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Other People's Money: Effects of Ownership on Compensation Strategy and Executive Pay

Steve Werner
Henry L. Tosi

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Steve Werner
Department of Management
University of Houston
Houston, Texas 77204-6283
(713) 743-4672

Henry L. Tosi
Department of Management
University of Florida
Gainesville, Florida 32611
(904) 392-6147

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research, conferences, and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.

Abstract**Other People's Money: The Effects of
Ownership on Compensation Strategy and Executive Pay**

In this paper we develop and test hypotheses based on agency theory and managerial capitalism to address the question of whether firms' compensation strategies are designed to motivate actions in the interests of equity holders or those of management. We examined differences in the organizational incentive structure of lower-level executives in management-controlled, owner controlled, and owner-managed firms. We found that when managers controlled the firm, there was pervasively weak incentive alignment for managers within the hierarchy and that, beyond base pay, they were able to extract compensation premiums through bonuses and long-term incentives, in spite of the fact that their firms did not demonstrate better economic performance than other types of firms. We were also able to demonstrate that equity holders pay substantial agency costs in management-controlled firms compared with owner-controlled firms. We end with a discussion of the organizational context for rationalizing executive compensation and the role of compensation consultants.

Ten years ago, the academic discourse on executive compensation focused, almost without exception, on whether or not the compensation of chief executive officers (CEOs) in the largest U.S. corporations was designed so that executive decision making would be directed at maximizing firm performance. There was a spirited theoretical debate and derivative empirical literature around the question of whether top executives, particularly chief executive officers, earned their pay. Some argued that they are "worth every nickel they get" (Murphy, 1986: 125), while others maintained that there is "no rational basis for the compensation paid to top management" (Kerr and Bettis, 1987: 661). One's theoretical and ideological position colored the answer: Agency theorists tended to support the position that CEOs merited their pay, while managerial capitalists tended to criticize pay levels.

The broader and perhaps more important question that this work failed to address is whether incentive structures in organizations were designed to ensure that managerial decision making is directed toward maximizing firm performance. Such inquiry requires knowledge about the nature of incentives for managers throughout the firm. The typical research on CEO compensation cannot contribute to answering this question unless one of the following assumptions is made: either (1) the incentive structure of lower-level managers is similar to that of the CEO, with similar motivational properties, or (2) the incentive structure for lower-level managers is irrelevant so long as the CEO's is designed to maximize firm performance. Fortunately, current research on managerial compensation is beginning to examine incentive structures within the organizational hierarchy, shifting away from the focus on CEO pay to the study of the determinants of pay for lower-level managers (e.g., Abowd, 1990; Gerhart and Milkovich, 1990; Lambert, Larcker, and Weigelt, 1991; Fisher and Govindarajan, 1992; Lambert, Larcker, and Weigelt, 1993). The dominant question, however, remains exactly the same as for CEO pay: To what extent does the managerial compensation structure provide incentives to maximize firm performance?

One way to answer the question is to understand the choices that are made in the design of the firm's compensation strategy - the way that firms orchestrate different components of pay, such as base pay, bonuses and incentives, and benefits, so that they are effective motivational and control mechanisms to achieve different organizational performance objectives. These choices are made in four distinct areas of compensation policy. The first is the pay-level policy, which determines whether the firm will lead, meet, or lag the current market wage level (Weber and Rynes, 1991; Milkovich and Newman, 1993). The second is the pay-structure policy, or the relationships between pay at the various levels of the organization. The third area is individual differences in pay, such as how pay is related to performance,

organizational tenure, or other human capital indicators such as age and experience. Finally, the benefits policy is the basis for how the firm voluntarily provides employees with indirect financial compensation, including various forms of income security, capital accumulation, and service programs.

Drawing on concepts from agency theory and managerial capitalism, this study addresses the question of whether the compensation structures of managers at lower levels of the organizational hierarchy are designed to motivate actions in the best interests of equity holders or to serve the interests of the entrenched management. We also attempt to reveal some of the underlying internal processes that lead to the specific form a firm's compensation strategy takes.

Theoretical Foundations

In agency theory, the firm is defined as a system of explicit and implicit contracts among those who participate in it, such as owners, managers, workers, and the suppliers of capital. Owners are seen as principals who contract with agents (the managers) to "perform some service on their behalf which involves delegating some decision making authority to the agent" (Jensen and Meckling, 1976: 308). The principal is faced with the problem of controlling the agent, because (1) both principals and agents are assumed to be rational and self-maximizing individuals with divergent interests, (2) agents can have private information that the principal cannot learn without costs, creating information asymmetry, and (3) the agent is assumed to be work- and risk-averse.

The principal seeks to control the agent through monitoring and/or risk sharing. Monitoring involves gathering information on the agent's effort, on random external factors that may affect the success of the agent's efforts, and on the outcomes of the agent's activities (Jensen and Meckling, 1976; McGuire, 1988). If information about all three is available, no agency problem exists, because a contract can be specified based on the appropriateness of the agent's actions. Monitoring is unnecessary, however, if there is optimal risk sharing between the principal and the agent, because the incentives of both will be aligned. Incentive alignment can be achieved through contracts that make the agent's compensation contingent on outcomes of the agent's performance (McGuire, 1988; Hunt and Hogler, 1990; Baiman, 1990).

Control by the principal, however, incurs some agency costs (Jensen and Meckling, 1976): monitoring costs to the principal from instituting incentive schemes, monitoring procedures, supervision, and adding supervisory levels, information and budgeting systems, reporting procedures, and boards of directors (McGuire, 1988; Eisenhardt, 1989); bonding

expenditures that are implicit in suboptimal risk sharing; and residual losses arising from unresolved agency problems (Jensen and Meckling, 1976).

Jensen and Murphy (1990) believe that while the agency model has been extensively developed theoretically and has generated many hypotheses about CEO compensation, the results of empirical work based on it have often been inconsistent with the theory's formal models of contracting. This is due in large part to internal political forces that affect the contract but are not accounted for in the theory or are not amenable to assessment with the methodology commonly used (Jensen and Murphy, 1990). These political forces are considered in managerial capitalism, which places managerial power in a more central theoretical position (Berle and means, 1932; Marris, 1964).

The key proposition of managerial capitalism is that the degree of managerial power in a firm is a function of the distribution of equity holdings, which defines the ownership structure. When equity holdings in large firms are widely dispersed, principals have less influence over management and the board of directors, which, though formally charged with representing the owners, is in fact controlled by management. In these management-controlled firms, managers can act in their own interests at the expense of the owners. When equity holdings are more highly concentrated in a single stockholder, principals can exert more influence over management, and such firms are owner-controlled. When the managers have large equity holdings, the firm is called owner-managed.

