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## TOP MANAGEMENT TENURE, CORPORATE OWNERSHIP STRUCTURE AND THE MAGNITUDE OF GOLDEN PARACHUTES

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*This study investigates top management tenure, corporate ownership structure and board composition as predictors of different aspects of golden parachute magnitude: size and the number of executives covered. We found that golden parachute contracts involve higher levels of payment (in years' compensation) when top management is longer-tenured, both in absolute number as well as relative to directors. Golden parachutes are found to extend to fewer executives when non-management-owned blocks of stock are highly concentrated and when the level of management-owned stock is relatively low. The research points to the importance of examining ownership structure, board subcommittee composition and top executive tenure when researching decisions made by corporate boards.*

An area of growing importance in the strategic management literature is research on the characteristics of top management teams and their relationship to decisions on executive compensation made by boards of directors. Although there has not been much research relating the characteristics of boards of directors to their decisions, this is clearly an area of much substantive interest. In particular, the adoption of golden parachutes has received much attention because of large payments made to departing CEOs after takeover of their firms.

Golden parachute contracts involve a negotiation by top management with the board for the inclusion of sizeable payments made in the event of takeover of the firm. Since such clauses are conditional upon the event of loss of corporate control by incumbent management, they have been labeled by some writers in the popular press as insurance against incompetence (Morrison, 1982). This view asserts that executives should be rewarded for their performance in managing the assets of the firm and not for loss of control to another management team, particularly at the magnitude reported in some salient transactions (Prokesch, 1986; Sloan, 1983). The central issue underlying this concern is that loss of control of

the firm through takeover is perceived to be a failure of management. It can be argued, however, that if takeover is seen as a displacement of the incumbent management by a better team, the golden parachute payment would be an inducement to incumbent management not to resist a takeover bid by such a team (Lambert and Larcker, 1985). The board of directors, therefore, has to make judgement on a complex set of factors, some of which are hypothetical (for instance, the identity of a potential bidder is as yet unrevealed), and others that are hard to measure (e.g. the potential effect of the acquisition on future strategy and performance).

The characteristics of golden parachute contracts approved by boards of directors for top management teams are of research interest because the contracts are adopted expressly to cover management's interests in the hypothetical (but in some cases, probable) event of takeover of the firm. By examining top management team and board characteristics as sources of variation in key parameters (size and coverage) of golden parachutes, we may better understand the relationship between top management characteristics and board independence. Golden parachute adoption is significant as an indicator of board-

level decisions in two ways: it directly addresses issues relating to change in control of the firm and directly pertains to top executive compensation. Both these sets of decisions are central to the charter of boards of directors of public corporations. In this sense, research relating specific attributes of golden parachute contracts (size and coverage) to top management and board characteristics can provide a clear perspective on board-level decisions in general.

A possible reason why boards of directors have not been extensively researched in the strategy literature (although fine examples do exist in recent works by Kosnick, 1987; Kerr and Bettis, 1987; and Cochran, Wood and Jones, 1985) is that there are few unambiguous indicators of board decisions. As a result, researchers are faced with the daunting task of attempting to relate board composition to variables such as performance of the firm, which is affected by many confounding factors besides board characteristics. On the other hand, golden parachute adoption is an unambiguous indicator of board decisions because the proxy statements filed by the firm must announce not only the adoption of the golden parachute but also relevant details such as scope (number and names of key executives covered) and magnitude of contracted payments.

This study examines the characteristics of boards of directors, ownership structure, top executive tenure and the prior history of takeover threats on the firm as factors influencing parameters (size of payments and number of executives covered) of golden parachute contracts. This research extends prior works by focusing on factors that contribute in explaining golden parachute size variance and to include composition of top management and operational indicators of takeover threats.

## PRIOR RESEARCH ON GOLDEN PARACHUTE CONTRACTS

Prior research on golden parachutes has been somewhat limited but insightful. Lambert and Larcker (1985) found that the stock market reacts positively, and statistically significantly, to the announcement of golden parachute adoption. The authors' interpretation was that stockholders perceive golden parachutes as aiding their inter-

ests because managers may be more inclined to view takeover attempts (if they occur) more objectively if they have a golden parachute contract at hand. This positive effect is presumed, based on the stock market evidence, to outweigh the disincentives for potential suitors to bid for the firm due to higher cost-implicit golden parachute contracts. Since a takeover would, on average, significantly benefit shareholders, golden parachutes for top managers would match their incentives with those of shareholders and reduce a conflict of interest if an unanticipated takeover bid occurred.

