

Worth, words, and the justification of executive pay

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Summary

This study examines how the compensation committees of a sample of U.S. corporations from the S & P 500 justify their compensation practices to shareholders. Drawing from research on organizational legitimacy as a theoretical base, we examine the effects of ownership structure, CEO pay, and organizational performance on the frequencies of three types of compensation justifications: external validations, shareholder alignment statements, and discussions of company performance. We find that when companies have more concentrated and active outside owners, they are much more likely to justify their compensation practices by citing the role of compensation consultants as advisors in the compensation-setting process. They are also more likely to discuss the alignment of managerial and shareholder interests, and to downplay a company's accounting returns. Companies that pay their CEOs large base salaries are also more likely to cite the role of consultants, and, for those with dispersed ownership, to discuss shareholder alignment. High accounting returns lead companies to emphasize accounting performance in their compensation justifications, and to downplay market returns. High stock price volatility leads companies to de-emphasize market returns. We discuss the implications of these findings for research and theory on the symbolic aspects of company–shareholder relationships. © 1997 John Wiley & Sons, Ltd.

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Introduction

Organizational environments require that managers respond to the demands of stakeholders. Because these demands are often at odds with an organization's ability to satisfy them, the relationship between an organization and its environment is characterized by competing claims and counterclaims (Bettman and Weitz, 1983; Straw, McKechnie and Puffer, 1983; Salancik and Meindl, 1984). This friction transforms the pure exchange agenda of organization–environment relationships into a symbolic battlefield where organizational legitimacy is constantly challenged in ongoing dialogues between organizational actors and the stakeholders who support them. At minimum, the battle for legitimacy requires that top managers and corporate boards carefully manage this symbolic environment or risk undermining a firm's reputation (e.g. Pfeffer,

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1981; Fombrun, 1996). In the extreme, the battle for legitimacy implies that an organization's resource acquisitions depend upon the ability of its elites to position the organization symbolically in acceptable ways (e.g. DiMaggio and Powell, 1991; Scott, 1995; Suchman, 1994).

Because it is so critical for the functioning of organizations, the management of legitimacy has been the subject of much recent theorizing in organizational studies. Ashforth and Gibbs (1990), for example, suggest that legitimacy is created by substantive organizational actions such as successful role performance. However, because substantive success is sometimes ambiguous and subject to opinion, Ashforth and Gibbs also emphasized the role of managerial accounts in legitimating organizational activities. By constructing persuasive accounts for what they do, organizations expand their credibility and create positive relationships with their stakeholders. Ginzler, Kramer and Sutton (1992) argued that one type of organizational account consists of 'justifications' for organizational actions. Organizational justifications are appeals to socially accepted principles, attitudes, circumstances, or events that explain and rationalize organizational decisions. Justifications create legitimacy by linking behaviors under question to other circumstances that are inherently valid, or by deflecting behaviors away from circumstances that are inherently undesirable.

One context in which corporate justifications are particularly interesting is executive compensation. Some studies suggest that high CEO salaries are justified by the financial impact that top managers have on their firms (e.g. Jensen and Murphy, 1990; Coughlin and Schmidt, 1985; Murphy, 1985). Other studies that CEO pay is unrelated to performance (e.g. Bentson, 1985; Kerr and Bettis, 1987) or that CEOs are taking advantage of their position to secure more pay than their performance warrants (e.g. Main, O'Reilly and Wade, 1995; Finklestein and Hambrick, 1989). Whatever the case, CEO salary in U.S. corporations has become so high that, in the words of one shareholder activist, 'It has reached Marie Antoinette proportions. People are getting disgusted with it' (Lublin, 1996). This disgust has caused public legitimacy problems for U.S. corporations because the wages of non-managerial workers have stagnated and reports of employees losing their jobs due to corporate downsizing have become commonplace. CEO compensation thus provides an interesting venue for studying how organizations justify sensitive organizational practices.

Only one study to date has examined the justifications that companies provide to explain their executive pay practices. Zajac and Westphal (1995) studied the justifications of Fortune 500 firms when they adopted an executive long-term incentive plan (LTIP). LTIPs give top executives an equity stake in the firms they manage by either awarding shares of company stock or by granting the options to purchase stock in the future. Zajac and Westphal analyzed justifications for LTIPs and observed that the content of these accounts shifted over the period from 1975 to 1990. Early justifications emphasized attracting and retaining managerial talent. Later justifications emphasized aligning the interests of management with the interests of shareholders by awarding management a stake in their company. Zajac and Westphal explained this shift by suggesting that LTIP justifications match the dominant corporate governance ideologies of a given time period, and that over the last 15 years there has been a broad social movement to evaluate top managers on the basis of shareholder returns.

In the present research, we build upon Zajac and Westphal by taking advantage of new corporate reporting rules that require corporate compensation committees to provide *explicit* justifications for all elements of their executive pay plans. Although we retain Zajac and Westphal's interest in shareholder alignment justifications, we examine additional themes in proxy statements that are theoretically and practically important. Specifically, we test a series of hypotheses concerning how ownership power and activism, company performance, and CEO compensation influence the frequency of shareholder alignment, external validation, and performance justifications for CEO pay.

The Context and Reporting of CEO Pay in U.S. Corporations

Top management compensation in U.S. corporations is the responsibility of a company's board of directors, particularly its compensation committee. This committee is usually composed of outside directors with no formal position in the company. The compensation committee annually ascertains how well management has performed and how deserving management is of any increase or decrease in pay. The committee must balance the interests of managers seeking to enhance their individual wealth, and the interests of shareholders seeking to maximize profits by keeping personnel costs low while still retaining competent stewardship of their assets. The objectivity of the compensation committee is ostensibly a function of the status of its members as outside corporate directors. In practice, however, the ambiguities of the compensation-setting process makes the compensation committee susceptible to social influence. In his well-known exposé of corporate compensation abuses, Crystal (1992) argued that compensation committees are little more than rubber stamps for managerial preferences because even outside directors are easily captured by management given that their lucrative board appointments often depend upon managerial nominations. Moreover, the actions of compensation committees can be affected by subtle status differences between their members and the managers they are appointed to oversee (Belliveau, O'Reilly and Wade, 1996).

It is because of the intrusion of these political motivations into the compensation-setting process that the U.S. Securities and Exchange Commission (SEC) has for many years required that compensation committees detail the amount and kind of compensation awarded to top management in annual proxy statements to shareholders. Crystal (1992), however, argued that these proxy disclosures have been subject to distortions and outright dishonesty as compensation committees have sought to buffer their practices from shareholders. The public outcry surrounding the compensation setting process led the SEC to make sweeping changes in the rules governing proxy disclosures in October of 1992. The new rules require companies to disclose all elements of top management's compensation in a standardized form. SEC regulations also stipulate that the compensation committee describe the compensation setting process and explain and justify the criteria that are used in awarding executive salaries. All of this information is designed to clarify for shareholders the compensation philosophies, strategies, and choices of the companies they own, and thus make boards more accountable for executive pay. As such, these new proxy disclosures are a valuable window into how corporate boards legitimize and justify their compensation practices. In the next section, we discuss the three types of proxy justifications that are the focus of our research, after which we develop and test a series of hypotheses concerning the factors that influence their frequency of occurrence.