The ownership structure will be reflected in the way managers are paid, since the firm's compensation strategy is one way to align the incentives of principals and agents. When managerial power is high as a result of equity dispersion, managers can reduce their compensation risk by designing pay structures that minimize the effects of fluctuating performance, because they have more influence than the board of directors in setting their own compensation (Tosi and Gomez-Mejia, 1989). The evidence for this comes from extensive research on CEO compensation that shows a strong relationship between firm performance and CEO pay in owner-controlled firms, while pay is strongly related to growth and sales increases in owner-controlled firms (McEachern, 1975; Allen, 1981; Gomez-Mejia, Tosi and Hinkin, 1987; Dyl, 1988; Kroll, Simmons and Wright, 1990).

Whether similar relationships exist at lower levels within the firm, under different kinds of ownership structures, remains empirically untested. The question is important, because Fama and Jensen (1983) contended that internal agency problems are resolved by relatively cheap monitoring that is achieved through decision hierarchies, mutual monitoring, and boards of directors. In these decision hierarchies, higher-level agents ratify and monitor the decisions,

initiative, and performance of lower-level agents. Mutual monitoring systems exist when agents interact to produce outputs and acquire low-cost information about their colleagues. Essentially, lower-level managers (themselves agents) act as principals who screen individuals, monitor inputs, and obtain information about the state of the world (Fama and Jensen, 1983; Stiglitz, 1975).

It is not clear that these internal monitoring mechanisms are so cheap. There are a number of problems when managers within the firm act as principals, monitoring other agents further down the organizational hierarchy (Baker, Jensen, and Murphy, 1988). First, unless the agent-monitors are themselves monitored or there is risk sharing, they will have little reason to enforce value-maximizing contracts with subordinates. Second, monitoring may be unreliable, because agents must bear all of the monitoring costs but receive little benefit from more accurate monitoring. These costs include the effort necessary for monitoring as well as the psychological costs of poor relationships with subordinates or peers that are the result of imposing controls. Third, a lack of monitoring may go all the way to the board of directors, which may have little financial incentive to exercise control but may bear substantial financial risk because of its fiduciary responsibility.

These arguments suggest that while there may be monitoring and incentive alignment at the highest managerial levels by boards of directors, there will be increasingly larger decrements in control, or control loss, as monitoring cascades through hierarchical levels (Williamson, 1967). Theoretically, control loss is dependent on precisely the same factors that affect the principal-agent relationship at the CEO level: information asymmetry, imperfect measures of agents' behavior or outcomes, and the effects of exogenous factors on the agent's performance (Demski and Sappington, 1987). One manifestation of control loss is that the alignment of managerial compensation and firm performance will weaken at progressively lower levels of the organizational hierarchy, and this should be apparent in the firm's compensation strategy.

If the ownership structure does affect the way that managers are paid, as suggested above, then there should be some obvious differences in the compensation strategies of different firms as a function of their different ownership structures. The essential difference, and the central thesis in this study, is that there will be greater control loss (or weaker incentive alignment) in management-controlled firms than in owner-controlled firms and owner-managed firms. We therefore formulated hypotheses about differences in the compensation strategies for managers at lower hierarchical levels in these types of firms. They specifically focus on how the ownership structure is related to pay-level policy, pay-structure policy, and policies that govern

individual differences in pay. Benefit policies were not studied because there was no information available in the dataset used for the analysis.

Hypotheses

Ownership structure and pay-level differences. Firms make decisions as to whether they should pay above, meet, or pay below prevailing labor market rates. Since the evidence shows that agency costs to principals due to excessive CEO compensation are greater in management-controlled firms than in owner-controlled firms (Allen, 1981; Dyl, 1988; Santerre and Neun, 1989), it can be expected that this same relationship should also hold at lower hierarchical levels, for two reasons. First, paying above-market wage may make the upper-level manager's job easier, because such a strategy makes it easier to attract and retain employees. Second, since pay differences between levels are relatively stable (Simon, 1957; Mahoney, 1979), providing higher pay for subordinates will have the effect of elevating top-level managers' own pay. In owner-managed firms, there should be no principal-agent problem, because managers hold a significant share of ownership in owner-managed firms. Thus owner-managed firms should behave like owner-controlled firms (McEachern, 1975). Therefore,

Hypothesis 1: Management-controlled firms will have higher levels of management pay than owner-controlled and owner-managed firms.

Ownership structure and pay-structure differences. The pay structure, the relationships between pay at the various organizational levels, can be visualized as a pay curve on which is plotted the average pay for each organizational level. The pay curve may be described in terms of the height of the pay structure and degree of inequality in the pay structure.

Pay structure height refers to (1) the magnitude of the pay differential between pay grades and (2) the number of pay grades between the highest-earning and lowest-earning workers. Because pay differences between levels are relatively stable (Simon, 1957; Mahoney, 1979), managerial pay will be higher in firms with taller organizational structures. Furthermore, the number of levels is also related to organization complexity, another factor often used to justify higher managerial pay. Finally, managerial pay levels will be affected by the percentage pay differences between organization levels. Thus we would expect greater interranks pay differentials, more organization levels, and greater pay inequality between levels in management-controlled firms. Therefore,

Hypothesis 2: Management-controlled firms will have taller pay structures than owner-controlled and owner-managed firms.

Hypothesis 3: Management-controlled firms will have greater pay inequality between levels than owner-controlled and owner-managed firms.

Ownership structure and individual differences in pay. If monitoring and risk sharing do cascade through the organization, then the form they take at lower levels should be affected by the form at the highest levels, though it should be less pronounced at lower levels. It has been shown that CEO pay in owner-controlled firms is closely related to performance, while in management-controlled firms it is closely related to firm size (McEachern, 1975; Hunt, 1986; Gomez-Mejia, Tosi, and Hinkin, 1987). This suggests that there is greater compensation risk in owner-controlled and owner-managed firms because the compensation strategy will be designed in ways to link pay more strongly to firm performance than in management-controlled firms. Thus,

Hypothesis 4: The managerial pay in owner-controlled and owner-managed firms will be more strongly correlated with performance than in management-controlled firms.

Hypothesis 5: The percentage of employees eligible for bonuses will be greater in owner-controlled and in owner-managed firms than in management-controlled firms.