Cochran, Wood and Jones (1985) researched various factors that affect golden parachute adoption such as board composition and the likelihood of takeover threats (using size, profitability and debt as proxies for this probability). Based on a sample of 406 firms from the *Fortune* 500 (52 of which adopted golden parachutes as of 1982), they found that the proportion of external directors was positively related to golden parachute adoption. This finding was supported later by Singh and Harjanto (1989). The latter study of 228 *Fortune* 500 firms (89 of which adopted golden parachutes as of December 1985) found that golden parachute adoption is influenced by diffused public stock ownership, high CEO tenure, board composition and a history of prior takeover attempts on the firm. Inside directors of firms with diffused ownership structure and relatively high top executive tenure tend to request golden parachutes and gain board approval. Additionally, when managers own lower levels of stock, they seek golden parachute contracts, indicating a trade-off in incentive alignment mechanisms between stock ownership and golden parachute contracts. The latter indicates that golden parachutes align top management incentives more with those of their stockholders, who on average stand to gain significantly from a takeover attempt.<sup>1</sup>

In his study of 331 firms, 47 of which provided golden parachute contracts, Knoeber (1986) found mild support for his proposition that the adoption of golden parachutes is positively related to the probability of being taken over (indicated by size and price/earnings ratio), investment strategy (measured as capital, advertising, and

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<sup>1</sup> The latter finding is consistent with the stockholder approval of golden parachutes noted by Lambert and Larcker (1985).

R&D expenditures), and negatively related to the proportion of stock owned by management. Using an agency theoretic argument, Knoeber asserted that golden parachutes may substitute the implicit, long-term deferred compensation contracts between management and stockholders, especially when stockholders cannot determine management performance but can improve their evaluation over time.

This study aims to extend our understanding on golden parachute phenomena in several respects. While Cochran *et al.* (1985), Knoeber (1986), and Singh and Harianto (1989) examined firms that adopted golden parachutes and compared them with firms which did not, this study complements them by exclusively examining key parameters of golden parachute contracts in a sample consisting of firms adopting golden parachutes (i.e. within-group analysis). Also, while the previously mentioned studies mostly deal with a dichotomous dependent variable (i.e. to adopt or not to adopt golden parachutes), this paper examines the size of the contracted payments and the number of executives covered by golden parachutes. Additionally, as this study focuses on the 'top management team' as its unit of analysis, it differs substantially from the firm-level or board-level unit of analysis of prior research on golden parachutes.

## THEORETICAL CONSIDERATIONS

The agency perspective of board-level decision-making is especially relevant to golden parachute adoption. In explaining the determinants of the magnitude of golden parachutes, we use arguments suggested by the agency perspective. Following the empirical results we also interpret the findings as indicators of managerial discretion. We will briefly discuss the agency perspective and highlight its assumptions concerning the nature of board-level decision-making processes, and those concerning the relationship between top management and the board (see Eisenhardt, 1988, for a survey of agency theory and its applications in strategic management and organization theory).

The agency perspective (Jensen and Meckling, 1976) proposes that the relationship between managers and stockholders can be understood in principal-agent terms, wherein managers are

agents in control of assets owned collectively by stockholders and are compensated based on observable indicators of performance. The board of directors of a firm is viewed as an entity charged with the task of monitoring the efforts of managers to achieve their fiduciary duties of maximizing shareholder wealth. An additional mechanism which monitors significant departures by management from the shareholders' interests is the market for corporate control, where a presumably less efficient management team will be replaced by a better team through merger and acquisition. However, it can be argued that the board provides a cost-effective mechanism for monitoring top managers.

Viewing a firm as a nexus of contracts (Jensen and Meckling, 1976), an agency theoretic perspective interprets golden parachute adoption as a top management contingent compensation to align management's interests with those of stockholders in the event of a takeover bid. The appropriate level of contingent compensation triggered by a change in control will provide a counter-balance to the tendency of management to entrench themselves. Indeed, this is how Lambert and Larcker (1985) conceptualize the problem of golden parachute adoption in their study of shareholder returns following golden parachute adoption by boards. Clearly, several factors affect the magnitude of contingent compensation specified in a golden parachute, such as top executive tenure, corporate ownership structure, board characteristics and prior history of takeover attempts on the firm. In the following discussion we introduce the explanatory variables of golden parachute magnitude and coverage.

### Top executive tenure

Top executives as a team will view a takeover bid unfavorably due to hazards it poses towards their firm-specific investments associated with long careers in corporations (Hambrick and Mason, 1984, make a similar point). Longer tenure of top executives is accompanied by greater identification with the organization, and leads to the development of firm-specific assets by senior executives. Knowledge and experience particular to the firm gathered over time by longer-tenured executives is difficult to apply with equal facility to other corporate environments. Consequently, and particularly if their human

capital involves idiosyncratic skills deterring mobility, top management will expect some protection from the hazard of loss of employment caused by an uncertain event over which they do not have control (such as in the form of golden parachute contracts). This human asset specificity argument is also advanced by Williamson (1985: 314–316) for a justification for golden parachute adoption. Because the unfavorable consequences of employment loss increase with tenure in the company, we expect the contractual agreement to provide greater compensation for longer-tenured management teams. Therefore:

*H1: The longer the average tenure of top management teams, the greater the size of golden parachutes awarded for the executives.*

The efficacy of boards of directors in monitoring management is dependent on their knowledge of company operations: the less informed the outside directors are about the company, the less effective their monitoring role will be. In an extensive clinical study on board-level decision-making, Alderfer (1986) found that board members with longer tenure shared a common understanding about their function as a ‘special group’ as well as the ways their companies operated. New board members, on the other hand, needed to learn about organizational practices before they could function properly. Often, new board members had to wait a year before making significant new contributions.

