

**ORGANIZATIONAL GOVERNANCE & EMPLOYEE PAY:  
HOW OWNERSHIP STRUCTURE AFFECTS THE  
FIRM'S COMPENSATION STRATEGY**

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Abstract

This research investigated how the ownership structure is related to the firm's overall compensation strategy. The findings extend previous research that focused primarily on CEO compensation strategy. We show that there are significant differences in the compensation practices that apply to all employees as a function of the ownership structure. The results show that for owner-controlled firms and owner-managed firms, there is significant pay/performance sensitivity for all employees. In management-controlled firms changes in pay are related to changes in size of the firm. These findings lead us to conclude ownership structure not only affects upper management's pay, but also the pay of all employees through substantial differences in the firm's compensation practices.

The strategic management literature has devoted much effort on trying to understand the myriad of factors that underlie top management compensation, particularly how it is related to firm performance. The focus on upper management pay, particularly the CEO, is not surprising – in most organizations decision-making and absolute authority lies at the top. Much of this work is based on agency theory and the theory of managerial capitalism, the central theme of which is how to design top management compensation schemes in ways that motivate this group to work in the interests of equity holders and not engage in self-serving behaviors. According to these theoretical perspectives, linking pay to performance results in increased risk sharing between principal and agent, which purportedly engenders “common fate” between the parties (and hence greater “incentive alignment”). Empirical studies generally find that incentive alignment at the top is lowest where it is needed the most: When ownership dispersion is high (e.g., Hambrick & Finkelstein, 1995; Gomez-Mejia, Tosi & Hinkin, 1987; McEachern, 1975; Kroll, Toombs & Leavell, 1997; Tosi & Gomez-Mejia, 1989). In other words, it appears that when upper management pay setting discretion is not constrained by major shareholders, executives reduce their risk by decoupling pay from performance and instead link their pay to criteria they can easily control (primarily firm growth; see Kroll, Simmons, & Wright, 1990; Wright, Kroll & Elenkov, 2002).

What remains to be studied, however, is the answer to the question: “What is the role of ownership structure as a determinant of the firm’s overall pay-performance relations?” In this paper we address this issue by examining how ownership structure affects the criteria used to determine pay adjustments for the entire organization. We found that ownership dispersion is associated with a decoupling of pay increases from firm performance, and a closer linkage between pay increases and firm growth for all employees. These results mirror previous findings on CEO pay, suggesting that the impact of ownership structure on pay-performance relations cascade to lower rungs of the organizational ladder.

This study is important for several reasons. First, it improves our understanding of the “internal monitoring” process discussed by early agency writers (e.g., Fama, 1980). Dispersed ownership not only

reduces risk sharing at the top but it also reduces risk sharing for the entire organization, suggesting that if CEO monitoring is weak, then internal controls (as reflected in pay-performance relations) are also weak. Second, we extend the literature on agency and managerialism to consider inter-firm pay allocation criteria. Relatedly, we add to the labor economics and industrial relations literature by showing that the pay determination criteria across firms varies as a function of ownership structure. Lastly, this study has major applied implications given that aggregate compensation costs often exceed 80% of total operating expenses (c.f., Gomez-Mejia & Balkin, 1992) and are many times greater than those associated with upper management's compensation expenses, the primary concern of most prior research. Our findings suggest that pay related agency costs under atomistic ownership are much greater than initially thought by those who just focused on upper management pay (since pay-performance relations are insignificant for the entire organization, not only at the top).

### **Theoretical Framework and Hypotheses**

Pay-performance relations below the top executive ranks have been analyzed in the strategic management literature primarily in terms of how risk sharing varies as a function of fit with contextual factors. For instance, Rajagopalan and Finkelstein (1992) argued that environmental complexity is associated with the use of riskier outcome-based performance criteria to make pay decisions in order to minimize monitoring costs. In a follow-up study, Rajagopalan (1996) reports that highly performing prospector firms tend to rely on incentive compensation which poses greater risk (since it is uncertain) but also greater upside potential (as employees stand to gain if prospects turn out to be successful). Similarly, several papers by Balkin and Gomez-Mejia (1987, 1990) and Gomez-Mejia (1992) report that risk sharing in the pay system is greater under conditions of high technological intensity and high environmental volatility as the firm retains greater flexibility by tying compensation costs to gyrations in firm performance.