Another important compensation strategy decision is how to relate pay to short-term and long-term goals. Better-performing organizations have long-term compensation plans linked to performance, while poorer performers have more restricted stock plans that are designed to retain employees (Wiegman, 1988). Short-term incentives do not shift as much risk to managers as long-term incentives, since long-term goals may be less clear and more uncertain (Gomez-Mejia and Welbourne, 1988). According to managerial capitalism, pay in management-controlled firms has a short-term orientation: Risk-averse managers should prefer to avoid long-term incentives because they are far more uncertain and risky. Thus,

Hypothesis 6: Owner-controlled and owner-managed firms will use a greater percentage of long-term performance incentives than management-controlled firms.

Another compensation strategy decision is what proportion of total pay should be placed at risk through the use of incentives. Incentives are related to increased organizational performance (Terborg and Ungson, 1985), individual performance (Asch, 1990), shareholder return (Abowd, 1990), productivity (Frisch and Dickinson, 1990), and lower quit rates (Lakhani, 1988) and absenteeism (Jacobson, 1989). Because higher percentages of variable managerial pay have been shown to have positive effects on subsequent firm financial performance (Gerhart and Milkovich, 1990), we hypothesize:

Hypothesis 7: Managerial pay in owner-controlled and owner-managed firms will have a greater percentage of bonus pay than managerial pay in management-controlled firms.

There are different ways to design incentive systems. They may be linked to individual goals or to corporate goals, such as earnings per share, growth, market share, and strategic positioning (Meng, 1990). Given the managerial capitalism proposition (Berle and Mean, 1932; Marris, 1964) and empirical evidence (McEachern, 1975; Allen, 1981; Gomez-Mejia, Tosi and Hinkin, 1987; Dyl, 1988; Kroll, Simmons and Wright, 1990) that management-controlled firms will strive for growth while owner-controlled and owner-managed firms will strive for financial performance goals that maximize shareholder wealth, we formulated a hypothesis about the relationship between changes in pay and changes in financial performance:

Hypothesis 8: Changes in managerial pay will be related to changes in financial performance and absolute financial performance level in owner--controlled and owner-managed firms but not in management-controlled firms.

While these eight hypotheses concentrate on the relationship of the ownership structure to compensation strategy, other factors play an important role. For example, firm size, performance, organizational level, responsibility, the type of industry, and human capital indicators such as age, tenure and experience have been shown to be associated with pay (Becker, 1964; Brown and Medoff, 1989; Gerhart and Milkovich, 1990; O'Reilly, Main, and Crystal, 1988; Milkovich and Newman, 1993; Fisher and Govindarajan, 1992).

Thus, their effects are controlled for in the analysis that follows.

METHOD

Sample

The hypotheses were tested with compensation data from the Center for Advanced Human Resource Studies (CAHRS) Data Base from the School of Industrial and Labor Relations of Cornell University and with data on the ownership structure obtained from proxy statements. The CAHRS database was made available by a large compensation consulting firm. It covers the years from 1981 to 1988 and contains compensation information from over 800 organizations on more than 200,000 managers, representing a broad spectrum of positions (e.g., CEOs, profit-center heads, and human resources generalists) and functional areas (e.g., manufacturing, marketing, and finance). The hierarchical level of managers represented varies from level 1 (CEOs) to level 12 (supervisor in an organization with 12 levels of management). The average years of firm participation in the database was 3.6 years. Firms were only included in this study if they did not experience a change in the ownership structure over the years for

which compensation data are reported for them. This resulted in a sample of 307 firms from 34 industries. The firms averaged \$4.86 billion in assets, 28,400 employees, and \$5.30 billion in sales.

Measures

Because the hypotheses relate firm ownership to firm compensation strategy, all variables were analyzed at the firm level. We computed average variable values for the number of years the firm was in the CAHRS database because pooling data across years provides more accurate, reliable, and valid measures (McEachern, 1975; Gomez-Mejia, Tosi, and Hinkin, 1987; Zajac, 1990). For variables used in the test of pay's sensitivity to changes in performance (hypothesis 8), we computed change scores. All financial data were adjusted to December 1992 dollars using the Consumer Price Index.

Measures of compensation strategy. Measures were developed to assess how firms approached the compensation strategy dimensions of pay level, pay structure, and individual differences in pay.

The pay-level policy was assessed with three variables, total pay level, base-pay level, and changes in total pay level. Total pay level is the average of all surveyed managers' salary plus bonus. While other facets of compensation, such as the valuation of long-term contingent pay arrangements, have been used in constructing pay variables (e.g., Lambert, Larcker, and Weigelt, 1993), simple measures of cash compensation are an effective proxy for total remuneration (Agarwal, 1981; Finkelstein and Hambrick, 1989). Base pay level is the average of all surveyed managers' base salary. Change in total pay level is measured by the average total pay (salary + bonus) in year t minus the average total pay in year $t-1$, all divided by average total pay in year $t-1$ for all surveyed managers for all years available.

The pay-structure policy dimension of compensation strategy was assessed by two indicators. Inequality of the pay structure was assessed with two measures, the ratio of CEO pay to average managerial pay and the Gini coefficient. Higher ratios of CEO pay to average managerial pay show greater inequality of pay (Cowherd and Levine, 1992; Gerhart and Milkovich, 1993). The Gini coefficient, another measure of pay inequality, is derived from the Lorenz curve. The Lorenz curve depicts the share of total labor costs received by the bottom t ($0 < t < 1$) proportion of the employee population (Chakravarty, 1990). The Lorenz curve depicts perfect pay equality (where all employees earn the same) as a straight line. Where there are differences in pay, the Lorenz curve is concave. The Gini index equals 1 minus twice the area under the Lorenz curve. Smaller Ginis indicate less inequality (Gerhart and Milkovich, 1993). The Gini coefficient may have values between zero and one. If there is perfect pay equality in a

firm, the Gini coefficient is zero. In a firm with perfect inequality, where one person earns all the money, the Gini coefficient approaches one. The Gini coefficient can be computed by

$$\frac{\sum_{l=1}^n \sum_{j=1}^n x_l x_j}{n^2} - \frac{2x}{n}$$

where n = the number of employees and x = pay (Chakravarty, 1990).

The Gini was computed using estimates of average managerial pay and the spans of control at each level. Consistent with theory and research, span of control was estimated as five for CEOs, six for level-2 managers, seven for level-3 managers, nine for level-4 managers, twelve for level-5 managers, sixteen for level-6 managers, and twenty for managers at level 7 and higher (Entwisle and Walton, 1961; Collins and Hull, 1986; Ouchi and Dowling, 1974). Had the number of subjects at each level from each organization in the sample been used, rather than these estimates, the resulting Gini Coefficients would have been strongly biased by the number and level of managers reported by the firm, because some firms reported more high-level employees than other firms.