Three Types of Compensation Justification

In theory, successful justifications for pay practices should stabilize the relationship between management and shareholders by synchronizing CEO pay with company performance. In practice, however, conflicting interests make this synchronization difficult. Pay allocations are a delicate balance among economic, technical, and social forces which conspire to loosen the coherence of compensation policies and to desynchronize the relationship between how much a

person is paid and how well he/she performs. These destabilizing forces inject uncertainty into executive pay practices and make it possible for both managers and shareholders alike to contest pay allocations as a matter of course. This contestability forces compensation committees to continuously account for the logic of their pay policies.

One justification strategy is to embed a controversial issue within practices that have face validity (e.g. Elsbach, 1994). In the domain of executive compensation, one such practice is the use of compensation consultants and external salary surveys to calibrate managerial pay. External consultants and surveys help to insure the equity of pay practices by relating a company's pay ranges to benchmarks reflecting market trends (Milkovich and Newman, 1993). Crystal (1992), a former consultant himself, suggested that these procedures are employed by the vast bulk of large corporations. Crystal maintained, however, that in addition to using consultants and surveys for rational information purposes, many firms capitalize on the taken-for-granted status of these practices and employ them to justify high executive salaries that are set for other reasons. When compensation committees explicitly refer to the use of consultants and surveys to explain their salary allocations, they are using *external validation justifications* to legitimize their decisions.

A second type of justification strategy is to bind a controversial issue to non-controversial objectives (e.g. Ashforth and Gibbs, 1990). Recent trends in corporate governance have reinforced the priority of shareholder value as the principal benchmark for judging managerial effectiveness (e.g. Davis and Thompson, 1994; Useem, 1993; Zajac and Westphal, 1995). When committees emphasize the alignment of managerial and shareholder interests, they are using *shareholder alignment justifications* to legitimize their decisions.

A third justification strategy is to highlight or de-emphasize compensation criteria according to the situation-at-hand (e.g. Ashforth and Gibbs, 1990; Ginzel *et al.*, 1992). By not revealing information that threatens the legitimacy of their policies, or by downplaying criteria on which their policies score poorly, compensation committees can deflect shareholder criticisms away from sensitive topics (e.g. Abrahamson and Park, 1994). Conversely, by emphasizing and highlighting criteria on which their policies score well, compensation committees can orient shareholder attention in ways that maintain policy integrity. Two particularly relevant compensation criteria are accounting and market performance measures. The loosely coupled linkage often found in organizations between pay and performance means that compensation committees must continuously reinforce performance logics or risk delegitimizing their allocations in the eyes of shareholders. Performance logics are reinforced through active discussion of performance-related topics. Performance logics are downplayed to the extent that such topics are kept out of compensation justifications. When compensation committees actively discuss corporate performance to account for their policies to shareholders, they are using *performance justifications* to legitimize their decisions.

Determinants of Proxy Justifications: Research Hypotheses

Taken together, external validations, shareholder alignments, and performance statements provide compensation committees with considerable latitude to package their justifications to shareholders in a convincing way. We suggest that the frequency of each type of justification depends upon three contextual factors that encourage committee members to emphasize some aspects of a company's pay policies more than others.

Shareholder power and activism

Given the structure of corporate governance in the U.S., it is very difficult for dispersed and uncoordinated shareholders to form coalitions for the purpose of influencing management (e.g. Berle and Means, 1932; Fama, 1980). This fragmentation has given management an advantage in corporate affairs, and has encouraged compensation committees to defer to management in their pay allocations. Recently, however, management–shareholder relationships have been marked by an increasingly active role for shareholders. Useem (1993) suggested that this activism is a result of increasingly concentrated ownership as large institutional investors have become major players in stock transactions. According to Useem, concentrated ownership has transferred power away from management and towards shareholders. Outside owners with large stakes in companies typically are sophisticated investors with good access to information both within and outside the company. Useem argued that the effects of their transfer of power have diffused throughout the investor community, and have led to more shareholder activism and greater corporate accountability.

These trends should create very salient pressures on the compensation committees of firms with strong and active outside owners to construct proxy justifications for their policies that reinforce shareholder and market objectives. Committees in such firms should feel more pressure to justify salaries through external validation, since external validations relate executive compensation to the practices of other comparable firms operating in similar markets. They should also be more inclined to use shareholder alignment justifications, and to emphasize market returns as a criterion for top management salaries. We thus make the following predictions:

- H1:* The greater the shareholder activism and concentration of outside shareholders, the more external validations, shareholder alignment statements, and market performance are used to justify executive compensation.

CEO compensation

A second factor that is likely to influence the content of compensation justifications in any given year is CEO pay during that year. The compensation levels of executives in large U.S. firms are scrutinized heavily in the business press. High levels of compensation call attention to a CEO's worth, and to a company's compensation policies in general. High pay thus pressures compensation committees to embed their allocations within politically acceptable logics. CEO compensation usually consists of three components: (a) a base salary tied to prevailing labor market conditions, CEO tenure, and salary ranges set by a company's salary policies, (b) an annual incentive bonus that is tied to some combination of market and accounting returns, and (c) an LTIP consisting of the gains realized from the exercise of stock options. High levels of compensation exert pressures on compensation committees to emphasize both external validation for these amounts as well as the linkage of these amounts to shareholder interests. We thus predict the following relationships:

- H2:* The higher the base salary, incentive bonus, and LTIP gains the CEO receives, the more external validations and shareholder alignment statements are used to justify executive compensation.

Since much of the pressure on compensation committees is driven by shareholder demands that CEOs be compensated according to how well they perform, proxy justifications for high CEO compensation should include greater attention to performance measures. The component of a CEO's remuneration that is most clearly tied to the performance of the firm in the year proxy

justifications are written is the annual incentive bonus, usually granted on the basis of accounting returns. Base salaries are typically not performance-driven, and long-term incentive awards may be a result of options granted several years before. Thus, performance justifications are most likely driven by the magnitude of annual bonuses. We hypothesize that:

H3: The higher the incentive bonus awarded to the CEO, the more accounting performance is used to justify executive compensation.

Company performance

How much a CEO is paid is only one-half of the current pay-for-performance ideology. The other half is how well a company actually performs. Low performance triggers the scrutiny of investors seeking to place blame on management for poor results. High performance eases justification pressures by relaxing legitimacy threats. The performance of publicly-held companies is usually broken down into three components: accounting returns and profitability, stock market returns, and 'beta' which is a measure of the volatility of a company's stock price relative to broad market indicators. Each of these performance dimensions is likely to contribute to the justification context of executive pay.