Based on creation of firm-specific human capital by top executives through longer tenure, and on the important role of longer tenure in the assertiveness of outside directors, it is reasonable to expect that as relative tenure of top management vis-à-vis outside board members increases, so does the magnitude of golden parachutes (in years’ compensation and coverage of numbers of executives).<sup>2</sup> Therefore:

*H2: The higher the relative tenure of top management teams compared to outside direc-*

*tors, the larger the number of executives covered and the size (in years’ compensation) of the golden parachute contract.*

### **Ownership structure**

The magnitude of stock owned by top management increases the degree of congruence between top management interests and those of stockholders (Kerr and Bettis, 1987). From an agency perspective, a higher level of stock owned by top management helps align managerial objectives and stockholder objectives, reducing the need for special compensation in the event of takeover (Singh and Harianto, 1989). This incentive alignment is accomplished through possible gains in stock value if a takeover bid is made for the firm. Therefore:

*H3: The higher the extent of stock ownership by management, the lower the need for special compensation and hence the smaller the number of executives covered by and the size of the golden parachute contract.*

Another important measure of ownership structure is the level of concentration of stock ownership not owned by management. The extent to which blocks of stock are held by identifiable investor groups (as opposed to being widely diffused) is a factor that constrains the ability of top management to influence the board in areas where a potential conflict of interest may exist between management and stockholders (Zald, 1969; Herman, 1981). Brickley, Lease and Smith (1988), in their study of voting behavior of 201 firms, found that institutional investors and other blockholders vote more actively than non-blockholders; they particularly oppose any proposal to the board that will likely harm stockholders. As the concentration of non-management-owned stock increases, it creates the opportunity for concerted action by major stockholders, which in turn delimits management influence upon matters requiring board-level decisions, including the award of excessively lucrative golden parachute contracts. Therefore:

*H4: The higher the level of concentration of stock ownership not owned by management, the smaller the number of executives covered by, and the size of, the golden parachute contract.*

<sup>2</sup> Parallel with this argument, Alderfer (1986) also found that CEOs were likely to have more influence with boards later than earlier in their careers. As CEO tenure increased substantially, so did the likelihood of board member turnover, and consequently the influence differential of the CEO. Our argument is in a sense an extension of Alderfer’s finding above, applying it to top management teams, rather than just CEOs.

## Board composition

The agency perspective presumes that outside directors would be objective and independent, especially in evaluating issues closely related to the fate of internal managers. If golden parachute contracts align stockholder interests with those of management, as Lambert and Larcker (1985) have argued, then there is no reason for outside directors to automatically reject the adoption of golden parachute contracts. However, if the golden parachute proposal involves an excessive level of compensation for top management, we expect that outside directors are likely to reject it. Excessive contingent compensation (for example, a \$32.3 million payment to Revlon's Mr Bergerac) is simply not in the best interests of the stockholders because it may inordinately increase costs of takeover, thus deterring a potential legitimate bid.<sup>3</sup> In the event that a firm with an unusually large golden parachute contract (in number of executives covered or in total compensation paid) is taken over, considerable controversy swirls around the issue of paying excessive severance packages: an issue boards will be very sensitive to. The effectiveness of outside directors to exercise their judgement in not approving excessive payments is dependent on the relative potency of outside versus inside directors, as indicated by the proportion of outside directors on the board. Therefore:

*H5: The higher the proportion of outside directors on the board, the more potent the outside directors in protecting shareholder interests, and thus the smaller the size and the number of executives covered by the golden parachute contract.*

## Committees of the board

One of the most important means for facilitating the decision-making process of the board is the creation of various committees such as executive, audit, executive compensation and other ad-hoc committees. The relevant committee for our study is the executive compensation committee, which is generally responsible for initiating

and reviewing compensation packages for key executives of the company, including the ratification of golden parachutes. Normally, the executive compensation committee consists largely of outside members of the board. The inclusion of any company executive to sit in such a committee is atypical, and if it exists, it may indicate the ineffectiveness of a board in protecting shareholder interests. Therefore:

*H6: The higher the proportion of company executives in the executive compensation committee of the board, the larger the size and the number of executives covered by the golden parachute contract.*

## Board size

The size of the board has been related to its complexity in decision-making (Pfeffer, 1973). As the size of the board increases, so does the diversity of interests represented on it. Such a diversity of interests may become all the more apparent when the board is faced with decisions involving hypothetical takeover attempts (golden parachute contracts) or real takeover bids. Furthermore, arriving at a shared consensus can be more complex in large boards, which may be often unwieldy.

The effect of board size on board-management relationships, however, may be complex and not monotonic. Because board size can be a function of company size, its effect can be confounded. In a small board it is likely that the top management will dominate the proceedings. Top managerial influence will probably decrease as the size of the board increases. However, as the size of the board reaches a certain threshold, it is likely that a dominant coalition will emerge. Because top management generally plays a major role in such coalition, its influence upon the board will be high. The net effect of board size on the extent of golden parachute coverage is, therefore, of ambiguous sign, and may not be linear. In this study we will explore this issue empirically.

