 1, the median director is 60 years old, has been with his/her firm for seven years, holds two other directorships, and serves on one other board committee. The distribution of stock ownership among directors is highly skewed to the right as the mean is about seventy times larger than the median (0.707% and 0.010% respectively). Among directors, 26.68% are insiders.

Of the 6,607 directors, 2332 or 35.3% serve on their firms' compensation committees. Comparing committee-member and non-member directors, the following statistically significant differences are observed: 1) Member directors have a smaller percentage of common shares than non-members ($t=-4.039$), 2) they are older ($t=12.938$), 3) they have been with the firm longer ($t=2.341$), 4) they hold more other directorships than non-members ($t=7.605$), 5) they are members in more additional committees than non-members ($t=6.848$), and 6) they are much less likely to be insiders ($t=-35.087$). These differences persist at a higher level of significance when a two-sample Wilcoxon test is used instead of the two-sample t-test. Further, with the exception of director ownership, these differences are in line with expectations and are consistent with the appointment of committee members being made in a systematic way, in the best interests of the company, and with member-directors being more experienced, having a better understanding of the firm's affairs, and being more independent of management influences. Interestingly, it appears that committee service is in the hands of a few people, since member-directors also serve on more additional committees. While interesting on their own, these univariate relationships may possibly be spurious, especially since member-directors are almost always outsiders. More light is shed on these relationships through the subsequent logistic regression results.

Thus far, a simple distinction has been made between insider and outsider-directors. In table 2, the insider (Panel A) and outsider (Panel B) classes are partitioned more finely to reflect intra-class differences, since management's ability to influence member directors will not only vary between the insider and outsider classes, but also across categories within each class. The results for firm insiders in Panel A are consistent with the

Table 1. Profile For Sample Directors Partitioned Based on Compensation Committee Membership

Variable		Total	CC	NC	t-value	Wilcoxon-z
# of directors		6607	2332	4275		
Stock owned	mean	0.707	0.470	0.836	−4.039***	−12.477***
	median	0.010	0.006	0.020		
Director age	mean	59.07	60.86	58.10	12.938***	13.341***
	median	60.00	62.00	58.00		
Tenure w/ firm	mean	8.85	9.16	8.68	2.341**	6.366***
	median	7.00	7.00	6.00		
# of other directorships	mean	2.48	2.79	2.31	7.605***	10.166***
	median	2.00	3.00	2.00		
Other committee memberships	mean	1.20	1.32	1.14	6.848***	7.507***
	median	1.00	1.00	1.00		
Pct. insiders	mean	26.68	6.30	37.8	−35.087***	−27.629***
	median					

All governance information is collected from the sample firms' 1994 proxy statements. CC denotes directors serving on each firm's compensation committee and NC denotes all remaining directors. For each variable the first and second lines report the sample means and medians. The right hand columns report the t statistic for the difference in means assuming unequal variances, and the z-value for the two-sample Wilcoxon test.

*,**,*** significant at the 0.05, 0.01, and 0.001 level respectively.

notion that firms select member-directors that are detached from management. Specifically, among insiders, the proportion of CEOs in compensation committees is significantly lower than the respective proportion that are not committee members. Similarly, among insiders, the proportion of other firm executives and their relatives that are board members is significantly smaller than the respective proportion of non-members (p-values for the X^2 test are 0.010 and 0.063 respectively). It follows that the third insider category (that of retired employees and employees of subsidiaries) has a significantly higher proportion of committee members than non-members (X^2 p-value <0.001). Therefore, even when an insider does serve on the board, that insider is much more likely to be a "lower-profile" insider (category #3) who is apparently less inclined to favour executives in setting their pay, compared to executives themselves.

Panel B presents results for differences across outside director categories on the basis of compensation committee membership. Three results stand out: 1) Most outsider committee-members are executives of other industrial firms (category #7). Further, the proportion of these executives in the compensation committee is significantly higher than this proportion among non-committee members (p-value <0.001). 2) A significantly higher proportion of professional decision makers is represented on compensation committees ($p<0.001$). 3) A significantly lower proportion of public directors (educators, public officials, military men) appear on compensation committees compared to those outside these committees. Finally, 4) a marginally lower proportion of "grey" directors (consultants, auditors, and lawyers) serve on compensation committees compared to their proportion among non-member directors. These results are consistent with the following: Executive pay is primarily set by peer directors in similar firms, both active and retired. Public directors are less likely to serve as they may have incomplete knowledge of the business environment that is necessary in setting compensation policy. Finally, potentially affiliated directors are less likely to serve since their occupation may compromise their independence. Taken as a whole, the evidence in table 2 is consistent with firms appointing committee members that are not attached to management, and have general business experience that is more in line with the environment in which the firm operates.