Accounting indices such as return on equity are measures of the effectiveness of management in utilizing the resources at its disposal. High accounting returns imply that management has been successful in balancing revenues and costs, and in making good use of the value-creating assets of a company. Regardless of the vagaries of stock market behavior, accounting returns speak directly to the quality of management and to the prescience of management's strategic and operational decisions. High accounting returns thus buffer management from external criticism and provide substantive evidence of the legitimacy of the top management team. Not only should high returns relax pressures on the compensation committee to legitimize their compensation policies, but they should also encourage compensation committees to highlight positive accounting indicators in their proxy discussions. Thus, we make the following predictions:

H4: The higher a company's accounting performance, the less external validations and shareholder alignment statements are used to justify executive compensation.

H5: The higher a company's accounting performance, the more accounting performance is used to justify executive compensation.

Market returns reflect the collective opinion of investors about the wealth-generating capabilities of a company. Thus, high shareholder returns signal the legitimacy of a company's management. This legitimacy should relax pressures on compensation committees to seek alternative sources of external validity for their policies, as well as encourage them to trumpet management's alignment with shareholder interests. Thus, the following conditions should hold:

H6: the higher a company's market performance, the less external validations are used to justify executive compensation.

H7: The higher a company's market performance, the more shareholder alignment statements and market performance are used to justify executive compensation.

A third important measure of firm performance is often referred to as a company's beta (e.g. Brealy and Myers, 1988). Beta is an index of the volatility of a company's stock price in relation to broad market indicators. A high beta in either a positive or negative direction indicates that changes in the company's stock price are much greater than changes in the market as a whole. The stock price of a high beta firm is much more volatile than the overall market, and

much more sensitive to changes in the economic environment. High betas are driven by many underlying factors, many of which are unrelated to managerial competence, such as the nature of a firm's business and the conditions of the industry in which a firm operates. Whatever the underlying causes, stock price volatility makes it much more difficult to compare the returns of a high beta firm to market averages. Because of this noncomparability, the compensation committees of volatile firms should be less willing to make compensation and performance comparisons with other firms in the market since comparisons to any market average or set of typical firms are likely to carry little weight with shareholders. This leads to the expectation that:

H8: The greater the volatility of a company's market performance, the less external validations, shareholder alignment statements, and market performance are used to justify executive compensation.

Table 1 provides a summary of the predictions covered by the eight hypotheses. In the absence of previous research on compensation justifications, these main effect predictions are parsimonious.

Table 1. Summary of hypotheses

Independent variables	Hypothesis	Dependent variables		
		External validation	Shareholder alignment	Accounting performance Market performance
Shareholder characteristics				
Shareholder activism	H1	Positive		
	H1		Positive	
Outside ownership and power	H1	Positive		Positive
	H1		Positive	
	H1			Positive
	H1			Positive
Compensation				
Base compensation	H2	Positive		
	H2		Positive	
Annual bonus compensation	H2	Positive		
	H3			Positive
LTIP compensation	H2	Positive		
	H2		Positive	
Company performance				
Company accounting performance	H4	Negative		
	H4		Negative	
	H5			Positive
Company market performance	H6	Negative		
	H7		Positive	
	H7			Positive
Company stock price volatility	H8	Negative		
	H8		Negative	
	H8			Negative
Controls				
Total sentences				
Company diversification				
Size				
Industry market performance				
CEO tenure				
Staggered board				

At the same time, the content of justifications is complex and reflects nuances in a compensation committee's relationship with shareholders. These complexities make it likely that at least some of the independent variables might influence justification content interactively such that the effects of one variable may depend upon the level of another. While prudence dictates main effect predictions at this stage in research on compensation justifications, several potential interaction effects among the independent variables seem reasonable. Thus, in addition to testing for the *predicted* main effects, we also examine *post hoc* a number of more complex interactive relationships.

Data and Method

Our sample was drawn from the S&P 500 index at the end of 1992, the first year for which proxy statements based upon the new SEC regulations were available. The original sample included the 366 companies out of the 500 which have a fiscal year end of 31 December. Missing data reduced the final sample to 266 companies. Companies with 31 December fiscal year ends were chosen so that five complete years of shareholders returns would be included in all comparisons, and to avoid any sampling problems which might arise from different fiscal years, such as significant changes in the market during the non-overlapping portions of company performance periods. *T*-tests on company size, beta, diversification, and profitability revealed no significant differences between our sample and the S&P 500 as a whole. Sample data and text were obtained from the companies' 1992 proxy statements and from Standard & Poor's COMPUSTAT data service. Only the portion of the proxy statement that was contained within the SEC mandated section entitled 'Report of the Compensation Committee' was included in our text corpus. All such text was digitized and stored in machine-readable form.

Dependent variables: justification content

Our measurement of justification content relied heavily on computer-aided text analysis. We followed Fan (1988), Dyer (1994), and others who have constructed content coding schemes to detect frequencies of high level 'concepts' in naturally occurring text. Concepts such as 'external validation' and 'accounting performance' are type abstractions extending over several different, but conceptually synonymous, lexical items of greater specificity. So, for example, the term 'accounting performance' subsumes such items as 'return on equity', 'return on assets', 'operating income', 'cash flow' and 'return on sales'. These items are equivalent given their common membership in the class of performance measures that is defined as 'accounting performance'. This equivalence justifies counting an instance of each lexical item as an instance of the more abstract conceptual category.

As Smith (1991) noted, however, establishing the semantic equivalence of lexical items is quite difficult because conceptual categories have fuzzy membership boundaries, and because the meaning of any word or phrase is context dependent. It is now accepted that the resolution of multiple meanings requires substantial domain-specific knowledge (e.g. Fisher and Riloff, 1992; McCarthy and Lehnert, 1995). Generating detailed domain rules to allow for automated disambiguation of lexical meaning involves an enormous investment of time in dictionary and rule construction. Consequently, previous researchers who have measured the frequency of broad

textual themes have relied on an iterative method of concept development in which concept membership rules are refined via repeated cycles of manual concept validation on random subsets of the relevant text (e.g. Fan, 1988). As concept membership becomes clarified, it is possible to employ computer techniques to count the frequency of specific items that are included as members of a given conceptual category. Summing across these frequencies is a measure of the frequency of the category as a whole.

Following this method of abstraction, we defined one category for each of the four dependent variables covered in our hypotheses: external validation, shareholder alignment, market performance, and accounting performance. Phrases included in each category are listed in Table 2. For each category, we followed a similar iterative procedure to clarify membership rules. We first created a starting membership array for a concept by listing words and phrases that *a priori* seemed to fit the category's definition. Using various text search programs, we qualitatively tested these initial definitions by conducting searches on each lexical phrase in order to understand how it was used within specific sentence contexts. Although intuitive in nature, these searches allowed us to winnow out words and phrases whose meanings were only infrequently subsumed by the coding category, and to identify other words and phrases that were direct or indirect category markers.