## The incidence of takeover threat

In firms that have experienced and successfully fended off a prior takeover threat, we expect that management will seek extensive coverage of managers by golden parachute contracts. An

<sup>3</sup> The total value of individual golden parachutes is seldom high enough to be a deterrent; however, the sum of all payments, if large numbers of executives are covered, enhances the already complicated negotiations of post-merger issues.

independent board, on the other hand, will examine such golden parachute proposals from a cost–benefit perspective, assessing the expected economic value of golden parachutes to the shareholders. Considerations in determining the value of a golden parachute proposal will involve the probability of being taken over, the premium offered in the acquisition (if it happens), the quality differential between the bidding management team and the incumbents, and the golden parachute size needed to ensure that inappropriate entrenchment of incumbent management does not occur. However, although the considerations involved in this decision are clear, considerable ambiguity surrounds estimation of the optimal amount of golden parachute compensation because it is contingent upon a hypothetical acquisition attempt by an unrevealed acquirer. In firms which were attacked but stayed independent, there will be a greater propensity to adopt a large golden parachute contract, in terms of number of executives covered, and in payment in years' compensation. This may reflect entrenchment of incumbent management who just managed successfully to stave off a takeover battle. Therefore:

*H7: In firms which have been subjected to prior takeover bids, the larger the number of executives covered by, and the size of, the golden parachute contract.*

## RESEARCH DESIGN

### Sample and data collection

This research is based on a sample of 89 large public corporations from the *Fortune* 500 which had adopted golden parachutes as of December 1985, based on proxy statements filed with the Security and Exchange Commission. This sample is a subset of our larger data base of 228 firms, the rest of which did not adopt golden parachutes. Data were collected from proxy statements on the size and composition of the board, the ownership structure of the firms' stock and executive compensation. Prior takeover attempts up to 1 year before the adoption of the golden parachute were also recorded using two sources: 13D filings with the SEC, and summary articles from the *Wall Street Journal* Index. Additional company data (size, profitability) were collected from Standard and Poor's COMPUSTAT tapes.

### Model specification and variable definition

Based on the above hypotheses, the following model is specified for our study:

$$\text{GP Magnitude} = f\{\text{key executive tenure, relative executive tenure vis-à-vis outside directors, the proportion of stock owned by management team, cumulative blocks of shares owned by major shareholders non-management, take-over threats, the proportion of outside directors, the proportion of inside directors in the executive compensation committee, the size of the board, error term}\}$$

To test our hypotheses we performed multiple regression analyses on the sample of 89 firms which adopted golden parachutes based on the general model above. Additionally, we ran a Tobit regression analysis for the full sample of 228 firms, including those that did not have golden parachute contracts. The Tobit test is useful for examining the robustness of the multiple regressions' results in the larger group of firms, due to the truncated nature of the dependent variables (for non-GP firms, the dependent variables will be zero, while for GP adopting firms the dependent variables will take on positive real values).

There are two aspects of golden parachute magnitude: the size of compensation and the number of executives covered. Each is run separately as a dependent variable in a regression model, resulting in two different regression analyses, with the same set of independent variables. The first aspect of golden parachutes, the number of executives covered by the contracts, is an indicator of how far the protection is distributed within a company. The second indicator of golden parachute magnitude is the dollar size of golden parachutes provided for top management expressed in terms of the number of years' compensation of top executives as reported in the proxy statement. This measure, size of golden parachutes in years of salary, is linked to the latest annual salary of the executives when a 'change in control' occurs, and thus reflects its value adjusted for annual salary differences. In our analysis we include company size as a control variable, measured as the log of total assets of the company in the year of golden parachute adoption.

Takeover threat is measured conservatively as

actual transfer of stock ownership of greater than 5 percent of the total stock of the firm to the potential acquirer and the filing of 13D statements with the SEC, at least a year in advance of the date of acceptance of the golden parachute proposal. The 13D filings are required by the SEC to indicate the intent of any investor who acquired more than 5 percent of the company stocks. The content of the filings, therefore, is a clear measure of takeover threats. Takeover attempt is a dummy variable; it is one if a company did experience takeover threat as defined above, and is zero otherwise. Board characteristics are measured in terms of size, the proportion of outside directors, and the proportion of inside directors sitting on the executive compensation committee. In our sample there were three firms which did not have any compensation committee on their board. For these firms we assume that all board members were involved in the decisions about top executive compensation.<sup>4</sup> Consequently, the proportion of inside directors in the compensation committee for these firms are exactly the same as the proportion of inside directors in their board.

The information asymmetry between top management and the board is measured in terms of the ratio of the average tenure of the top five executives (including the CEO) to the average tenure of individual outside directors. The human asset investment of the executives and its related hazard of loss of employment are measured as the average absolute tenure of the top executives of the company. Additionally, top management team incentives are indicated by the percentage of stock owned by the management team as reported in the proxy statement. The level of concentration of stock ownership not owned by management is measured as the sum of all blocks of stock ownership greater than 5 percent. The 5 percent cut-off is used following the guideline by the SEC as an indicator of significant stock ownerships.