All of the above studies appearing in the *Strategic Management Journal* have filled important empirical and theoretical gaps by showing how the organization's risk sharing emphasis with the compensation system interact with contextual factors. By adopting a contingency theory perspective, this stream of research largely assumes that organizations choose pay criteria based on what is best for the firm given the context it faces (for instance, low or high environmental volatility, c.f., Balkin & Gomez-Mejia, 1987, 1990). This rational, instrumental approach to compensation strategy is very different from the parallel research on how ownership structure affects top management pay (where self-serving behaviors prejudicial to the organization often play the key role). Next, we argue that one important factor to consider in explaining inter-firm differences in pay allocation criteria is ownership structure, with those firms where executives enjoy much discretion (i.e., under high ownership dispersion) preferring to adopt low risk compensation strategies for the entire organization and vice-versa when executives are closely monitored (i.e., under high ownership concentration).<sup>a</sup>

The managerial capitalist perspective holds that whether or not incentive alignment occurs between principal and agent depends on the degree of managerial discretion<sup>b</sup>, which is determined by the ownership structure, or who controls the firm (see review of agency and managerialism theories by Tosi et al., 1999). The ownership structure is usually assessed as a function of equity concentration. When equity is concentrated, owners can influence management and the firm is called owner-controlled (OC) and managerial discretion is low. When stock is widely dispersed, small equity holders are relatively powerless to influence management and the firm is called management-controlled (MC). In MC firms, managerial discretion is high. When a manager has a block of controlling stock, the firm is called owner-managed (OM) and discretion is also high (McEachern, 1975; Hambrick & Finkelstein, 1995). In OM firms however, because the agent and the principal are the same, no divergent interests exist between the two, eliminating the agency problem.

Owner controlled firms increase managerial risk bearing by making agents accountable for their actions through pay that is performance sensitive (Dalton, Daily, Ellstrand, & Johnson, 1998; Tosi & Gomez-Mejia, 1989). As risk bearing increases, risk averse managers will do whatever they can to protect themselves from risk (Ahimud & Lev, 1981; Eisenmann, 2002; Gedajlovic & Shapiro, 1998). Unlike managers in MC firms, OC executives don't have the luxury of making strategic decisions that lower their personal risk at the expense of shareholders (e.g., increased diversification [Ahimud and Lev, 1981; Wright, Kroll, & Elenkov, 2002], reductions in R&D [Hill & Hansen, 1989; Kochhar & David, 1996], passage of anti-takeover provisions [Sundaramurthy, 1996] and the like) because these managerial risk reduction strategies are potentially harmful to shareholders and therefore less viable alternatives for OC executives (due to closer monitoring).

Employee compensation, however, is one area where both owners and executives in OC firms would share common ground in terms of risk reduction. This can be accomplished through conservative pay strategies that avoid commitments to guaranteed fixed pay by rewarding employees in accordance to fluctuations in firm performance (Balkin & Gomez-Mejia, 1987). Owners would likely be favorably predisposed to compensation schemes that engender a “common fate” between employees and shareholders (through closer firm performance-compensation ties) as they should be able to retain a larger portion of the firm's residual claims. On the other hand, there are some good reasons, as we discuss below, why managers in MC firms may implement compensation strategies that result in a decoupling of pay and performance (i.e., lower risk sharing) throughout the entire organization. We argue that in MC firms, managers experience lower pay/performance risk, so they feel less pressure to act conservatively with the pay system to improve their lot.

### **The Ownership Structure and Employee Pay/Performance Sensitivity**

Research supports the agency theory logic that owners (principals) prefer to tie agents' pay to performance, since it aligns agent and principal goals thereby reducing the threat of moral hazard (Fama,

1980; Fama & Jensen, 1983). This appears to be the case in OC firms, but not in MC firms. In the OC firms, CEO compensation is more sensitive to changes in performance than in MC firms (McEachern, 1975; Dyl, 1988; Kroll et al., 1990; Tosi & Gomez-Mejia, 1989; Hambrick & Finkelstein, 1995; Wright et al., 2002). Managers subject to higher risk bearing and enjoying lower discretion as those in OC firms are likely to forge tighter linkages between employee pay and performance for several related reasons. First, as noted above, such a compensation strategy is likely to reduce the employment and compensation risk of managers whose actions are under close scrutiny. Assuming that principals prefer to share performance uncertainty with employees in exchange for potential upside earning gains then top executives are likely to implement these compensation strategies in order to be in good standing in the eyes of their monitors.