Pay structure height is measured by the number of organization levels and the mean percentage interranks pay differences. Given stable interranks pay differences, more hierarchical levels lead to taller structures, and given any number of hierarchical levels, a greater average interranks percentage pay difference will lead to taller structures. Number of managerial levels was available in the CAHRS data. Mean percentage interranks pay differences were calculated from the database for all surveyed managers.

The individual-differences dimension of compensation strategy policy was assessed with three indicators of how firm performance is related to pay. One is the percentage of employees eligible for bonus, calculated by dividing the number of employees eligible for bonus by the total number of employees per company. The second is the percentage of managers eligible for long-term performance incentives, calculated by dividing the number of surveyed managers who are eligible for long-term performance incentives by the total number of surveyed managers in each firm. The third is bonus to total pay ratio, calculated by dividing the average bonus of surveyed managers by the average total pay of surveyed managers in each firm.

Ownership structure. The ownership structure is a discrete variable that classifies owner-controlled firms ($N=154$) as those in which at least 5 percent of the firm's outstanding stock is in the hands of one individual or organization that was not involved in the actual

management of the company, that did not deny beneficial ownership, that did not report only disposition rights, or was not an employee benefit plan (McEachern, 1975; Gomez-Mejia, Tosi, and Hinkin, 1987; O'Reilly, Main, and Crystal, 1988). Otherwise, firms were designated as management-controlled (N=112), unless there was a manager with a 5 percent holding, in which case they were designated as owner-managed (N=41). Empirical work has demonstrated the suitability of the 5-percent cutoff as a proxy for monitoring (Hunt, 1986; Tosi and Gomez-Mejia, 1989; Tosi and Gomez-Mejia, in press).

Control variables. Measures were obtained for four classes of control variables: organizational variables, human capital variables, job properties, and industry variables.

Organizational variables included size, change in size, financial performance, and change in financial performance. Organizational size is a composite index constructed from a factor analysis of the standardized values of assets, sales, and number of employees. These separate standard scores were weighted by item loadings (.96, .95, .85, respectively) to obtain the size measures. Change in size was also a composite index, constructed by first computing changes in assets, sales, and the number of employees, factor analyzing the change scores, and then using the factor loadings (.76, .79, .79, respectively) to construct the change in size index. Financial performance, used generally as a control variable except in the case of hypothesis 8, is a composite index constructed from standardized values of return on assets (ROA) and return on equity (ROE). Change in performance is a composite index of the standardized changes in ROA and ROE.

There were two managerial human capital variables: years of education and years of experience. For both of these, increases or decreases could raise or lower pay levels. Each was aggregated by firm. Years of education is the average years of education of all surveyed managers in the firm. Change in years of education for year t was calculated as average years of education in year t minus average years of education in year t-1, all divided by average years of education in year t-1 for all years available. Years of experience is a composite measure that includes years of firm-specific experience and potential market experience. Years of firm-specific experience is the number of years the employee has been with the firm. Years of potential market experience was calculated by age minus years of education minus 6; it measures the potential experience of incumbents in the labor market (Gerhart and Milkovich, 1990). Change in years of experience for year t was calculated as average years of experience in year t minus average years of experience in year t-1, all divided by average years of experience in year t-1 for all years available.

There were two measures of job properties. Job level is defined as the number of reporting levels between the company's board of directors and the position of the incumbent. Employees supervised is the number of exempt and non-exempt employees supervised directly and indirectly. It is a measure of supervisory responsibility.

Dummy variables were used to control for industry effects (O'Reilly, Main, and Crystal, 1988; Fisher and Govindarajan, 1992). Firms were included in the analysis only if there were at least two other firms with identical 2digit Standard Industrial Classification codes (Gerhart and Milkovich, 1990; Leonard, 1990). Thirty-four industries are represented in the sample.

Analysis

The hypotheses were tested using ordinary least squares regression. Models were specified with the dependent and independent variables relevant to each hypothesis. Size, performance, the job variables, the human capital variables, and the industry dummy variables were included as control variables when applicable because of their association with pay (Becker, 1964; Brown and Medoff, 1989; Gerhart and Milkovich, 1990; O'Reilly, Main, and Crystal, 1988; Milkovich and Newman, 1993; Fisher and Govindarajan, 1992).¹

RESULTS

The regression coefficients and standardized betas, and significance of each variable in the model are shown along with the R^2 and adjusted R^2 of each model in the accompanying tables. The results of the hypothesis tests are grouped by the three compensation policy dimensions that were studied.

Ownership structure and pay-level differences. Dependent variables for hypothesis 1 were base and total pay. Table 1 shows the regression weights and standardized betas for the variables in the two models (the 33 industry dummy variables were included in the model but are not shown in the table). The total pay of managers in owner-controlled and owner-managed firms is significantly less than in management-controlled firms. The effects of ownership structure to base pay approached conventional significance levels ($p < .06$).

TABLE 1: Regression Results for the Model of the Relationship between ownership and the Managerial Pay Level

Variables	PAY LEVEL			
	Total Pay (N=271)		Base Pay (N=271)	
	Regression Weights	Standardized Beta	Regression Weights	Standardized Beta
Mean Level	-\$17,638**	-0.19	-\$13,933**	-0.23
Mean Education	\$34,665**	0.30	\$25,986**	0.35
Mean Experience	\$2,155**	0.14	\$1,695**	0.17
Mean # of Emps Supervised	\$21**	0.61	\$11**	0.48
Performance	\$6,310**	0.09	\$170	0.00
Size	-\$2,339	-0.03	\$3,335	0.06
Owner-Controlled	-\$13,095**	-0.10	-\$6,431	-0.07
Owner-Managed	-\$15,044*	-0.08	-\$7,213	-0.06
R ²	0.82**		0.80**	
Adjusted R ²	0.78**		0.76**	

Note: * p<.05 ** p<.01

To investigate the cascading effects of incentive alignment and monitoring, identical regression models for total pay were computed for managers from the first through the sixth hierarchical levels.² The results are shown in Table 2. Mean number of employees supervised was not included in the model for CEOs (level 1), because the number of employees supervised is equivalent to total number of employees in the firm, a factor used to create the size variable. Compared with owner-controlled firms, management-controlled firms pay their managers more at all six hierarchical levels studied (p.05). This also appears to be the case for owner-managed firms, though the regression coefficients are significant only for levels 1 and 3 (p< .05) .