## RESULTS

The results of this research are reported in Tables 1 to 4. Descriptive statistics are shown in Tables 1 and 2, about golden parachutes and about

independent variables. The number of executives covered by golden parachute contracts ranged from 1 to 99, with an average of 10 (9.64 to be precise) and a standard deviation of 14.37. The corresponding mean value of the golden parachutes for CEOs was \$2.28 million, with a standard deviation of \$1.65 million, and the total amount involved in the golden parachutes was an average of \$6.89 million. It is interesting to note the cross-sectional variation in the parameters of the agreements, particularly in the number of executives covered by the agreement. The variation suggests that some of the more controversial golden parachute payments were indeed at the upper end of a rather extensive distribution (see standard deviations and ranges).

Table 1 shows that the two dependent variables are negatively correlated to each other, but insignificantly ( $r=-0.09$ ). This indicates that the two parameters, the number of executives covered and individual contracted payments in terms of years of salary, are two different aspects of golden parachute contracts.

From Table 2 we note that the size of boards of directors is positively and significantly correlated with the size of the company ( $r=0.60$ ). It is necessary, therefore, to carefully control the possible confounding effect of company size in our regression models. We also note that executives' average tenure and relative tenure are highly correlated ( $r=0.68$ ) and therefore are used individually in our regression models. Additionally, there are several significant interrelationships among the other independent variables. Stock ownership by management is positively correlated with the proportion of inside directors on executive compensation committee ( $r=0.35$ ) and negatively with the proportion of outside directors on the board ( $r=-0.32$ ), while the latter two are negatively correlated ( $r=-0.39$ ). These significant correlations intuitively make sense, in that the higher the proportion of stock ownership by management, the bigger the role of the management on the board (as reflected in their role on executive compensation) and the less prominent the role of outside directors as indicated by their proportion on the board. Other significant correlations are detected from Table 2, but are complicated to explain intuitively (e.g. executive tenure with company size and with concentration of ownership in non-management's hands). In our analysis we decided to enter the executive tenure (absolute) and

<sup>4</sup> Our results hold when we remove these cases from our sample.

Table 1. Golden parachute characteristics

	Mean	SD	Range	1	2	3	4
1. Total GP amount covering all executives (\$ mil.)	6.89	6.03	0.65–32.87	1.00			
2. Amount CEO GP (\$ million)	2.28	1.65	0.41–11.04	0.64	1.00		
3. Number of executives covered	9.64	14.37	1.00–99.00	0.52	-0.02	1.00	
4. Top executive GP (in years' compensation)	3.96	2.07	0.50–13.60	0.35	0.30	-0.09	1.00

Critical values:  $p < 0.01$  for  $r > 0.27$ ;  $p < 0.05$  for  $r > 0.21$ .

Table 2. Means, standard deviations and Pearson correlation coefficients of independent variables

	Means	SD	1	2	3	4	5	6	7	8
1. Log asset	3.05	0.41	1.00							
2. Board size	12.01	3.24	0.60	1.00						
3. Ext. directors	0.68	0.13	0.08	-0.03	1.00					
4. Compensation committee (percentage insiders)	0.11	0.19	-0.13	-0.07	-0.39	1.00				
5. Average tenure	19.66	8.09	0.22	0.22	-0.22	-0.10	1.00			
6. Relative tenure	3.10	1.85	0.21	0.16	-0.20	0.01	0.68	1.00		
7. Management stockholding	5.74	7.50	-0.22	0.11	-0.32	0.35	0.06	0.08	1.00	
8. Non-management stock concentrations	11.32	13.45	-0.01	-0.00	-0.13	0.18	0.37	0.04	0.13	1.00
9. Prior takeover attempt	0.18	0.39	-0.04	-0.09	0.09	-0.10	0.16	0.19	0.06	0.20

Critical values:  $p < 0.01$  for  $r > 0.27$ ;  $p < 0.05$  for  $r > 0.21$ ;  $p < 0.10$  for  $r > 0.175$ .

relative tenure separately into the model, to control the possible confounding effect of the two. At the end of our analyses we carefully examine the other intercorrelated independent variables, as well as the effect of company size in our models.

The results of the regression and Tobit analyses are presented in Tables 3 and 4 for the number of executives covered and for the dollar size of the golden parachute, respectively. The results indicate that the two dependent variables, the number of executives covered and the size of golden parachute (in years of salary), are two different parameters of golden parachute contracts. While the first dependent variable is indicative of a distribution of contractual protection, the second one reflects the expected wealth of the individuals named in the contracts. Evidently, each aspect of the golden parachute appears to be influenced by different independent variables, some of them even in the opposite direction.