Relatedly, there is both theory and evidence that the incentive system at the top is likely to cascade throughout lower levels in the organization as a form of "internal monitoring" (Fama & Jensen, 1983; Williamson, 1964, Werner and Tosi, 1995). Therefore, if powerful equity holders impose performance-based incentives at the top, these upper echelons are likely to develop similar pay policies and practices at lower levels to mimic the risk they incur. This means that in the aggregate, employee compensation will be more sensitive to firm performance in owner-controlled firms than in manager-controlled firms.

Finally, incentive based compensation schemes for employees may increase performance, yet they may reduce employee satisfaction (Schwab, 1974), disrupt the social fabric in organizations (Whyte, 1949), and create more tension in supervisory/employee relations and high turnover (Kohn, 1993). Such outcomes are not uncommon in ESOPs, profit sharing, gainsharing, and other similar aggregate incentive plans widely used in industry (Welbourne, Balkin & Gomez-Mejia, 1995). Managers become a stronger target of employee displeasure when workers are asked to forfeit base compensation in lieu of potentially higher incentive payments, and these rewards are not forthcoming when firm performance targets cannot

be met (see Gomez-Mejia, Welbourne & Wiseman , 2000, for a review of these plans and related literature). Thus, given high discretion, managers may prefer less performance-based pay throughout the organization because of problems that these sorts of compensation systems might induce and avoid them to create a more harmonious work environment even if this may not be in the best interest of owners.

### **The Ownership Structure and Employee Pay/Size Sensitivity**

A key prediction of managerialism is that when ownership is widely dispersed so that managerial discretion is high, top executives seek to increase organization size, which augments their power, salary, status, and security (Baumol, 1959; Marris, 1964). Unlike firm performance, firm size can be easily and deliberately manipulated to meet revenue targets through mergers and acquisitions, diversification, internal growth strategies and the like. Empirical evidence supports the proposition that MC executives tend to pursue firm growth more often than OC executives, and that executive pay tends to be more closely linked to changes in size among the former than among the latter (McEachern, 1975; Gomez-Mejia et al., 1987; Hambrick & Finkelstein, 1995).

One would expect that the observed firm size-pay relation would not stop in the executive suite but that it would cascade across the entire MC organization. There are three reasons for this expectation. First, linking compensation increases to firm growth involves lower risk sharing for employees (as firm size is more controllable and less variable than firm performance), which decreases the possibility of workers' dissatisfaction (which as we discussed earlier may be present when pay-performance relations are strong) and hence management can avoid potential employee backlash. Second, if unencumbered MC executives wish to pursue an aggressive growth strategy, it seems logical that average employee pay should go up in tandem in order to secure sufficient employees to sustain such an expansion. As the number of vacancies increase such a compensation strategies (1) will attract better applicants, and (2) reduce voluntary turnover because workers may face higher opportunity costs if they change jobs. Otherwise the lack of human capital would put a limit to rapid growth. Third, if employee pay is linked to firm size, it would

make it easier for executives to justify more pay at the top as the firm grows. A classical rationale for this phenomenon was provided by Simon (1957) who argued that organizations attempt to maintain appropriate differentials between levels and establish these differentials not in absolute pay terms but as ratios. The differentials between ranks are not determined by economic forces, but rather, through an internal legitimizing process based on norms of social stratification. Simon (1957) implies that the norm hovers around a 30 percent differential between ranks. Consistent with this notion, Mahoney (1979) found that the pay ratios between successive ranks are remarkably consistent across firms with approximately a 33 percent pay differential between levels in the hierarchy. Peck (1987) replicated these results by showing that the pay relationships among the five highest paid executives differ little by type of business. For examples, on average, the second highest paid executives typically receives 67 to 87 percent of the highest paid executive's income, and the third highest receives approximately 55 percent of the top executive's pay. Through logical extrapolation of Simons' arguments and these empirical results, by paying lower level employees in accordance with firm growth, MC managers can justify their own pay needing to be higher as firm size expands in order to maintain internal equity.