We then used these refined membership definitions as input into Miller's (1990) VBPro content analysis program. VBPro accepts category membership lists and searches a text corpus for member words and phrases. The output of the search is a list of frequencies for each member word or phrase, as well as the frequencies of each concept in sentences or paragraphs. *We coded frequencies by sentence, and chose as our dependent measure the number of sentences in a given proxy statement that contained the target category.*

A second output from a VBPro run is a listing of all the text containing concept words and phrases. We used this text output to validate concept definitions. By manually comparing the sentences that contained only target concepts with the complete text for a random 10–20 per cent sample of companies, we were able to determine the number of concept hits (where the automated coding scheme detected a concept occurrence that was actually present), the number of misses (where the coding scheme did not detect a concept occurrence that was actually present), and the number of false hits (where the coding scheme detected a concept occurrence that was not actually an occurrence of the target concept) for a given concept definition. The manual tabulation of hits, misses, and false hits in this way represents a viable and acceptable technique for validating automated text analysis accuracy (e.g. Lehnert and Sundheim, 1991).

Through iterative manual comparisons on different portions of text, we were able to clarify the lexical markers for each of our four dependent variable concepts. Concept membership lists were refined by subtracting non-diagnostic lexical items, and by adding diagnostic items, for each category. By computing the number of hits, misses, and false hits for each iteration, and then making necessary modifications to the concept membership lists, we were able to build an automated procedure that eventually converged to acceptable levels of error. Complete accuracy in automated text analysis is difficult (Lehnert and Sundheim, 1991), so we defined acceptable error as an 80 per cent hit rate (total hits/total actual occurrences) and a 5 per cent false hit rate (total false hits/actual occurrences), assuming that any misses were random. The hit and false hit rates for all four dependent variables converged to at least these levels with between two and four iterations, attaining 97 per cent and 0 per cent for external validation, 80.6 per cent and 1.49 per cent for ownership alignment, 86.7 per cent and 0 per cent for accounting performance, and 80.25 per cent and 2.47 per cent for market performance. Ownership alignment was difficult to define using only a single concept because of the multiple meanings of the word shareholder. Thus, we defined two subconcepts, 'shareholder' and 'align' and sentences that contained both

Table 2. Definitions and frequency counts of dependent variable concept words

Concept	Frequency	Concept	Frequency	Concept	Frequency	Concept	Frequency
External validation	631	Shareholder	1399	Accounting performance	1531	Market performance	1011
advisors	5	shareholder	418	roa	19	divided return	1
consultant	92	shareholders	455	roe	97	total return	78
consultants	137	shareowner	15	eps	82	total returns	13
consultant's	5	shareowners	19	ros	7	price appreciation	78
consulting	73	stockholder	180	rotc	9	return on capital stock	0
hewitt	40	stockholders	312	return on assets	42	tsr	6
hewitt's	3			return on equity	164	cumulative return	3
Perrin	12	Align	1505	return on investment	21	total average return	2
tpf&c	2	link		return on capital	29	term returns	4
ors	2	linking	129	return on sales	17	market price of the common stock	14
hay	6	linked	39	return on total capital	7	shareholder returns	19
experts	5	tie	82	return on average equity	3	shareholder return	83
survey	118	tying	42	net income	172	stockholder returns	8
surveys	111	tied	12	earnings	558	stockholder return	31
surveyed	20	align	109	cash flow	127	returns to stockholders	5
		aligned	523	credit rating	1	return to stockholders	25
		aligning	26	ratio	36	return to stockholder	0
		interest	38	ratios	9	return on stockholder's	1
		interests	138	return on sales/revenues	1	return on stockholders	7
		interests	367	return on targeted equity	1	return to shareowners	2
				return on expense	1	return to shareholders	35
				return on common equity	10	shareholder value	221
				return on shareholders' equity	11	stockholder value	96
				return on average common equity	3	share owner value	4
				return on opening equity	1	share owner return	1
				return on average equity	3	company's common stock	114
				returns on the company's assets	1	company's common shares	9
				return on beginning-of-year equity	1	stock price	151
				return on average shareholder equity	3		
				operating profits	7		
				operating profit	19		
				operating income	65		
				operating margins	4		

Table 3. Concept sentence occurrences

Concept	Mean	<i>S.D.</i>	Minimum	Maximum	Total
Total sentences	41.06	16.01	5	96	12,197
External validation sentences	1.73	1.83	0	9	513
Shareholder alignment sentences	1.65	1.35	0	7	489
Accounting measure sentences	3.52	2.87	0	18	1045
Market measure sentences	2.82	2.60	0	18	839

subconcepts were taken as a measure of the ownership alignment superordinate concept (see Table 2). Concept frequencies are presented in Table 3.

Independent variables

The independent variables used in this study represent four categories of measure.

Company performance.

Market Return Market return was computed as the 5-year total shareholder return on a company's stock. Starting in 1992, companies have been required by the SEC to provide a graphical presentation of the company's total return to shareholders over the previous 5 years on \$100 invested in the company's stock at the beginning of the period. Total market return for the year reflects the annual change in a company's stock price, assuming reinvestment of dividends. Total market returns used in this study were obtained from these graphs.

Average ROE Return on investor equity (Net Income/Shareholder's Equity) is frequently used by investment analysts as a direct measure of how well a company is using the equity provided by the shareholders (Teitelbaum, 1996). The 5-year average return on equity was calculated using data from the COMPUSTAT data base.

Company beta Beta is an often used measure of a company's non-systematic risk (Brealy and Meyers, 1988). It represents the average change in a company's stock price in response to a 1-unit change in the market. The larger a company's beta, the more volatile and risky its stock.

Outside Ownership

Owner concentration The concentration of outside shareholders was dummy coded as a 1 if there were outside owners listed as significant shareholders in the 1992 proxy statement (e.g. Main *et al.*, 1995). A significant shareholder is typically considered to be anyone who controls 5 per cent or more of the company's outstanding common stock. If an individual or organization controls 5 per cent or more of stock, the extent and purpose of the holdings must be disclosed in the proxy statement. We defined an outsider as any individual or group who was not currently, nor had ever been, a member of management, and was neither a member nor descendent of the company founder's family nor the representative or beneficiary of any legal entity set up in the family's name.

Shareholder activism Shareholder activism was defined as the number of resolutions presented by shareholders which were to be voted on at the annual shareholders meeting, as listed in the company's 1993 proxy statement. Larger numbers of shareholder resolutions are indicative of greater levels of shareholder activism (Useem, 1993).