The tests of hypothesis 1 show the cost of being a manager in an owner-controlled or owner-managed organization. Managers in owner-controlled firms and owner-managed firms earned an average of \$6,431 and \$7,213 less in salary and \$13,095 and \$15,044 less in total pay, respectively, than those in management-controlled firms when controlling for individual, job, organization, and industry effects (see Table 1, above). These figures vary substantially by hierarchical level, with greater differences at higher levels (See Table 2).

TABLE 2: Regression Results for the Model Testing the Relationship of Ownership to Total Pay, by Hierarchical Level

Variables	TOTAL PAY BY LEVEL					
	Level 1 (N=264)	Level 2 (N=267)	Level 3 (N=270)	Level 4 (N=258)	Level 5 (N=239)	Level 6 (N=200)
	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)
Mean	\$7,781	\$39,537	\$30,467	\$20,834	\$18,101	\$8,708
Education	(.03)	(.19)**	(.21)**	(.24)**	(.39)**	(.29)**
Mean	\$3,250	\$3,823	\$2,755	\$2,628	\$1,751	\$1,049
Experience	(.07)	(.13)*	(.14)**	(.22)**	(.21)**	(.18)**
Mean # of Emps Supd		\$7.39 (.50)**	\$16.5 (.52)**	\$25.6 (.44)**	\$17.9 (.27)**	\$27.9 (.33)**
Performance	\$32,695 (.09)	\$25,324 (.14)**	\$8,808 (.09)*	\$4,505 (.07)*	\$1,153 (.03)	-\$359 (-.01)
Size	\$265742 (.58)**	\$36,761 (.17)**	\$24,124 (.20)**	\$17,890 (.24)**	\$15,318 (.30)**	\$16,169 (.38)**
Owner- Controlled	-114850 (-17)**	-\$45535 (-14)**	-\$23221 (-13)**	-\$10260 (-.09)*	-\$7,899 (-.10)*	-\$7,299 (-.10)*
Owner- Managed	-219063 (-22)**	-\$43013 (-.09)	-\$22206 (-.08)*	-\$10992 (-.06)	-\$8,001 (-.07)	-\$9,339 (-.09)
R ²	.60**	.65**	.76**	.77**	.79**	.75**
Adjusted R ²	.52**	.58**	.72**	.72**	.75**	.69**

Note: * p<.05 ** p<.01 Standardized Betas in Parentheses

The ownership structure and pay-structure policy. Results of tests of hypothesis 2, in Table 3, showed no relationship between the ownership structure and height of the pay structure. Further, the results in Table 4 show that pay inequality was not related to the ownership structure, as was predicted by hypothesis 3.

TABLE 3: Regression Results for the Model Testing the Relationship Between Ownership and Pay Structure Height

Variables	PAY STRUCTURE HEIGHT		
	Number of Managerial Levels (N=307)	Mean Total Pay Difference Between Levels (N=297)	Mean Base Pay Difference Between Levels (N=297)
	Weights (Std. Betas)	Weights (Std. Betas)	Weights (Std. Betas)
Size	0.54** (0.30)	-0.00 (-0.02)	-0.02 (-0.08)
Performance	-0.07 (-0.05)	0.02 (0.08)	0.00 (-0.03)
Owner-Controlled	-0.13 (-0.04)	0.01 (0.03)	0.00 (-0.01)
Owner-Managed	-0.14 (-0.03)	-0.05 (-0.09)	-0.04 (-0.09)
R ²	0.22**	0.12	0.14
Adjusted R ²	0.11**	0.00	0.01

Note: * p<.05 ** p<.01

TABLE 4: Regression Results for the Model Testing the Relationship Between Ownership and Pay Structure Inequality

Variables	PAY STRUCTURE INEQUALITY			
	Total Pay		Base Pay	
	Gini Pay Ratio (N=274)	CEO to Manager (N=300)	Gini Pay Ratio (N=274)	CEO to Manager (N=300)
	Weights (Std. Betas)	Weights (Std. Betas)	Weights (Std. Betas)	Weights (Std. Betas)
Size	0.005** (0.16)	0.08 (0.04)	0.006** (0.19)	-0.02 (-0.02)
Performance	0.001 (0.02)	0.08 (0.05)	0.000 (-0.02)	-0.09 (-0.08)
Number of Managerial Levels	-0.014** (-0.67)	0.55** (0.52)	-0.012** (-0.69)	0.40** (0.53)
Owner- Controlled	0.001 (0.01)	-0.04 (-0.01)	0.001 (0.02)	-0.13 (-0.06)
Owner-Managed	-0.001 (-0.01)	-0.43 (-0.09)	0.002 (0.03)	-0.33 (-0.10)
R ²	0.50**	0.40**	0.52**	0.43**
Adjusted R ²	0.41**	0.32**	0.45**	0.34**

Note: * p<.05 ** p<.01

Ownership structure and individual differences in pay. Table 5 reports the results of the test of hypothesis 6, the relationship between firm performance and total pay as a function of the ownership structure. Separate regressions were computed for both owner-controlled and management-controlled firms, controlling for the number of employees supervised, hierarchical level, education, experience, and industry. There were not enough owner-managed firms to conduct an analysis. The results showed the ownership structure did not affect the relationship between firm performance and total pay.

TABLE 5: Regression Results for the Model Testing the Relationship Between Ownership, Firm Performance and Managerial Pay

Variables	TOTAL PAY LEVEL			
	Owner-Controlled (N=114)		Manager-Controlled (N=68)	
	Regression Weights	Std. Beta	Regression Weights	Std. Weights
Mean Level	-\$20,262**	-0.27	-\$21,332**	-0.22
Mean Education	\$24,719**	0.31	\$45,858**	0.33
Mean Experience	\$1,638-	0.12	\$3,709**	0.22
Mean # of Emps Supervised	\$24**	0.56	\$16**	0.65
Size	\$22,644	0.12	-\$1,943	-0.02
Performance	\$3,982	0.06	\$7,300	0.07
R ²	0.83**		0.85**	
Adjusted R ²	0.79**		0.80**	

Note: * p<.05 ** p<.01

Hypothesis 7, which specified the relationship between ownership structure and the percentage of employees eligible for bonus was supported in part, as shown in Table 6. Owner-managed firms have significantly greater percentages of bonus-eligible employees than owner-controlled or management-controlled firms ($p < .05$).