While these may be valid business reasons for linking employee pay and firm size (e.g., facilitate the recruitment process as more positions need to be filled), shareholders are ultimately more interested in firm performance. Thus, we predict a different pattern of pay decision criteria depending on ownership concentration with MC managers more likely to reward firm size and OC managers more likely to reward firm performance. Consistent with a managerialism interpretation, strong firm size-pay relations and weaker performance-pay relations under low ownership dispersion, with the opposite being the case under high ownership dispersion is indicative of agency problems when managers are in control. Based on the preceding arguments we hypothesize:

**Hypothesis 1:** Changes in compensation levels will be related to changes in financial performance in owner-controlled firms, but not in management-controlled firms.

**Hypothesis 2:** Changes in compensation levels will be related to changes in size in manager-controlled firms, but not in owner-controlled firms.

## METHOD

To test the hypotheses, we used the entire population of firms in COMPUSTAT that met the following criteria during the years 1997 and 1998: (a) each firm had to report total compensation expenses for all employees, return on assets (ROA), number of employees, assets, and sales; (b) COMPUSTAT information for each firm could be matched with corresponding ownership and executive pay information available from proxy statements filed with the Securities and Exchange Commission (SEC); and (c) there were at least two other firms with identical 2-digit Standard Industrial Classification codes (Werner & Tosi, 1995; Gerhart & Milkovich, 1990). This resulted in a sample of 407 firms from 29 industries. Our sample is not significantly different ( $p>.05$ ) in ROA, assets, sales, or number of employees than the non-included firms that reported compensation data. However, when our final sample was compared to all of Compustat firms that did not report compensation data ( $N = 8,776$ ) we found that the latter group exhibited lower ROA ( $P \leq .01$ ) and tended to be smaller (in terms of number of employees, assets, and sales volume,  $P \leq .01$ ).

### Analysis

The hypotheses were tested using ordinary least squares regression. To test the hypotheses, change in size and change in ROA were regressed on change in pay level separately for MC, OC, and OM firms. Change in executive pay level was included as a control variable in each of the models. Because none of the variables' Variance Inflation Factor (VIF) reached 10.0 in any of the models, there was no evidence of substantial multicollinearity (Hair, Anderson, Tatham, & Black, 1998).

### Variables

Data was collected for the period 1997-1998. Change scores were calculated as the difference in the variable from 1997 to 1998 divided by the variable in 1997 (Werner & Tosi, 1995). It is typical in

executive compensation research to use a time window of four years or so (Gomez-Mejia & Wiseman, 1997). We decided to adhere to a two-year frame for three reasons. First, as noted below, we only had 46 MC firms. Because of missing values, we would lose a high percentage of these for each year added, reducing statistical power and the generalizability of results. Second, the data of interest is highly autocorrelated across years. For instance, number of employees, assets, and volume of sales correlated .99, .97, and .96 across years. Similarly, compensation per capita correlates .98 between successive years. This is not unusual. Several studies have found the same for market share (Kalyanaram & Urban, 1992), stock market returns (Lee & Swaminathan, 2000), and earnings (Baber, Kang & Kumar, 1998, 1999). This suggests that most of these firm level measures are strongly influenced by prior decisions and outcomes and that firms evolve in a path dependent fashion (Baber, Kang & Kumar, 1998). Thus, we preferred to keep the sample size as high as possible (particularly for MC firms) while foregoing the doubtful benefits that may be obtained by extending the time frame.

**Ownership Structure.** Firms were classified as Manager-Controlled (MC), Owner-Controlled (OC) or Owner-Managed (OM) (Werner & Tosi, 1995; O'Reilly, Main, & Crystal, 1988; Hambrick, & Finkelstein, 1995). MC firms (n=46) are those in which no individual or institution other than an employee benefit plan owns 5% or more of the firm's outstanding voting stock. OC firms (n=198) are those in which at least 5 percent of the firm's outstanding voting stock is in the hands of one individual or organization that was not involved in the actual management of the company or was not an employee benefit plan. OM firms (n=163) are those in which at least 5% of the firm's outstanding voting stock is in the hands of one individual who was involved in the actual management of the company. We chose this operationalization of the ownership structure because it is commonly used, allowing comparability across studies (see Banning, 1999; Bloom & Milkovich, 1998; Kroll, Wright, Toombs, & Leavell, 1997; Hambrick & Finkelstein, 1995; O'Reilly, Main, and Crystal, 1988) and has been shown to be a valid measure of managerial control (Tosi & Gomez-Mejia, 1994; 1989).