CEO compensation

Base salary This variable is equal to the natural log of the 1992 base compensation of the CEO, as reported in the company's 1993 annual proxy statement.

Incentive bonus This variable is equal to the natural log of the CEO's 1992 annual bonus, as reported in the company's 1993 annual proxy statement. Not all CEOs received bonuses in 1992. Since the natural log of 0 is undefined, for those individuals who did not receive bonuses, these measures were coded as 1, thereby setting the natural log of these measures at 0.

LTIP gains This variable is equal to the natural log of the total dollar gain realized by the CEO in 1992 from the exercise of previously granted options, and/or the sale of restricted stock, as reported in the company's 1993 annual proxy statement. Cases in which the CEO realized no LTIP gains were coded as 1.

Control variables

Company size Larger firms are more visible than smaller firms and may adjust their proxy justifications in ways that reflect this visibility. We accounted for any systematic effect of size by controlling for the log of the company's total assets in 1992.

Company diversification Diversified firms may have different justification tendencies than non-diversified firms. Accordingly, we controlled for the percentage of a company's sales which occurred in the company's primary SIC code during 1992. A firm's primary SIC code is the two-digit SIC code in which the largest percentage of the company's sales occurred.

Industry performance Industry performance is a significant variable used in performance comparisons (e.g. Gibbons and Murphy, 1990). Firms in the same industry are exposed to the same environmental and economic pressures. To approximate industry performance, total annual return and market capitalization data were collected from COMPUSTAT on all firms for each two-digit SIC code represented in the same. To estimate industry performance for the 1993 proxy year, each company's total annual market return (including reinvested dividends) was weighted by its market capitalization for that year. If a company's market value or total return information was missing for a given year, the company was excluded from the calculation for that year. These weighted values were then summed and divided by the total market capitalization for the industry group to arrive at each group's annual performance. The five annual performance measures were then used to calculate the value of \$100 investment in the industry over the previous 5 years.

CEO power Zajac and Westphal (1995) found that CEO power was a significant factor in the presence or absence of shareholder alignment justifications. Although our research concerns the effects of shareholder relationships on compensation justifications, we controlled for the effects of CEO power. First, we controlled for *CEO tenure*. CEO tenure was defined as the number of

years the CEO had held his current position as of 1992. Even in the face of significant outside ownership, if a company's CEO has held his post for many years, he will have consolidated his power base with the board of directors, and will thus be more immune to outside influence (Main *et al.*, 1995; Westphal and Zajac, 1994). Second, we coded for whether the board of directors had *staggered re-elections*. A company has a staggered board when only some board members, rather than the entire board, stand at any one time for re-election. Many institutional investors have claimed that staggered re-elections allow the CEO to fill the board with loyalists who will protect the CEO's interests at the expense of shareholders. This variable was coded 1 if a company has a staggered board, and zero otherwise.

Total sentences This variable is equal to the number of sentences included in the company's compensation committee report. This variable is used to control for the effect of statement length upon the frequency of occurrence of the dependent variables.

Method of analysis

Count data are seldom normally distributed, thus violating a key assumption of OLS regression (Greene, 1991). An examination of the justification frequencies in our sample revealed that a Poisson distribution was a more reasonable approximation. One limitation of the Poisson model is that it assumes that the variance of the expected event counts is equal to its mean. Count data are often overdispersed, with the variance of the expected events exceeding their mean (Cameron and Travendi, 1986). We corrected for this problem by using the negative binomial distribution which estimates an additional parameter that corrects for overdispersion. One can test whether a negative binomial model is superior to a Poisson model by subtracting the likelihood ratios of the two models and consulting a chi-square table. We used this approach and present the appropriate models in our tables.

Results

Table 4 presents the means, standard deviations and correlations for all of the variables used in this analysis. Table 5 shows the results of predicting the use of external validations (see Table 1 for a summary of these predictions). Model 1 shows that more shareholder resolutions and concentrated outside ownership are positively associated with the frequency of external validation sentences, providing support for H1. Model 1 provides no support for the external validation prediction in H2 in that no relationship exists between CEO compensation and external validations. H4 and H6 predict negative relationships between accounting and market performance and the use of external validations. As can be seen in model 1, these hypotheses were also not supported. Model 1 does confirm the external validation portion of H8, in that firms with higher betas use fewer external validations.

Because consultants are widely used, we were surprised that base pay had no impact on the use of external validations. One reason could be that a large number of the firms in our sample did not pay a bonus to the CEO, thus reducing pressures to justify high base pay. Indeed, in many of the statements that we examined in which the CEO was not paid a bonus, the lack of a bonus was discussed extensively. The effects of base salary may be strongest for firms in which the CEO was paid a bonus, and may be weakened for firms paying no bonus. Model 2 tests this argument by

Table 5. Regression for external validations

Variable	Model 1	Model 2	W/Bonus Model 3	W/O Bonus Model 4
Constant	-3.7218 (2.6610)	2.5677 (4.8130)	-5.9802† (3.1650)	-0.6503 (5.8450)
Outside ownership	0.3336† (0.1325)	0.3297† (0.1307)	0.2933 (0.1429)	0.5498* (0.3387)
Shareholder activism	0.1075† (0.0444)	0.1058† (0.0447)	0.0789* (0.0484)	0.2669† (0.1119)
Company 5-year market performance	0.0006 (0.0004)	0.0007* (0.0004)	0.0006 (0.0004)	0.0068† (0.0031)
Five-year average company ROE	-0.0059 (0.0056)	-0.0065 (0.0058)	-0.0104 (0.0072)	0.0083 (0.0112)
Company beta	-0.4239† (0.1824)	-0.3981† (0.1854)	-0.4974† (0.2043)	-0.3424 (0.3439)
Base salary	0.3143 (0.2084)	-0.1696 (0.3701)	0.5442† (0.2610)	0.2223 (0.4939)
Annual bonus compensation	0.0117 (0.0146)	-0.0823 (0.1223)	-0.0593 (0.1248)	
LTIP gains	0.0027 (0.0099)	0.0033 (0.0099)	0.0018 (0.0105)	-0.0078 (0.0268)
CEO tenure	-0.0086 (0.0110)	-0.0091 (0.0111)	-0.0026 (0.0124)	-0.0546† (0.0223)
Staggered board	0.1317 (0.1305)	0.1608 (0.1339)	0.1530 (0.1556)	0.4734 (0.2758)
Industry performance	0.0003 (0.0009)	0.0004 (0.0009)	0.0008 (0.0009)	-0.0026 (0.0024)
Company size	-0.1067† (0.0556)	-0.0978* (0.0569)	-0.1005* (0.0625)	-0.3293* (0.1851)
Company diversification	-0.0011 (0.0030)	-0.0011 (0.0029)	-0.0006 (0.0034)	-0.0033 (0.0055)
Total sentences	0.0214‡ (0.0044)	0.0215‡ (0.0044)	0.0214 (0.0046)	0.0157* (0.0087)
Bonus dummy		-8.3357 (5.3060)		
Bonus dummy × base salary		0.7150* (0.4242)		
Overdispersion parameter	0.2647† (0.0973)	0.2582‡ (0.0961)	0.2690† (0.1072)	
Log-likelihood	-439.33	-437.82	-358.55	-73.48