TABLE 6: Regression Results of the Models Testing the Relationship Between Ownership and Incentives

Variables	DEPENDENT VARIABLE		
	Percentage of Bonus Eligible Employees (N=295)	Percentage of Managers Eligible for Long-term Incentives (N=303)	Percentage of Bonus Pay to Total Pay for Managers (N=306)
	Weights (Std. Betas)	Weights (Std. Betas)	Weights (Std. Betas)
Size	0.001 (0.01)	0.021 (0.06)	0.016* (0.15)
Performance	-0.010 (-0.09)	0.036 (0.11)	0.030** (0.31)
Owner-Controlled	0.018 (0.08)	-0.107** (-0.18)	-0.029* (-0.16)
Owner-Managed	0.050* (0.16)	-0.225** (-0.25)	-0.056** (-0.21)
R ²	0.23**	0.20**	0.30
Adjusted R ²	0.12**	0.09**	0.21

Note: * $p < .05$ ** $p < .01$

The results of the test of hypothesis 6, designed to assess the use of long-term incentives in the different classes of ownership, were opposite from the predicted direction. Table 6 shows that management-controlled firms made greater use of long-term incentives than owner-controlled and owner-managed firms ($p < .01$).

Table 6 shows similar opposite results for the test of hypothesis 7, which stated that firms with influential owners would design compensation strategies in which bonuses would be more extensively used than when managers are in control. Management-controlled firms had a significantly higher percentage of bonus to total pay than owner-controlled and owner-managed firms ($p < .01$).

Hypothesis 8 assessed the sensitivity of changes in pay to changes in performance as a function of ownership structure. It was tested only for firms that participated in the survey for at least two consecutive years and only if they were in an industry that contained three or more firms in the sample after separating the data by ownership. The results of the test for the whole sample, displayed in Table 7, show that change in performance ($p < .01$) and absolute performance ($p < .05$) are both related to change in total pay for owner-controlled firms but not for management-controlled firms.

TABLE 7: Regression Results of Models Testing the Relationships Between Ownership and Changes in Pay for the Total Sample

Variables	CHANGE IN TOTAL PAY			
	Owner-Controlled (N=73)		Manager-Controlled (N=56)	
	Regression Weights	Std. Beta	Regression Weights	Std. Beta
Change in Mean Level	-0.54**	-0.29	-0.31	-0.25
Change in Mean Education	0.99*	0.08	-1.46	-0.30
Change in Mean Experience	-0.18	-0.06	-0.16	-0.09
Change in Mean # of Emps Supd	0.32**	0.84	0.29**	0.65
Change in Size	-0.01	-0.03	-0.02	-0.17
Size	-0.02	-0.03	0.00	0.00
Change in Performance	0.03**	0.10	0.01	0.20
Performance	0.014*	0.08	0.003	0.05
R ²	0.93**		0.35**	
Adjusted R ²	0.92**		0.24**	

Note: * p<.05 ** p<.01

The cascading effects of incentive alignment were tested with identical models of total pay by hierarchical level for levels 1 through 6 for ownercontrolled firms and for management-controlled firms, including industry dummy variables. The results are shown in Tables 8 and 9. Because no industry dummy variables were significant and each adjusted R² was reduced with the inclusion of the industry controls for both the owner-controlled and management-controlled samples, the models were run without the industry controls. In owner-controlled firms, change in total pay is significantly related to change in performance for the top three managerial levels (p.>05). There were no such effects in management-controlled firms.

TABLE 8: Regression Results of the Models Testing the Relationship Changes in Total Pay and Changes in Performance by Hierarchical Level in Owner-Controlled Firms

CHANGE IN TOTAL PAY BY LEVEL						
	Level 1 (N=72)	Level 2 (N=72)	Level 3 (N=73)	Level 4 (N=69)	Level 5 (N=64)	Level 6 (N=48)
Variables	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)
Δ Mean Education	-1.20 (-0.34)	1.92** (0.39)	2.11** (0.49)	-0.87 (-0.26)	0.98* (0.30)	0.46* (0.35)
Δ Mean Experience	-0.02 (-0.02)	0.04 (0.02)	0.31 (0.24)	-0.15 (-0.22)	0.36** (0.53)	0.21** (0.49)
Δ Mean # of Employees Supervised		0.00** (0.37)	0.01 (0.15)	0.01 (0.21)	0.00 (-0.15)	0.00 (0.05)
Δ Size	0.00 (0.01)	0.00 (0.00)	0.01 (0.11)	0.01 (0.08)	0.03* (0.28)	0.01 (0.11)
Size	-0.07 (-0.17)	-0.05 (-.14)	0.00 (0.01)	-0.03 (-.12)	-0.02 (-0.08)	0.00 (0.02)
Δ Performance	0.05* (0.28)	0.04* (0.23)	0.04** (0.31)	0.03 (0.26)	0.01 (0.09)	-0.02 (-0.20)
Performance	0.03 (0.23)	0.03* (0.24)	0.01 (0.17)	0.02* (0.30)	-0.01 (-0.09)	0.01 (0.15)
R ²	0.19*	0.32**	0.29**	.19	.22*	.34**
Adjusted R ²	0.12*	0.25**	0.22**	.09	.13*	.23**

Note: * p<.05 ** p<.01

TABLE 9: Regression Results of the Models Testing the Relationship Changes in Total Pay and Changes in Performance by Hierarchical Level in Management-Controlled Firms

CHANGE IN TOTAL PAY BY LEVEL						
	Level 1 (N=56)	Level 2 (N=56)	Level 3 (N=56)	Level 4 (N=55)	Level 5 (N=50)	Level 6 (N=42)
Variables	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)	Weights (S.B.)
Δ Mean Education	-0.40 (-0.15)	0.63 (0.10)	1.29 (0.21)	-1.16* (-0.30)	-0.41 (-0.08)	0.76 (0.25)
Δ Mean Experience	-0.02 (-0.15)	0.66** (0.43)	0.31 (0.22)	0.17 (0.22)	0.35 (0.19)	0.43** (0.48)
Δ Mean # of Employees Supervised		0.01 (0.09)	0.10** (0.38)	0.00 (0.18)	0.04 (0.20)	0.03** (0.49)
Δ Size	-0.01 (-0.07)	0.06 (0.26)	0.01 (0.06)	0.06** (0.39)	0.03 (0.19)	-0.02 (-.11)
Size	0.00 (-0.05)	0.00 (-.04)	-0.02 (-.21)	-0.02 (-.21)	-0.01 (-0.08)	-0.01 (-.08)
Δ Performance	0.02 (0.21)	0.03 (0.24)	0.02 (0.17)	0.02 (0.21)	0.02 (0.16)	-0.01 (-0.12)
Performance	0.00 (0.06)	0.01 (0.06)	-0.01 (-.13)	-0.03** (-0.33)	0.00 (0.00)	0.01 (0.06)
R ²	0.08	0.25*	0.33**	.39**	.17	.47**
Adjusted R ²	0.00	0.14*	0.23**	.30**	.03	.36**

Note: * p<.05 ** p<.01

DISCUSSION AND CONCLUSIONS

Several caveats must be taken into account when considering the results. First, the sample of firms is not random, but limited to clients of the consulting firm that provided the data to CAHRS. Second, the data contain neither the actual nor estimated values of benefits and long-term incentives, nor is there any information about how bonuses were actually determined, prohibiting analyses of these variables. Third, it is likely that the consulting firm used a somewhat standard set of recommended practices, such as job evaluation methods and industry surveys, that may limit the variance in the compensation strategies of the participating firms, increasing the difficulty of detecting true effects of the ownership structure. Fourth, since more complete data were not available about the distribution of personnel at different levels and the number of organizational levels, it was necessary to estimate values for these variables for each firm in the tests of hypotheses about pay structure height (hypothesis 2) and pay inequality (hypothesis 3).