In the multiple regression results (Models 3.1 and 3.2), the statistically significant predictors of the number of executives covered by the golden parachute contract are: the proportion of inside directors in the executive compensation committee (negative), relative tenure (positive), stock owned by the management team as a whole (positive), the concentration of stock in the hand of non-management (negative) and company size (log asset). The overall model is statistically significant in terms of the  $F$ -ratio. Neither top management's relative tenure nor their average absolute tenure had any significant effect. Note that the variation of these two variables (Models 3.1 and 3.2) does not alter the patterns of relationships of all other variables.

The Tobit analysis in Table 3 strengthens the above results, especially for the executive relative tenure and the concentration of stock not owned by management. Additionally, the Tobit also shows that two other variables are significant predictors for the number of executives covered

by golden parachutes: prior takeover attempt (positive) and the proportion of outside directors (positive).

Table 4 has the average golden parachutes size for top executives (in terms of number of years' salary) as the dependent variable. From the regression analysis (Models 4.1 and 4.2) we found that except for two independent variables, stock ownership by management and the proportion of inside directors on compensation committee, the results are consistent with our hypotheses, at least in the predicted direction. Again, the Tobit analysis in Table 4 supports the significance of the executive relative tenure and magnifies the significance of the concentration of stock not owned by management (negative).

The proportion of inside directors in the executive compensation committee of the board is a significant predictor of the number of executives covered by the golden parachutes and has, contrary to our hypothesis, a negative sign. This variable has a positive but insignificant effect on the contracted payments in terms of years of salary. The result on compensation committees suggests that committees largely consisting of outside directors tend to expand the number of executives covered by golden parachutes contracts (Table 3), but do not have any significant effect on individual contracted payments in terms of years of salary (Table 4).

Stock owned by management is statistically significant and has a positive sign (the opposite of our prediction), indicating that the greater the block of stock owned by management, the greater the number of executives covered by the golden parachute. This variable, however, is insignificant and has a mixed sign in predicting the dollar size of the golden parachute. Again, the results suggest that the management with greater stock ownership seeks to distribute the protection toward a potential hazard of unemployment that may result from a takeover, without pursuing large individual payments.

Although insignificant in all multiple-regression models, the direction of the influence of prior takeover attempts is intuitively appealing. The existence of prior takeover attempts consistently enhances the number of executives covered by the golden parachute contracts (as supported by the Tobit result in Table 4), but does not affect the amount of the contract awarded (in terms of years of compensation). In our data base we also

collect takeover attempts of the firms up to 3 years prior to the date of golden parachute adoption. Using this 3-year takeover attempt to substitute the 1-year measure yields the same results as reported in Tables 3 and 4.

As predicted in our hypotheses, the relative tenure of top management teams is significant and positively related to the size of the golden parachute. Note that our measure of tenure presented in this set of models has been normalized with respect to the average tenure of external board members. Similarly, when the average absolute tenure of top executives replaces relative tenure, it is also significant and has a positive sign as hypothesized.

One of our primary concerns is the effect of company size on the dependent variables. Note from Tables 3 and 4 that company size is a significant predictor for the number of executives covered, but not for the size of the golden parachute. To further investigate the role of size, we ran a regression using only company size as the single predictor of our dependent variables, and found that in itself company size was a significant predictor for the number of executives covered by a golden parachute ( $F=3.90$ ;  $R^2=0.042$ ) but was insignificant for predicting the size of golden parachutes in years of salary ( $F=0.14$ ;  $R^2=0.001$ ). Evidently, by comparing this result with the full model for the number of executives covered by golden parachutes, the inclusion of all other independent variables significantly increases the proportion of variance explained from 0.042 to 0.2034 ( $F=1.724$ ). Thus, company size serves in the model as primarily a control variable.

We also note from Table 2 that board size and company size are highly intercorrelated. To address this issue we ran variations of our models by entering each variable separately. Again, company size does not appear to significantly affect the size of golden parachutes, but the board size does. The model without company size accounts for 20.23 percent of the variance compared to 20.34 percent for the full model. Additionally, the inclusion of company size does not alter the pattern of interrelationships among other variables. These results are not surprising as the contracted payments (in years of salary) are a relative measure and have, in a sense, already been 'normalized' to company size.

For the number of executives covered by

Table 3. Regression analysis dependent variable: GP number (number of executives covered by golden parachutes)

Variable	Model 3.1	Model 3.2	Tobit
Executives' average tenure		-0.049 (-0.24)	
Executives' relative tenure	1.02 (1.02)		0.10* (1.81)
Management's stockholding	0.69*** (2.87)	0.71*** (2.89)	0.01 (0.39)
Non-management stock concentration	-0.21* (-1.72)	-0.20* (-1.65)	-0.02*** (-2.90)
Proportion of Ext. directors	-0.68 (-0.05)	-5.23 (-0.39)	1.04* (1.65)
Percentage insiders in executive compensation committee	-15.73* (-1.75)	-16.74* (-1.82)	
Prior takeover attempt	2.71 (0.68)	3.88 (0.97)	0.47* (1.87)
Board size	-0.11 (-0.18)	-0.07 (-0.12)	0.01 (0.32)
Company size (log asset)	8.68* (1.80)	9.85** (2.04)	0.17 (0.68)
Constant	-18.67 (-1.25)	-15.67 (-1.01)	-1.55* (-1.91)
<i>R</i> <sup>2</sup>	0.186	0.172	
<i>F</i> ratio	2.29**	2.08**	-379.66**

\*\*\* Significant at  $p < 0.01$ ; \*\* significant at  $p < 0.05$ ; \* significant at  $p < 0.10$ .