Table 3 presents three logistic regression models of the probability that a director serves on the compensation committee. For each of the three models, the −2Log likelihood

Table 2. Profile For Sample Directors Partitioned Based on Committee Membership and Director Affiliation

PANEL A – Insider directors					
Director Category	Number	% CC	% NC	Chi-sq.	p-value
Chief Executive Officer	589	23.81	34.28	6.64**	0.009
Firm employees and their relatives	945	46.26	54.25	3.46	0.063
Retired firm employees/ Employees of subsidiaries	228	29.25	11.35	38.59***	0.001
Total board insiders	1762	100.00	100.00		

PANEL B – Outsider directors					
Director Category	Number	% CC	% NC	Chi-sq.	p-value
Active employees of industrial firms	2452	52.79	48.80	49.63***	0.000
Active employees of financial firms	443	9.16	9.07	0.01	0.912
Professional directors/ other Retired decision makers	488	11.81	8.58	13.90***	0.001
Public directors (employed by universities, military, gov't)	642	10.21	15.69	31.36***	0.001
Affiliated directors (consultants, auditors, lawyers)	676	12.91	14.75	3.37	0.066
Private investors	144	2.98	2.90	0.03	0.871
Total board outsiders	4845	100.00	100.00		

All governance information is collected from the sample firms' 1994 proxy statements. CC denotes directors serving on each firm's compensation committee and NC denotes all remaining directors. The right hand columns report the Chi-sq. statistic for the difference in proportions, and the corresponding p-value.

*,**,*** significant at the 0.05, 0.01, and 0.001 level respectively.

value is significant at the 0.001 level. Model 1 presents results for the full sample of 6,607 directors. The results are very similar to the univariate results presented earlier. Compensation committee members 1) are older, 2) have a longer tenure on the firm's board, 3) hold significantly more other directorships than non-committee members, 4) serve on fewer other committees, and 5) are much more likely to be outsiders. In contrast to univariate findings, the logit regression results reveal no differences between the two groups in terms of stock ownership.

Given that firm affiliation is a very important determinant of committee membership, models 2 and 3 examine these determinants for insider and outsider directors separately. Focusing first on insiders and model 2, results suggest member-directors have significantly more committee memberships than non-member directors (p-value < 0.001). Given the time commitment required for board committee service, this result is consistent with insider-members accumulating more committee memberships as a means to more political power within the organisation. Director investment, knowledge, and experience (as proxied by stock ownership, board tenure, and other directorships) are non-factors in determining committee membership for insiders. This reinforces the view that insiders may serve on the committee in self-interest. Whether an insider is on the committee and which insider serves may be a political struggle more than an effort to protect shareholder interests.

An outsider member-director may plausibly be placed on the committee in order to represent shareholder interests by linking executive pay to shareholder value and by monitoring, to the extent possible, managerial opportunism in relation to compensation. In such a case, director investment, knowledge, and reputational worth may indeed

Table 3. Logit Regressions of the Probability That a Director Serves on the Compensation Committee.

Variables	(1)		(2)		(3)	
	Coefficients	p-value	Coefficients	p-value	Coefficients	p-value
Intercept	−1.564***	0.000	72.664***	0.000	71.473***	0.000
Log (1+Stock ownership)	0.362	0.663	0.631**	0.007	71.189	0.500
Director age	0.020**	0.004	0.007	0.347	0.020***	0.000
Tenure w/ firm	0.014**	0.004	0.016	0.851	0.015**	0.001
# of other directorships	0.033*	0.011	70.014	0.365	0.039**	0.001
Other committee memberships	70.052	0.069	0.467**	0.006	70.109***	0.000
One if insider zero otherwise	−2.198***	0.000				
Committee member directors	2326		146		2180	
Non−committee member directors	4256		1602		2654	
Chi-squared	974.99***		83.69***		78.13***	

All director information is collected from the sample firms' 1994 proxy statements. In model 1 the dependent variable is set equal to one if a director is a member of the compensation committee and zero otherwise. In model 2 (3) the dependent variable is set equal to one if an insider/director (outsider/director) serves on the compensation committee and zero otherwise.