Although we did not posit specific hypotheses for OM firms (given that principal and agent are embodied in the top executive), we included these firms in the analysis for comparative purposes consistent with prior research. Stock ownership information was obtained from proxy statements obtained from the SEC website ([www.sec.gov](http://www.sec.gov)).

**Change in Pay Level.** Our dependent variable is the change in average compensation expense per employee from 1997 to 1998. This includes salaries, wages, pension costs, profit sharing, incentive compensation, payroll taxes, and other employee benefits, but excludes commissions. To assess pay level per employee per year, we divided total compensation expenses by the number of employees in the same year. Total compensation and number of employees was obtained from COMPUSTAT.

**Independent Variables.** To test the hypotheses change in size and change in ROA were regressed on change in pay level separately for MC, OC, and OM firms. Change in executive pay level was included as a control variable in each of the three models.

Change in Firm Size was measured as the change in a composite of assets, sales, and number of employees (Werner & Tosi, 1995; Gomez-Mejia et al., 1987). Assets, sales, and number of employees were standardized and averaged to create the size variable (alpha=0.83).

Change in Performance was measured as change in return on assets (ROA), which has been frequently used as a measure of performance in compensation and governance research (e.g., Tosi, et al., 2000, Balkin, Gideon, & Gomez-Mejia, 2000; Sanders & Carpenter, 1998; Henderson & Fredrickson, 2001).

Change in Executive Pay Level was calculated as the change in average annual pay (salary, bonus, other annual compensation) of the top executives (up to five) as reported in the firm's proxy statement. Proxy statements were obtained from the SEC website. Although total compensation expenses included executive and managerial pay, in our sample executive pay accounted for 0.00513 (about ½ of 1 percent) of the total compensation expenses. Nevertheless, we controlled for executive pay so that our

aggregate change in average pay level measure is a better proxy for the change in pay of lower level employees. Executive pay is also likely to control for managerial pay levels since the two are highly correlated (Werner & Tosi, 1995).

Industry Dummy Variables were created for each of the 29 industries represented in the sample. Two-digit SIC codes were used to categorize industries. However, because none of the industry dummy variables were significant at  $p<0.05$  they were not included in the final models.

## **RESULTS**

Table 1 reports the means, standard deviations, and correlations of all the variables used in the analyses. Our sample firms averaged a 1% increase in ROA, and a 2% increase in size. Consistent with the current controversial trend of escalating executive pay, our sample's mean change in executive pay level was 13% while the mean change in pay level of all employees was 6%. The correlations show that bivariately change in pay level is positively correlated with change in ROA ( $p<.01$ ) and change in executive pay level ( $p<.01$ ). This latter correlation supports our suggestion that when executives give all employees greater raises, they themselves also receive greater raises.

### **{TABLE ONE ABOUT HERE}**

Table 2 reports the models testing the hypotheses for each subsample (MC, OC, and OM) and the total sample. The standardized betas and significance of each variable in the model are shown along with the  $R^2$ , F, and adjusted  $R^2$  of each model. Table 2 shows that change of size is significantly related to change in pay level for the MC ( $p<.01$ ) sample but not for the OC sample (n.s.). Change of ROA, however, is significantly related to change in pay level for the OC ( $p<.01$ ) sample but not for the MC sample (n.s.). Thus, the hypotheses are supported. For OM firms, both changes in size and ROA predict change in pay level ( $p \leq .05$ ). The model is significant ( $p<.01$ ) for all four regression equations (MC, OC, OM, and total) explaining between 6 and 17% of the variance in change in pay level. Although the variance explained in changes in pay is modest, it is consistent with a number of other studies looking at

changes in pay (e.g., Gomez-Mejia, Tosi, & Hinkin, 1987, Werner & Tosi, 1995; Murrell, Frieze, & Olson, 1996).