Note: For Tobit analysis there were 228 firms in our sample, including firms which did not adopt golden parachutes.

Table 4. Regression analysis dependent variable: the size of golden parachutes (in terms of the number of years' salary)

Variable	Model 4.1	Model 4.2	Tobit
Executives' average tenure		0.053** (1.89)	
Executives' relative tenure	0.33*** (2.75)		0.13*** (2.43)
Management's stockholding	0.022 (0.06)	0.026 (0.08)	-0.01 (-0.89)
Non-management stock concentration	-0.032 (-0.17)	0.075 (0.00)	-0.01*** (-2.76)
Proportion of Ext. directors	-2.17 (-1.18)	-2.30 (-1.26)	0.52 (0.77)
Percentage insiders in executive compensation committee	1.79 (1.42)	2.01 (1.54)	
Prior takeover attempt	-0.47 (-0.83)	-0.36 (-0.63)	0.28 (1.11)
Board size	-0.23*** (-2.76)	-0.24*** (-2.78)	-0.05 (-1.42)
Company size (log asset)	1.12 (1.66)	1.27* (1.85)	0.10 (0.43)
Constant	3.69* (1.76)	3.32 (1.50)	0.01 (0.01)
<i>R</i> <sup>2</sup>	0.228	0.191	
<i>F</i> ratio	2.95**	2.36**	-259.67**

\*\*\* Significant at  $p < 0.01$ ; \*\* significant at  $p < 0.05$ ; \* significant at  $p < 0.10$ .

Note: For Tobit analysis there were 228 firms in our sample, including firms which did not adopt golden parachutes.

golden parachutes, we found that company size does have significant confounding effects. Without company size in the model, board size appeared significant ( $t = -2.19$ ) in predicting the number of executives covered. This result, however, diminished once we entered company size in the model, indicating that the effect of board size was confounded by company size. Note that there is no reason to believe, *a priori*, that board size is confounding company size. Furthermore, the inclusion of company size also altered the pattern of relationships among other variables, notably the concentration of stock not owned by management (become significant, negative). This effect was also reflected in the increasing proportion of variance explained, from 0.169 (without company size) to 0.2034 in the full model.

Similar analyses were carried out to examine the possible multicollinearity effect of stock ownership by management, the proportion of inside directors in the executive compensation committee and the proportion of external directors. We found that there is no significant effect of such interrelationships, in terms of both the variance explained and the pattern of relationships among other variables.

## MODEL RESULTS AS INDICATORS OF MANAGERIAL DISCRETION

The agency perspective traditionally presumes the role of the board of directors as a cost-effective monitoring mechanism to protect shareholder interests.<sup>5</sup> The presumed independence of outside directors is, however, questionable. If top management influence on the board through the CEO and inside directors is high, then the board would probably rule in favor of management in decisions involving potential conflicts of interest between management and stockholders. Managerial discretion suggests that managers possess high levels of latitude in pursuing their personal agendas, and that monitoring mechanisms are limited in their effectiveness in detecting their departures from stockholder interests (Hirsch and Friedman, 1986).

<sup>5</sup> The role of boards of directors as an 'intermediary' between shareholders and management has not been extensively addressed in the agency model, both formally and empirically. See Holmstrom and Tirole for an assessment (1987: 40-42).

The extent of managerial discretion and the influence enjoyed by top management teams is a matter of degree. Williamson (1975, 1988) asserts that the extent of managerial discretion varies systematically with the level of competition in product markets, as well as the structural characteristics of internal organization. According to this view, managers of firms having significant levels of uncommitted cash flow have greater latitude for discretionary behavior. Additionally, Williamson argues that if the internal organization of the firm results in loss of critical information on resource utilization (as in the classic U-form organization), functional managers may have the latitude to pursue goals unrelated to shareholder value.

Top management teams with long average tenure vis-à-vis board members tend to have larger golden parachutes approved by their boards. This result is consistent with Alderfer's (1986) clinical study of decision-making in corporate boards, which revealed that top executive tenure in relation to that of outside board members had a considerable bearing on decision-making, particularly in the early years of the director's tenure. The results also hold for executive tenure measured in absolute terms. Such a positive relationship between the size of golden parachute contracts and top executive tenure suggests that top managers obtain contingent compensation for their personal investment in the corporation. Once a policy decision is made to award a golden parachute, such a basis for determining its magnitude is not unreasonable. The controversy surrounding golden parachute contracts, then, probably arises from widely publicized payments, such as that made to the CEO of Revlon, which turn out to be at the extreme end of our sample distribution. Studies of strategic leadership which pay special attention to the latitude for discretionary behavior of managers may operationalize the degree of managerial discretion through indicators such as tenure of top executives and outside directors.