*,**,*** significant at the 0.05, 0.01, and 0.001 level respectively.

determine committee membership. Model 3 provides evidence on these expectations and the research proposition. Outside directors chosen have served on the firm's board longer, are older, and hold more outside directorships. All results are significant at the 0.01 level. Committee membership does not depend on director stock ownership. Interestingly, the number of other committee memberships is a negative and significant determinant among outside directors. This result is consistent with outside directors having a finite amount of committee work, each filling different posts to fulfil a service to the firm. Together, this evidence is largely consistent with the research proposition and suggests the likelihood of committee membership rises with increases in variables that proxy for independence, firm-specific knowledge, experience, and reputational worth.[2]

Conclusions

This study examines the determinants of compensation committee membership. Specifically, drawing on agency theory, I argue that compensation committee members should be independent of management's influence and that they should hold greater amounts of stock ownership than non-member directors. Contrary to these predictions, committee member directors are found to hold the same level of equity as non-member directors. This result may be explained by the negligible ownership levels that are held by outsiders, rendering the ownership mechanism to be ineffective in motivating outside directors. Moreover, among inside directors, those with the highest equity holdings are more likely to serve, suggesting that committee membership for insiders may be a signal of power in the organisation. Further, committee members are rarely insider-directors (only 146 of 2332 committee member-directors were insiders). This finding suggests independent committee members are highly preferred for determining executive pay, in accordance with arguments suggested by agency theory.

In addition, the results suggest that directors with a more valuable reputation capital, as proxied by the number of additional board seats, are more likely to serve on these committees (or that social class helps to perpetuate managerial dominance in compensation committees). Consistent with prior research, member-directors are found to have a longer tenure on the firm's board, and to be older, both consistent with director experience being an important qualification for committee membership. Among insiders, the likelihood of committee membership is enhanced by other committee memberships, suggesting committee participation is a measure of power that is concentrated in the hands of a selected few. For outsiders, the relation is inverse, suggesting committee service is distributed rather evenly, aiming at fairer workloads for outside directors.

In further tests, the frequency of membership across finer director categories is examined. The results suggest that, even when insiders are committee members, they are significantly more likely to be employees of subsidiaries or retired firm employees rather than firm executives. Among outsiders, active executives in other industrial firms and retired firm executives are significantly more likely and public directors are less likely to serve on these committees consistent with member-directors having a better understanding of the firm's business environment.

The basic implication of these findings is the following: Policy makers such as the SEC, the financial press, and shareholder activists have paid much attention to the exclusion of insiders from compensation committees as the key to improved executive compensation practices. This study shows that insider participation in such committees is rare, and highlights other director-specific attributes to be important in explaining compensation committee membership. Thus, efforts on making such committees more effective should focus on director characteristics other than director type – such as the participation of fewer affiliated directors, and directors with more equity ownership in compensation committees.

Nevertheless, the results on the determinants of committee membership are generally consistent with more experienced and independent directors, with a more valuable reputation capital being preferred to serve on these committees. With the exception of the findings on the ownership and affiliation measures, this evidence is in accordance with the predictions of agency theory, suggesting that corporate boards closely monitor committee membership thereby protecting shareholder interests.

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Notes

1. One is added to the SHARES variable before making the logarithmic transformation since 231 directors (3.5% of the total) were reported to hold no company stock.
2. The finer director categories presented in Table 3 were also tested in a multivariate logit model. The results (not reported here) suggest they are not important in determining committee membership. The importance of these categories in the Table 2 tests can therefore be attributed to a spurious relationship with some of the variables introduced in Table 3.

References

Baysinger, B., and H. Butler (1985), Corporate governance and the board of directors: Performance effects of changes in board composition, *Journal of Law, Economics, and Organization* 1, 101–124.

Baysinger, B. D., and R. Hoskisson (1990), The composition of boards of directors and strategic control: Effects on corporate strategy, *Academy of Management Review*, 15: 72–87.

Beatty, R.P. & E.J. Zajac (1994), Top management incentives, monitoring, and risk sharing: A study of executive compensation, ownership and board structure in initial public offerings, *Administrative Science Quarterly* 39, 313–336.

Belliveau, M., C. O'Reilly III, & J. Wade (1996), Social capital at the top: Effects of social similarity and status on CEO compensation, *Academy of Management Journal* 39, 1568–1593.

Berle, A., and G. Means (1932), *The modern corporation and private property*, New York: Macmillan.