### **{TABLE TWO ABOUT HERE}**

### **DISCUSSION**

This study, combined with other research, shows that managerial discretion does affect the overarching compensation strategies and practices of MC, OM, and OC firms. This is an important finding because, we believe, central to understanding the formulation of compensation strategy is to understand the role of ownership structure, since the strategic concept itself is explicitly defined in terms of decisions that determine the overall direction of the firm and its ultimate viability (Quinn, 1980).

We found that pay/performance sensitivities differ among the three types of firms; employees in OC and OM firms bear more compensation risk than in MC firms. First, the pay/ performance sensitivity coefficients are higher in OC and OM firms, while in MC firms changes in pay are more decoupled from performance and related to changes in firm size. This means that the nature of the incentive structure for non-managerial employees as a function of ownership structure is quite similar to that documented in earlier research on top-management (e.g., Hambrick & Finkelstein, 1995; Werner & Tosi, 1995).

One interesting finding is that for OM firms. It appears that the dual nature of top management in OM firms leads them to design pay systems that emphasize both performance and growth. They are owners who desire to maximize return on their capital, but they are also managers with high managerial discretion who would benefit from increased organizational size. Our results show that pay/performance sensitivity coefficients in OM firms are slightly less than those in OC firms, while the pay/size sensitivity coefficients in OM firms are less than in MC firms. This results in OM firms having greater pay/performance sensitivity than MC firms, but less than OC firms, while having greater pay/size sensitivity than OC firms but less than MC firms.

## **Limitations and Future Research**

Like all studies, this research has limitations. One is the cross-sectional nature of our data, dampening causality claims. The short-time frame used here (1997-1998) has the distinct advantage that all firms are subject to the same macroeconomic factors (inflation, unemployment rate, general economic conditions and the like) yet it restricts our ability to make long-term longitudinal predictions. Another potential problem is that our measures represent inferred rather than managers' intended compensation strategies. Thus, we are using a policy capturing approach rather than a direct measure of compensation strategies. Another limitation is the sample. Because firms that report compensation data tend to be better performing and larger than those that do not, this raises the question of the extent to which our findings would generalize to all firms in Compustat if release of such information was mandatory. Unless future research proves otherwise, this issue is only relevant to the findings reported here if OC and MC firms behave differently in terms of the amount and quality of information provided. Finally, the pay measures are rather coarse, aggregate indices that do not allow us to single out pay mix variables such as bonuses, benefits, and salary. These indices may also mask intra-firm differences that would be useful to study. Nevertheless, the aggregate pay measures do provide a parsimonious way to test our hypotheses across a large sample of firms. Furthermore, both average and total compensation costs are critical elements in most firms' general operating expenses so from a corporate governance perspective these aggregate labor cost indicators are important in and of themselves. However, looking at other firm level performance measures such as stock returns and lower level measures would help further our knowledge in this area.

General Patterns. The aspects of compensation strategy examined here do not operate in isolation and most likely are part of a larger compendium of pay and human resource management practices. Thus, our findings raise a number of other questions. For example, how does ownership structure affect other aspects of compensation strategy such as pay level? Although numerous other factors would need to be considered in the theoretical model (for example, employee quality, motivation, managerial reputations,

the takeover market, and various control variables) our findings provide evidence that ownership structure affects compensation decisions that apply to all employees. Other compensation strategies that may also be related to ownership structure include short- vs. long-term orientation, external vs. internal equity, and open vs. secret pay. Does ownership structure affect human resource strategies in such areas as recruitment, selection, training, and development? Are there differences in the operations of “internal labor markets” between OC and MC firms? We believe that these are important issues and encourage other researchers to examine the ways that ownership can affect other internal organizational processes intended to increase firm performance.

Risk sharing. The role played by corporate governance on the determinants and consequences of aggregate risk bearing also deserves more attention in future investigations. Our results indicate that in OC firms, top managers are not the only ones that have their pay at risk. All employees bear the adverse consequences from unforeseeable events that impact firm performance or decisions made by top managers that influence the pay allocation criteria (e.g., the achievement of specified productivity or profitability targets). To the extent that OC firms offer performance-related incentives as a substitute for other forms of relatively assured pay (e.g., base salary) so that the employee may face foregone income if performance targets are not met, risk bearing should increase correspondingly. This would be compounded by the fact that the “line of sight” between an individual’s behavior and firm-level performance outcomes is rather tenuous.