* $p < 0.10$; † $p < 0.05$; ‡ $p < 0.01$.

interacting base salary and a dummy variable representing whether the CEO was or was not paid a bonus in 1992. The results provide support for this argument in that the interaction is positive and significant. To clarify this relationship further we split our sample into two subgroups, firms whose CEOs were paid bonuses and those who were not, and re-ran the analysis. In support of our arguments, model 3 shows that base salary had a positive impact on the use of external validations for firms whose CEOs were paid a bonus, while model 4 shows that it had a no impact for firms in which the CEOs were not paid a bonus. *Post hoc*, we also tested for interaction effects using ownership variables and found no effects.

Table 6 presents the results of predicting the frequency of shareholder alignment statements and test predictions in H1, H2, H4, H7 and H8. Model 1 reveals no support for the shareholder

Table 6. Regressions for shareholder alignment

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Constant	0.0211 (2.2090)	2.5183 (2.3760)	-1.2515 (3.2350)	2.7192 (2.3530)	3.1202 (2.3870)	2.4439 (2.3730)	-0.8961 (3.2210)
Outside ownership	-0.0861 (0.1020)	-0.0797 (0.1018)	6.4291* (3.7810)	-0.0792 (0.1015)	-0.3956† (0.1726)	-0.2543† (0.1298)	6.6013* (3.7350)
Shareholder activism	-0.0117 (0.0397)	-0.0257 (0.0403)	-0.0349 (0.0408)	0.0242 (0.0472)	-0.0257 (0.0402)	-0.0348 (0.0406)	0.0085 (0.0489)
Company 5-year market performance	-0.0002 (0.0003)	-0.0002 (0.0004)	-0.0002 (0.0003)	-0.0003 (0.0004)	-0.0010* (0.0005)	-0.0002 (0.0004)	-0.0010* (0.0006)
Five-year average company ROE	-0.0033 (0.0039)	-0.0038 (0.0038)	-0.0042 (0.0039)	-0.0032 (0.0038)	-0.0037 (0.0037)	-0.0111† (0.0051)	-0.0078 (0.0052)
Company beta	0.0587 (0.1269)	0.0028 (0.1299)	0.0041 (0.1296)	0.0206 (0.1310)	0.0308 (0.1305)	-0.0157 (0.1293)	0.0346 (0.1317)
Base salary	-0.0157 (0.1734)	-0.1924 (0.1845)	0.0810 (0.2435)	-0.2044 (0.1825)	-0.2196 (0.1847)	-0.1761 (0.1844)	0.0794 (0.2422)
Annual bonus compensation	0.0084 (0.0108)	0.2341‡ (0.0884)	0.2210† (0.0878)	0.2390‡ (0.0881)	0.2480‡ (0.0887)	0.2268‡ (0.0881)	0.2329* (0.0878)
LTIP gains	-0.0017 (0.0079)	-0.0043 (0.0080)	-0.0025 (0.0081)	0.0045 (0.0093)	-0.0025 (0.0080)	-0.0040 (0.0080)	0.0080 (0.0095)
CEO tenure	-0.0118 (0.0079)	-0.0110 (0.0079)	-0.0125 (0.0081)	-0.0110 (0.0079)	-0.0098 (0.0079)	-0.0096 (0.0079)	-0.0105 (0.0081)
Staggered board	0.0625 (0.1023)	0.0535 (0.1025)	0.0591 (0.1026)	0.0451 (0.1024)	0.0506 (0.1031)	0.0360 (0.1032)	0.0367 (0.1036)
Industry performance	-0.0003 (0.0008)	-0.0002 (0.0008)	-0.0001 (0.0008)	-0.0003 (0.0008)	-0.0002 (0.0008)	-0.0001 (0.0008)	-0.0002 (0.0008)
Company size	0.0019 (0.0442)	-0.0035 (0.0443)	-0.0028 (0.0444)	-0.0103 (0.0443)	-0.0145 (0.0447)	-0.0073 (0.0447)	-0.0223 (0.0449)
Company diversification	0.0009 (0.0024)	0.0009 (0.0024)	0.0015 (0.0024)	0.0005 (0.0024)	0.0011 (0.0024)	0.0008 (0.0024)	0.0014 (0.0024)
Total sentences	0.0164‡ (0.0029)	0.0162‡ (0.0029)	0.0167‡ (0.0030)	0.0165‡ (0.0029)	0.0160‡ (0.0029)	0.0160‡ (0.0029)	0.0167‡ (0.0030)
Bonus dummy		-2.9248† (1.1380)	-2.7692† (1.1300)	-2.9947‡ (1.1360)	-3.1120‡ (1.1440)	-2.8262† (1.1340)	-2.9382‡ (1.1330)
Outside ownership × base salary			-0.4854* (0.2818)				-0.5279* (0.2787)
Shareholder activism × LTIP gains				-0.0095* (0.0054)			-0.0094* (0.0054)
Outside ownership × Co. market performance					0.0014† (0.0006)		0.0013* (0.0007)
Outside ownership × company ROE						0.0140† (0.0065)	0.0091 (0.0069)
Log-likelihood	-416.76	-413.31	-411.84	-411.68	-410.74	-411.13	-406.39

* $p < 0.10$; † $p < 0.05$; ‡ $p < 0.01$.

alignment predictions of H1 in that neither concentrated ownership nor the number of shareholder resolutions relates to the extent of the use of owner alignment statements. We also do not find any relationship between compensation level and the use of owner alignment statements (H2). Because the presence of a bonus impacted the extent to which firms used external validations, we also included it in model 2 to determine whether it affected the frequency of owner-alignment statements as well. Model 2 shows some support for H2 in that the larger the bonus the greater the frequency of shareholder alignment statements. However, there is a negative effect for the dummy denoting the presence/absence of a bonus. These effects indicate that

committees paying low bonuses and those paying very high bonuses are most likely to discuss owner alignment. Decomposing this effect indicated that committees that pay no bonus are significantly more likely to discuss shareholder alignment than those that pay bonuses up to \$260,000¹. Committees awarding bonuses higher than \$260,000 are *more* likely to discuss owner alignment than those which do not pay a bonus. The absence of a bonus may present a symbolic opportunity to argue that the company is interested in aligning management's interests with the interests of shareholders. The committee can argue that no bonus was awarded because the firm did not meet its objectives and that the board places great importance in aligning management and shareholder interests. At the same time, large bonus awards pressure the committee to justify their actions. One way for the committee to do this is to present arguments stating how its compensation policies are aligning management and shareholder interests. A *post hoc* examination of the statements tended to support these arguments.