These limitations notwithstanding, there are several implications of the results worth noting. One thing they demonstrate is the pervasiveness of weak incentive alignment and managerial compensation premiums in organizations when power is asymmetrically distributed so that equity holders are disenfranchised relative to managers. Another is the differential costs of compensation strategies to equity holders of owner-controlled firms compared with management-controlled firms. They also provide some insights that embellish the story of how political processes operate to decouple the compensation strategy from firm performance while maintaining the appearance of economic rationality when managers control firms. Finally, and beyond the scope of the original research objective, some data-based impressions about the role of compensation consultants in the executive compensation process emerged from the analysis.

Incentive Alignment, Control Loss, and Compensation Premiums

It should come as no surprise that relationships between pay and performance that were found at the CEO level (e.g., McEachern, 1975; Gomez-Mejia, Tosi and Hinkin, 1987; Main, O'Reilly and Wade, 1993) are mimicked for managers at lower hierarchical levels. For the total sample in this study, changes in firm performance as well as the absolute level of firm performance were related to changes in pay in owner-controlled firms but not in management-controlled firms. For managerial levels below the CEO, changes in performance were related to changes in pay for only the top three levels in owner-controlled firms. In management-controlled firms, there was no relationship between changes in pay and changes in firm performance for any executive level. In these firms, pay for lower-level management

groups is decoupled from firm performance and not aligned with owners' interests, leaving them with less compensation risk than their peers in owner-controlled firms.

Not only is the compensation risk lower in management-controlled firms, the compensation strategy appears to be designed to provide substantial managerial pay premiums. Overall, managers at the hierarchical levels studied were paid 8.2 percent more than managers in owner-controlled firms and 9.5 percent more than those in owner-managed firms. The pay differences are exaggerated as a function of organizational level. For example, the average total pay of CEOs in management-controlled firms was \$219,000 higher than that of a counterpart in an owner-managed firm. At the sixth hierarchical level, the average total pay differential was \$6,000. Two other studies of internal pay levels, both of which considered managerial power, found similar effects. O'Reilly, Main, and Crystal (1988) reported a negative correlation between external equity holdings and the mean salary of the top vice-presidents and the mean salary of executive officers in their study of 105 firms in nine industries. Lambert, Larcker, and Weigelt (1993: 457), in their study of four managerial levels in over 300 publicly traded firms, also concluded that the existence "of a large shareholder ... has a negative influence on the level of executive compensation."

There is no apparent economic justification for such premiums for the firms in this study, since management-controlled firms did not perform better than owner-controlled firms, and they were significantly worse performers than owner-managed firms.³ Therefore, these premiums may be considered as a lower bound of an estimate of the agency costs incurred in management-controlled firms. The average firm in this study had around 8,000 exempt personnel, which includes both managers and professionals. Assuming the same compensations differences apply to professional employees as applies to managers, the mean total premium in management-controlled firms is about \$105 million more than in owner-controlled firms and about \$120 million more than in owner-managed firms.

These results have implications for the control of internal agency problems. For example, the issue of control loss may be moot in management-controlled firms, where there is weaker incentive alignment and lower compensation risk for CEOs and, at the same time, there is less monitoring of the compensation process than in owner-controlled firms (Tosi and Gomez-Mejia, 1989; Tosi and Gomez-Mejia, in press). Weak incentive alignment at the highest hierarchical levels is a virtual guarantee of even weaker controls at lower levels. Control will not become stronger as it cascades down the hierarchy. The question that remains is what are the bases of control criteria at lower executive levels within the management-controlled firm? One

would speculate that they are related to perpetuating the power of the dominant coalition and reducing managerial risk, while maintaining the facade of economic rationality.

There is a different control issue in owner-controlled firms. The incentive structure of the dominant coalition is based on improving firm financial performance, seemingly aligning managerial interests with those of owners. At lower levels, however, the nature of control appears to change. Incentives are less strongly related to improving firm profitability, apparently reducing the alignment of the interests of lower-level managers with the owners' interest. There could be two possibilities for this finding. One is that aligning interests of the dominant coalition is enough to lead to performance improvements. If this is so, control loss and incentive alignment may be a more relevant issue for upper-management levels than for lower hierarchical levels. The other is that the alignment of incentives at the top hierarchical levels by strong pay-performance linkages is translated into other types of performance criteria at lower levels that still effectively provide motivation to strive toward better economic performance.

Political Processes and Compensation Strategy

These results are consistent with the explanation that the agency contract is affected by internal political processes and that these are revealed in the choices made about the pay-structure strategy, the pay-level strategy, and the strategy that governs individual pay differences in the firm. These political processes are played out by a cast of actors (compensation consultants, boards of directors, board compensation committees, major stockholders, and CEOs) in different ways in management-controlled, owner-controlled, and owner-managed firms, always with the objective of providing the appearance of economic rationality.

The pay-structure strategy. Pay structures in management-controlled firms are designed in ways that make them similar to those in owner-controlled and owner-managed firms, giving no appearance that the interests of the entrenched management are particularly favored. For example, the mean interranks percentage pay differences are the same for the different classes of ownership (hypotheses 2), as is the nature of pay inequality within the firms, as measured by the Gini coefficient (hypothesis 3). Further, the percentage of bonus-eligible managers was similar in owner-controlled and in management-controlled firms. Only owner-managed firms had a significantly higher percentage of bonus-eligible managers, a result that was expected (hypothesis 6). Finally, management-controlled firms actually appear to provide more performance incentives for top management because there is greater use of long-term incentives (Hypothesis 7) and a greater percentage of bonus to total pay (Hypothesis 8).