The presence of differential risk bearing as a function of ownership-structure raises several interesting issues for comparative research on the compensation systems of OC and MC firms. One of them is the extent to which procedural and distributive justice differs between OC and MC firms. Are there any mechanisms in place in OC firms to ensure that employees are not unjustly penalized for performance outcomes that lie beyond their control? What processes do OC firms use to ensure that aggregate performance-based incentives are fairly distributed across individuals and groups?

Another issue would be the extent to which there are differences in risk taking between OC and MC firms at the employee level in response to the incentive system. While principals can monitor decision-making at the top, this would become increasingly more difficult at lower levels as complexity and information asymmetries rise accordingly. In the case of gainsharing, for instance, one of the most widely used aggregate pay-for-performance plans, Gomez-Mejia, Welbourne and Wiseman (2000: 493) warn us that “employees after a certain point may become increasingly risk averse in response to the greater risk they face. Employees may avoid projects or alternatives with higher expected value that involve greater risk.” How do OC firms prevent employees from becoming overly cautious in their behavior/decision making, resulting in even lower performance than would otherwise be observed in the absence of such plans? How do individual employees with private information that may lead to cost savings induce the cooperation of others who may be in a position to hinder or enhance implementation of these ideas?

Lastly, one might speculate that OC firms may attract and retain more “risk loving” employees than MC firms. Some research suggests that not all employees exhibit equal tolerance for compensation risk and that they tend to gravitate towards firms that best meet their risk preferences (Gomez-Mejia & Balkin, 1989). Does a greater employee tolerance for risk in OC firms mitigate the potential risk averse consequences of greater compensation risk bearing?

Cooperative behaviors and mutual monitoring. Another related issue that may be explored in the future is how aggregate incentive alignment systems in OC firms engender “common fate” between employees who are forced to play a dual role of principal-agent as their interests become intertwined. Again, our results indicate that employee pay is linked to firm performance in OC firms but not in MC firms. This may mean that the control system differs between the two types of firms. By providing employees with monetary rewards based on collaborative achievements, OC firms may substitute direct monitoring by supervisors with mutual monitoring by peers. Mutual monitoring in OC firms should result

from the interdependence between agents who anticipate a financial incentive based on group outcomes. Thus, by shifting common risks to all employees and creating a community of interest, collective monitoring in OC firms may replace, to some extent, the hierarchical system of control. One advantage of this approach is that “when agents interact to produce outputs, they acquire low-cost information about colleagues, information not available to higher level agents. Mutual monitoring systems tap this information for use in the control process” (Fama & Jensen, 1983: 310). To what extent do OC firms rely on a collective agency contract that encourages mutual monitoring of agents’ behavior while MC firms emphasize a traditional chain of command or vertical control systems? What are the consequences, if any, of these different forms of control between OC and MC firms?

### **Conclusion**

Our findings show that organizational governance issues can affect not just top management but all firm employees. We believe that this occurs through policies, procedures, and strategies implemented by top management that have pervasive effects across the entire organization. Thus, organizational governance issues should concern all organizational stakeholders including employees, rather than just shareholders and top corporate management.