Model 2 shows no main effects of accounting performance, market performance, and stock volatility on the use of owner alignment statements, providing no support for the corresponding predictions in H4, H7, and H8. Although model 2 shows no support for the main effects of ownership concentration and activism, we investigated theoretically plausible interactions in which concentrated ownership and/or the number of shareholder resolutions modify the effects of compensation or performance on shareholder alignment statements. In effect, concentrated and active owners may amplify or dampen the main effects of compensation and performance. Models 3 through 5 show the relevant regression coefficients for these interactions. Model 3 shows that the effect of base pay is modified by whether the firm has concentrated ownership. More specifically, the ownership–base pay interaction is negative and reduces the use of owner-alignment statements.

In order to interpret this interaction we must explicitly indicate which independent variable is assumed to modify the other independent variable's impact on the dependent variable. In this case, we have suggested that ownership would moderate the effect of base pay on owner alignment statements. Because our ownership variable is dichotomous, base pay has a positive effect on the frequency of ownership alignment statements for firms with dispersed owners, but has a negative impact for firms with concentrated ownership. The finding suggests that committees in firms that have concentrated ownership and pay their CEOs a low salary are more likely to discuss ownership alignment issues than those whose CEOs have a high salary. Low salary may represent a self enhancement opportunity for the committee *vis-à-vis* powerful owners if the committee claims that it is aligning management interests with those of stockholders.

Model 4 shows that there is also a negative interaction between the number of shareholder resolutions and exercised options. Because the number of shareholder resolutions is a discrete variable, this means that exercised options have a positive effect on the ownership alignment statements for firms with no resolutions, but a negative effect for firms that have one or more shareholder resolution statement. Further analyses revealed that for firms with no shareholder resolutions, exercised options have only a small positive impact on ownership alignment statements. For firms with shareholder resolutions, however, increases in the value of exercised options have a negative impact on shareholder alignment statements. This effect becomes increasingly powerful as the number of shareholder resolutions increases. Again, it may be that little or no gains on exercised options represent a self-enhancement opportunity for committees to increase their legitimacy with active shareholders. It is not clear, however, why ownership only moderates base salary and the number of shareholder resolutions moderates exercised options.

¹ Our analyses of this and other interactions follow the procedure discussed by Schoonhoven (1981).

Models 5 and 6 show that while the main effect of corporate performance is negative, its interaction with ownership concentration is positive. Because ownership is a dichotomous variable, this means that increases in performance have a negative effect on the use of shareholder alignment statements for firms with dispersed outside ownership, but have a positive impact for concentrated firms. The explanation for these effects may be similar to the explanation for the interaction between ownership and base pay.

One puzzling result is that in both models 5 and 6 the main effect of concentrated ownership is negative. Because outside ownership has a positive effect on the use of external validations, it would seem that concentrated outside ownership would also lead to more ownership alignment statements rather than fewer. However, once all the relevant interaction effects are included in model 7, the main effect of ownership turns positive and significant, suggesting that the presence of powerful outside owners, independent of its moderating role, encourages the use of shareholder alignment justifications.

Table 7 reports the effects of the independent variables on performance justifications, testing predictions in H1, H3, H5, H7 and H8. Shareholder power and activism are not related to increased use of market measure justifications, providing no support for this prediction of H1. Model 1 provides support for H3, showing that the higher the CEO's bonus the more frequently committees discuss accounting performance. Because bonus plans most often use accounting performance to determine the size of bonus awards, granting large bonuses is justified by discussing how the targets were met.

In a model not shown here, we also investigated whether a dummy variable which indicated whether any bonus was awarded had an effect on the discussion of accounting measures. No such impact was found. There is only a positive and linear relationship between the size of a bonus and discussion of accounting measures. We also investigated whether the presence or absence of a bonus affected the extent to which the committee discussed market returns. Model 3 re-estimates model 2 but adds a dummy variable indicating the presence of a bonus. Interestingly, the dummy variable is negative and significant, while the continuous bonus variable has a significant positive effect on the use of market performance statements. Although not predicted, these results are similar to our findings for the use of owner alignment statements, and indicate that firms whose CEOs receive very low bonuses or very high bonuses discuss market performance most frequently.

H5 argued that higher accounting performance leads to a greater discussion of accounting performance. We find support for this hypothesis in that a firm's 5-year return on equity positively influences the discussion of accounting returns (see model 1). ROE is also negatively related to the discussion of market returns (see model 3). However, support for H7, which proposed a corresponding prediction for market performance, was not found. There appears to be no relationship between market performance and the discussion of either market or accounting performance. Model 3 also supports H8 by showing that as a firm's beta increases discussions of market returns decline.

Discussion

We argued that CEO pay, corporate performance, and concentrated and active outside owners influence how compensation committees justify CEO compensation. While we found support for many of the hypothesized direct relationships between these variables and the frequencies of

Table 7. Regressions for performance measures

Variable	Accounting	Market measures	
	measures Model 1	Model 2	Model 3
Constant	2.1047 (2.048)	-0.7833 (2.0910)	0.9111 (2.2310)
Outside ownership	-0.1817† (0.0950)	-0.0683 (0.1046)	-0.1012 (0.1026)
Shareholder activism	-0.0104 (0.0401)	-0.0012 (0.0471)	-0.0053 (0.0448)
Company 5-year market performance	-0.0002 (0.0003)	-0.0002 (0.0004)	0.0029 (0.0019)
Five-year average company ROE	0.0066* (0.0036)	-0.0059* (0.0037)	-0.0250‡ (0.0095)
Company beta	0.1722 (0.1250)	-0.2405* (0.1305)	-0.3385‡ (0.1249)
Base salary	-0.1904 (0.1658)	0.0701 (0.1599)	-0.0403 (0.1684)
Annual bonus compensation	0.0281‡ (0.0097)	0.0203 (0.0137)	0.1827† (0.0835)
LTIP gains	-0.0010 (0.0074)	0.0006 (0.0073)	-0.0004 (0.0074)
CEO tenure	0.0164† (0.0066)	-0.0081 (0.0085)	-0.0070 (0.0085)
Staggered board	0.0946 (0.0987)	0.0076 (0.1066)	0.0572 (0.1056)
Industry performance	0.0002 (0.0007)	0.0011 (0.0008)	0.0013 (0.0008)
Company size	0.0389 (0.0458)	-0.0199 (0.0419)	-0.0532 (0.0423)
Company diversification	-0.0029 (0.0021)	-0.0015 (0.0025)	-0.0010 (0.0025)
Total sentences	0.0215‡ (0.0028)	0.0259‡ (0.0030)	0.0257‡ (0.0030)
Bonus dummy			-2.1079† (1.0890)
Overdispersion parameter	0.1508‡ (0.0482)	0.1651‡ (0.0481)	0.1416‡ (0.0465)
Log-likelihood	-561.40	-520.45	-514.73