Pay-level strategies. The pay-level strategies in management-controlled firms appear to be designed to lead the market in both base pay and total compensation. This conclusion is based on the finding that pay is higher in management-controlled firms in the study and the assumptions that (1) the firms included in the study are a representative sample of those included in the more complete CAHRS database and (2) that this database was used in the compensation surveys conducted by the consultant for its client firms. If this is so, then this database defines the executive pay "market" that is used as the basis for the design of any client's compensation program.

Since the firm's economic performance cannot be a justification for such a pay-level policy, it must be rationalized in other ways, and it may be here that the role of the consultant is important (Crystal, 1991). One way to provide a rationale is to select companies carefully to include in the compensation survey to produce results that are acceptable to the dominant actors in the pay process in the client firms. Another way is to aid the client firm in implementing a policy of premium pay positioning for executive salaries, perhaps with the justification that the firm will be able to attract higher-quality managers (Crystal, 1991).

Individual pay-difference strategies. One aspect of individual paydifference strategies is the bonus component, in which there appear to be substantial premium-taking opportunities. Management-controlled firms pay larger bonuses, and these make up a larger proportion of total pay than in owner-controlled or owner-managed firms. In fact, more than 50 percent of the difference in total pay between management-controlled and owner-controlled firms is accounted for by bonuses.

The results suggest that the bases for determining bonuses vary as a function of the ownership structure. The typical approach to determining bonuses is to allocate a percentage of profits to a bonus pool, which is then in turn allocated to individual senior managers (Hills, 1987). In owner-controlled firms the triggering mechanism for the size of the bonus pool and the basis for its distribution to lower-level managers appear to be improvements in firm performance. In management-controlled firms, the triggering mechanism is not so obvious. More than likely "the measures of performance used ... change from year to year. Hence, stock price appreciation may be the justification this year, because it has been excellent. But if stock price appreciation isn't so good next year, then earnings per share growth will be the measure of choice, because it was decent in the past year" (Crystal, 1991: 15).

Organizational context of rationalizing executive compensation.

Although some have argued that consultants are among the "first culprits in ... a litany of culprits" (Crystal, 1991) in the executive compensation process, these results suggest a slightly

less harsh view: They are more likely supporting players. As vendors, they must design a compensation strategy that meets the needs of organizational stakeholders who make the purchasing decision. The effects of this obviously economic relationship are compensation strategies that have different forms and favor owners or managers as a function of which stakeholders are the most influential.

When managerial interests are dominant, the role of the consultant is to provide an appropriately justified compensation strategy that can be ratified by the board of directors while satisfying managerial interests. This takes place in a context of corporate governance that bears the hallmarks of being responsive to conventional economic forces and fostering owners' interests but, instead, is managed by the incumbent executives to their own advantage. The most visible and ostensibly important corporate governance mechanism, the board of directors, should be concerned primarily with the interests of owners and secondarily with those of management, and it is generally thought that boards with less representation from management and more outside members would act in ways more favorable to owners (Williamson, 1985). Interestingly, while it appears that boards of management-controlled firms are structured with higher percentages of outside board members (Boeker and Goodstein, 1993; Main, O'Reilly, and Wade, 1993; Pi and Timme, 1993),⁴ creating the illusion that the board is independent of management -- which would lead it to make the interests of owners a primary concern -- the evidence indicates quite the opposite: Managerial pay is higher when boards are composed of higher percentages of outside directors (Wade, O'Reilly, and Chandratat, 1990; Lambert, Larcker, and Weigelt, 1993).

One explanation for this is that in management-controlled firms, social influence processes strongly affect executive compensation levels, mediating the more direct, conventional executive labor market forces (O'Reilly, Main, and Crystal, 1988; Wade, O'Reilly, and Chandratat, 1990). In these firms, the dominant actors in determining CEO compensation are the CEOs themselves (Tosi and Gomez-Mejia, 1989). They can affect the structure of the board and the compensation committee by appointing board members who have high positions and high salaries in other firms and/or by setting high levels of compensation and perquisites for board members. In the absence of market forces, executive pay can easily be decoupled from the interests of owners, permitting reciprocity norms and social comparison processes to dominate pay setting (O'Reilly, Main, and Crystal, 1988; Tosi and Gomez-Mejia, 1989; Wade, O'Reilly, and Chandratat, 1990). The effects, as O'Reilly and his colleagues suggest, are that board members will likely choose compensation levels for the firm's managers that reflect their own pay, resulting in more favorable treatment for the incumbent management. The consultant

plays an enabling role, that of providing an appropriately rationalized compensation strategy that allows this to happen.

This research led us to another conclusion, only indirectly related to the results, about compensation research. We became convinced that, save some unlikely methodological or theoretical breakthrough, there is little to be gained from additional research on CEO compensation. There are many other issues to be investigated that might broaden our knowledge of the internal incentive structure and how it is used by firms. One is the performance criteria at middle hierarchical managerial levels in high-performing organizations and the relationship of these criteria to those used at the top levels. A second is the extent to which pay criteria may have shifted from period to period to justify pay increases and other incentives in management-controlled firms. A third is the study of the actual justifications used by boards of directors for premium compensation strategies in firms that do not have particularly strong economic performance. The difficulty with such research is obvious. It requires data that are not easily obtainable from most existing sources and that would therefore require a great deal of effort to obtain. Unless we attempt to undertake inquiry of this type, however a simple fact remains: We will be relegated to explanations about compensation based only on very divergent theoretical frames from which can come only stronger ideological posturing and very little useful knowledge.

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ENDNOTES

¹ To conserve space, correlation matrices and descriptive statistics are not reported. They are available on request from the authors.

² There was no analysis of the cascading effects below the sixth organizational level because, with the large number of industries used as control variables ($n=34$), the number of cases was too small and would produce meaningless results. There were instances in which the same problem occurred for analyses involving owner-managed firms.

³ A result not reported here demonstrated that there was no difference in the performance between owner-controlled and management-controlled firms. Further, while Hunt (1986), in reviewing the literature on ownership structure, concluded that there were no performance differences related to the type of control, there are some other bases for arguing that owner-controlled firms do perform better. First, while the research cited by Hunt (1986) is equivocal in the matter of performance differences between ownership structure, it is very possible that in those studies the performance differences between owner-controlled and management-controlled firms are actually larger than reported, because management-controlled firms choose accounting methods that overstate results in favorable ways (Sunder, 1973, 1975; Biddle and Lindahl, 1982; Salamon and Smith, 1977). Second, a recent study by Tosi and Gomez-Mejia (in press) found that compensation process monitoring was higher in owner-controlled firms and, more importantly, it was correlated with firm performance.

⁴ The correlations are relatively small ($@r=.15$) and, for the most part, significant.