## END NOTES

- a. There is a large literature in labor economics and industrial relations that focuses on inter-firm pay differentials as a function of the industry environment (e.g., Solon, Whatley, & Stevens, 1997; Nord, 1999), unionization (e.g., Raphael, 2000), job factors (Cappelli & Cascio, 1991), skill levels (Cappelli, 1996), demographics and firm characteristics (Hirsch, Macpherson, & Hardy, 2000; Bailey, Berg, & Sandy, 2001; Krashinsky, 2002), and the like (for instance studies show that historically unionization is associated with a 5-20% pay premium controlling for other factors [Mullin, 1998; Raphael, 2000; Delery, Gupta, Shaw, Jenkins, & Ganster, 2000]). Unlike the strategic management literature reviewed above, its main focus is on the determinants of pay level, rather than on the risk sharing properties of the compensation system at the aggregate level (see Gerhart & Rynes, 2003, [p.144], Wiseman, Gomez-Mejia, & Fugate, 2000, and Gerhart, Trevor, and Graham, 1996 for excellent discussions regarding risk). Since our objective is to analyze inter-firm differences in criteria used to make pay adjustments (which are reflective of compensation risk sharing between employees and the firm) rather than on inter-firm pay level differentials we do not delve into the labor economics and industrial relations literature here (for an excellent review see Gerhart & Rynes, 2003).
- b. It should be noted that this concept of managerial discretion differs in important ways from that suggested by Hambrick and Finkelstein (1987), which is generally measured with industry or contextual indicators (Hambrick & Abrahamson, 1995; Magnan & St-Onge, 1997), and makes no assumptions about whether the discretionary choices will result in negative or positive firm outcomes (Finkelstein & Boyd, 1998).

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TABLE 1  
Means, Standard Deviations, and Correlations of Variables

|                           | MC      | OC      | OM     | Change<br>In<br>Pay<br>Level | Change<br>In<br>Firm<br>Size | Change<br>In<br>ROA | Change<br>In<br>Exec.<br>Pay<br>Level |
|---------------------------|---------|---------|--------|------------------------------|------------------------------|---------------------|---------------------------------------|
| Mean                      | 0.13    | 0.46    | 0.41   | 0.06                         | 0.02                         | 0.01                | 0.13                                  |
| Standard Deviation        | 0.34    | 0.50    | 0.49   | 0.19                         | 0.50                         | 1.72                | 0.38                                  |
| Manager-Controlled        | 1.00    |         |        |                              |                              |                     |                                       |
| Owner-Controlled          | -0.36** | 1.00    |        |                              |                              |                     |                                       |
| Owner-Managed             | -0.32** | -0.77** | 1.00   |                              |                              |                     |                                       |
| Change in Pay Level       | -0.06   | -0.10   | 0.14** | 1.00                         |                              |                     |                                       |
| Change in Firm Size       | 0.07    | 0.02    | -0.07  | 0.05                         | 1.00                         |                     |                                       |
| Change in ROA             | 0.00    | -0.07   | 0.08   | 0.22**                       | 0.03                         | 1.00                |                                       |
| Change in Exec. Pay Level | -0.04   | 0.00    | 0.03   | 0.15**                       | 0.09                         | 0.27**              | 1.00                                  |

Note: \* p<.05; \*\* p<.01; n = 407.

TABLE 2  
Regression of the Effects of Change in Size and ROA on  
Change in Average Pay Level by Ownership Structure

| Variables                        | CHANGE IN PAY LEVEL                                   |   |   |   |
|----------------------------------|---|---|---|---|
|                                  | Sample 1<br>MC Firms<br>(N=46)                        | Sample 2<br>OC Firms<br>(N=198)                       | Sample 3<br>OM Firms<br>(N=163)                       | Sample 4<br>Total Sample<br>(N=407)                   |
|                                  | Standardized<br>Betas<br>(Regression<br>Coefficients) | Standardized<br>Betas<br>(Regression<br>Coefficients) | Standardized<br>Betas<br>(Regression<br>Coefficients) | Standardized<br>Betas<br>(Regression<br>Coefficients) |
| Change in Size                   | 0.35**<br>(0.089)                                     | 0.00<br>(0.000)                                       | 0.15*<br>(0.201)                                      | 0.04<br>(0.015)                                       |
| Change in ROA                    | 0.15<br>(0.026)                                       | 0.19**<br>(0.022)                                     | 0.18*<br>(0.019)                                      | 0.19**<br>(0.021)                                     |
| Change in Executive Pay<br>Level | 0.10<br>(0.047)                                       | 0.14*<br>(0.073)                                      | 0.05<br>(0.023)                                       | .09*<br>(0.047)                                       |
| R <sup>2</sup>                   | 0.17**  | 0.07**  | 0.07**  | 0.06**  |
| F                                | 2.80**  | 4.54**  | 4.08**  | 8.17**  |
| Adjusted R <sup>2</sup>          | 0.11**  | 0.05**  | 0.05**  | 0.05**  |

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