* $p < 0.10$; † $p < 0.05$; ‡ $p < 0.01$.

external validations, shareholder alignment statements, and performance discussions (see the summary of results in Table 8), perhaps the most intriguing aspect of our results are several theoretically important interaction effects. One is the joint effect of base salaries and incentive bonuses on external validations. We hypothesized that the components of CEO pay would combine additively to affect justification content, under the assumption that high pay leads shareholders to question the worth of management. Although we found evidence for some direct effects, our results suggest that there is a strong non-linear relationship between base salaries and bonuses in determining the use of external validations. Crystal (1992) argued that external validations are used to justify high pay set for reasons other than market equity. Our results are consistent with this argument, but only for companies who pay their executives a bonus. Bonus

Table 8. Summary of hypotheses and results

Independent variables	Hypothesis	External validation		Shareholder alignment		Accounting performance		Market performance	
		Predicted	Actual	Predicted	Actual	Predicted	Actual	Predicted	Actual
Shareholder characteristics									
Shareholder activism	H1	Positive	Positive	Positive	N.S.				
	H1								
	H1								
Outside ownership and power	H1	Positive	Positive	Positive	Positive†			Positive	N.S.
	H1								
	H1								
Compensation									
Base compensation	H2	Positive	Positive*	Positive	N.S.				
	H2								
Annual bonus compensation	H2	Positive	N.S.	Positive	Positive*				
	H2								
LTIP compensation	H3	Positive	N.S.	Positive	N.S.		Positive	Positive	
	H2								
Company performance									
Company accounting performance	H4	Negative	N.S.	Negative	Negative†			Positive	Positive
	H4								
	H5								
Company market performance	H6	Negative	Positive†	Positive	Negative†				Positive
	H7								
	H7								
Company stock price volatility	H8	Negative	Negative	Negative	N.S.				Negative
	H8								
	H8								
Controls									
Total sentences									
Company diversification									
Size									
Industry market performance									
CEO tenure									
Staggered board									

* Significant only when bonus dummy is present.

† Significant only when an interaction term is present.

payments are an important component of CEO pay, and there are market and political pressures on compensation committees to include incentive bonuses in annual remuneration. Because bonuses are such a taken-for-granted element in CEO pay, the *absence* of a bonus is a very powerful signal to shareholders that compensation committees are not unduly influenced by management preferences. Not paying a bonus may neutralize investor criticism and reduce the pressure to validate externally pay allocations.

This interpretation is bolstered by our evidence that bonuses were non-linearly related to shareholder alignment and market return justifications. Alignment and market return justifications are used most frequently by committees who awarded a high bonus *and* committees who awarded *no* bonus. The former effect is consistent with our original prediction that high pay leads committees to link their pay allocations to shareholder-oriented objectives. The latter effect is consistent with our *post hoc* argument that the absence of a bonus is an important signal to shareholders concerning the judiciousness of the committee. One would expect that committees play upon this signal and emphasize it in their proxy justifications. With high bonuses, shareholder alignment justifications are used to convince shareholders that these bonuses are in their best interest. With no bonuses, they are used to reinforce the fact that the committee is independent of management, and thus is safeguarding shareholder wealth by awarding bonuses only under conditions of satisfactory market performance. These complementary non-linear effects of CEO bonuses illustrate how similar justification statements can be used for subtly different purposes depending upon the organizational context.

Another interesting interaction involved ownership concentration. We observed that although ownership concentration had a main effect on external validation and alignment justifications, the latter effect was contingent on controlling for complex interactions between ownership concentration, base salary, and organizational performance. For firms with concentrated owners, higher base pay was associated with fewer shareholder alignment justifications, and higher market and accounting performance with more alignment justifications. Conversely, for firms with dispersed owners, higher base pay was associated with more alignment justifications, and higher performance with fewer alignment justifications. It is the pattern of effects for dispersed firms that is most consistent with our hypotheses. Only for dispersed ownership do high base salaries and poor performance lead compensation committees to embed their pay allocations within a shareholder ideology. When outside ownership is concentrated, high base pay retards ownership alignment statements while high performance encourages them.

One way of explaining these effects is to assume that concentrated owners are also sophisticated owners. They are likely to dismiss blatant attempts at shareholder manipulation. Compensation committees probably believe that gross impression management strategies will be ineffective and may actually undermine their credibility in the eyes of powerful shareholders. Dispersed owners are much more difficult to track, have much less power over the compensation committee, and do not have the resources to keep informed of the inner workings of a company. For this reason, compensation committees may conclude that the best strategy for managing dispersed owners is to provide them with the most politically correct justifications.

One last area of interest are the effects on performance justification. Crystal (1992) argued that compensation policies are justified by using the performance measures that place a firm in the best light. We found substantial support for Crystal's arguments in the case of accounting returns. A high average ROE encourages committees to play up accounting returns in their proxy statements and to downplay market returns. High market returns, on the other hand, are not related to performance justifications. Market justifications are, however, influenced by a company's stock price volatility. When price volatility is high, compensation committees are much less willing to justify their pay allocations on the basis of market returns, most likely because such

returns are highly susceptible to uncontrollable environmental shocks and thus quite disruptive to the coherence of any justification strategy in the long run.

Although the general pattern of our results supports what is known about corporate governance, managerial compensation, and organizational legitimacy, because our research is cross-sectional it is open to the criticism that any significant relationship between company conditions and proxy justifications may be due to the substantive, rather than the symbolic, aspects of corporate action. In some cases, substantive effects may imply a reverse causal ordering between our dependent and independent variables. For example, the relationship between concentrated ownership and external validations may not be due to impression management, but to the fact that powerful outside owners induce compensation committees to hire consultants to rationalize their pay practices. Because we do not measure these underlying substantive processes, and because our study covers only a single year, it is impossible for us to untangle the substantive and the symbolic effects of proxy justifications completely.

But as Weick (1995) pointed out, substance and symbolism in organization–environment relations are likely to converge over time as companies and their stakeholders enact a mutually understandable practical order. Thus, for example, concentrated ownership may force boards to employ outside consultants, but boards must make it clear in their proxy statements that such consultants have, in fact, been used in the compensation setting process. The presence of external validations in proxy statements, in this case, would be an indicator of the value placed on the use of consultants by outside shareholders, and thus an implicit attempt by the compensation committee to legitimize their actions. If successful, these attempts reinforce the use of consultants and thus propagate the logic of external validation in the future. Substance may indeed induce symbolic acts, but symbolic acts reinforce and shape substance.

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