Bhagat, S., & B. Black (1997), Do independent directors matter? Working Paper, Columbia University.

Bilimoria, D., & S.K. Piderit (1994), Board committee membership: Effects of sex-based bias, *Academy of Management Journal* 37, 1453–1477.

Byrd, J., & A. Hickman (1992), Do outside directors monitor managers? Evidence from tender offer bids, *Journal of Financial Economics* 32, 195–221.

Cotter, J., A. Shivdasani, & M. Zenner (1997), Do independent directors enhance target shareholder wealth during tender offers? *Journal of Financial Economics* 43, 195–218.

Dalton, D., C. Daily, A. Ellstrand, and J. Johnson, Meta-analytic reviews of board composition, leadership structure, and financial performance, *Strategic Management Journal* 19, 269–290.

Davis, G. (1991), Agents without principles? The spread of the poison pill through the intercorporate network, *Administrative Science Quarterly* 36, 583–613.

Dobrzynski, J. H., M. Schroeder, G. Miles, and J. Weber (1989), Taking charge: Corporate directors start to flex their muscle, *Business Week*, July 3: 66–70.

Elson, C. (1993), Executive overcompensation: A board-based solution, *Boston College Law Review* 34:5, 937–996.

Fama E., & M. Jensen (1983), Separation of ownership and control, *Journal of Law and Economics* 26, 301–325.

Gilson, S. (1990), Bankruptcy, boards, banks, and blockholders: Evidence on changes on corporate ownership and control when firms default, *Journal of Financial Economics* 27, 355–387.

Hampson, A. (1991), Tying CEO pay to performance: Compensation committees must do better, *Business Quarterly* 55 (Spring), 18–21.
Hermalin, B. E., and M. Weisbach (1988), The determinants of board composition, *Rand Journal of Economics*, 19: 589–606.
Jensen, M., and W. Meckling (1976), Theory of the firm: Managerial behavior, agency costs, and ownership structure, *Journal of Financial Economics* 3, 305–360.
Kaplan, S., & D. Reishus (1990), Outside directorships and corporate performance, *Journal of Financial Economics* 27, 389–410.
Kesner, I.F. (1988), Directors' characteristics and committee membership: An investigation of type occupation, tenure and gender, *Academy of Management Journal* 31, 66–84.
Klein, A. (1996), Firm performance and board committee structure, Working paper, New York University.
Kosnik, R. (1990), Effects of board demography and directors' incentives on corporate greenmail transactions, *Academy of Management Journal* 33, 129–150.
Lederer, J. (1993), The board, the proxy, and executive pay, *Directors and Boards* 17, 43–44.
Mallette, P. and K. Fowler (1992), Effects of board composition and stock ownership on the adoption of poison pills, *Academy of Management Journal* 35, 1010–1035.
Shivdasani, A. (1993), Board composition, ownership structure, and hostile takeovers, *Journal of Accounting and Economics* 16, 167–198.
Vafeas, N. (1999), The nature of board nominating committees and their role in corporate governance, *Journal of Business Finance & Accounting* 26 (1&2), 198–225.
Vafeas, N. (1999), Determinants of the adoption of director incentive plans, *Journal of Accounting, Auditing, and Finance* 14, forthcoming.
Vance, S. (1983), *Corporate leadership: Boards, directors, and strategy*, New York: McGraw Hill.
Waldo, C. (1985), *Boards of directors: Their changing roles, structure, and information needs*, Westport, CT: Quorum.
Weisbach, M. (1988), Outside directors and CEO turnover, *Journal of Financial Economics* 20, 431–460.

Book Note

Winners, Losers and Microsoft – competition and anti-trust in high technology; Stan J. Liebowitz and Stephen E. Margolis; The Independent Institute, Oakland, California, 1999

Two professors of economics, at the universities of Texas and North Carolina State, respectively, discuss whether the 'mousetrap principle' (build a better mousetrap and the world beats a path to your door) or the newer 'path dependence' theory (inferior products can lock-out better products) describes the behaviour of high tech markets. Using Microsoft as the key example, they conclude that in high-tech markets better products quickly replace inferior ones and software prices fall dramatically where Microsoft is a player. They conclude that Microsoft's dominance does not imply an illegal monopoly because competitive advantages in high-tech markets are temporary. The best way to promote competition, they argue, is not through anti-trust action but by relying on the competitive entrepreneurship of free markets. The courts in the Microsoft anti-trust case did not agree.