Similarly, tenure in the organization as a source of organization-specific knowledge can be viewed as a source of influence differential between organizational actors (cf. Pettigrew, 1973). In this light, our findings indicate that executives with high influence differential (vis-à-vis outside directors) are able to obtain high contracted payments, in terms of years of salary. Taken

together, the results also suggest that the top management team's investment to stay longer with the company is concurrently rewarded with (1) a higher contingent compensation to invest in the firm-specific human capital, and (2) a better position to deal with their outside directors in governing the corporation as reflected by their relative tenure.

Besides its property as an incentive, stockholding by management may also reflect the extent to which it has influence over the board. We would expect that the higher the stock ownership by management, the higher its influence on board-level decisions, reflected in the magnitude of golden parachute contracts. The result that stock ownership by management is significantly and positively ( $p<0.01$ ) related to the number of executives covered by management supports this discretionary argument. In terms of individual payments (in years of salary), however, the result is not significant, indicating that managers with high stockholdings tend not to pursue high individual payments. This nicely complements the incentive alignment argument: top executives with high stockholdings are already protected by the possible gains in stock value if a potential suitor makes a bid for the firm, and use their high influence on the board to distribute the contractual protection.

One would also expect that executives of firms with a high level of diffusion of stock ownership could have more room for discretionary behavior. Our results confirm this view in the direction we discussed earlier: firms with a high level of diffusion of public stock ownership tend to have golden parachutes for larger numbers of executives, but delimit the amount of individual payments. Note that our Tobit analysis (Table 4) amplifies this finding.

The tendency to increase the number of executives covered by golden parachutes, but not the size of individual payments, is also supported by outside directors, especially those who sit on the executive compensation committee. The negative coefficient on non-management stock concentration in the regression with the number of executives covered as the dependent variable, however, indicates the preference of large stockholders to limit the total magnitude of the contract. Note from Table 1 that golden parachute coverage is positively and significantly correlated with the total amount of the contract. It is

reasonable to conjecture that within a given total amount of the contracted golden parachute payments, and in absence of other motives, outside directors in the executive compensation committee tend to support a wider distribution of the contractual protection.

If golden parachute contracts align stockholder interests with those of management (i.e. an agency theoretic argument), there is a sufficient reason for outside directors to support the adoption of golden parachute contracts. Consequently, one can expect that if outside directors indeed accept this interest alignment proposition, firms with a larger proportion of outside directors will not find any difficulty adopting reasonable golden parachute contracts. This interpretation can now clarify the seemingly unexpected empirical studies of the 'adoption' of golden parachutes: firms with high proportions of outside directors are more likely to adopt a golden parachute (e.g. Cochran *et al.*, 1985; Singh and Harianto, 1989), but do not award excessive contractual protection.

From a research design perspective, our findings on board composition underscore a legitimate concern that the proportion of outside directors in itself may not be sufficient to capture the dynamics of board-management relationships. Some outside directors may have other contractual connections with the firm. These contract obligations may render those outside directors less independent in carrying out their fiduciary duty. Similarly, executives who sit on each others' boards may exchange reciprocal favors, thus reducing their independence (Kosnick, 1987).<sup>6</sup>

## CONCLUSION

This study examines some attributes of top management team, corporate ownership structure and board composition as the determinant of the magnitude of golden parachutes. We argue that the two parameters of golden parachutes—

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<sup>6</sup> To address this issue we have examined the role of outside directors' connection with top management teams (through reciprocal board appointments, significant contractual arrangements or family ties) in affecting the number of executives covered by, or magnitude of, contracted payment in the golden parachute. However, since our results reported in Tables 3 and 4 were unaffected by indicators of such reciprocal connections between directors, we chose not to report those findings.

coverage (number of executives) and size (number of years' compensation equivalent)—can be viewed as indices of contingent compensation provided to top management teams in the event of change in control. This contingent compensation can reduce the possibility of entrenchment of management when faced with a takeover bid that does serve the shareholders. The determinants of magnitude of the contractual payments and their coverage (in terms of numbers of executives) can also be indicators of managerial influence on their boards of directors.

From an agency perspective the results provide some support for the underlying hypotheses, especially in predicting the contracted size of golden parachute payments. The significance of top executive tenure in predicting the size of contracted payments suggests a recognition of the value of firm-specific human capital. The golden parachute can then be conceptualized as a device to motivate a top management team to continue to invest their resources in developing firm-specific skills by providing them with compensation in the event of takeover and termination of employment. The findings also highlight the importance of top management team tenure in large corporations: that long tenure is considered valuable by boards of directors—even in these turbulent times of proxy fights and contested takeovers.

Firms with high levels of management-owned stock and relatively diffused public stock ownership tend to obtain a wide dispersion of contractual protection by covering larger numbers of executives. We argue that there is a complementary effect of incentive alignment and influence processes: these executives exercise their influence on the board to spread the contractual protection, but do not demand a large contracted individual golden parachute payment because they are already protected by potential gains in their stock value in the event of a takeover. Greater levels of non-management-owned stock in the hands of institutional stockholders delimit the number of executives covered by golden parachutes.

The nature of our sample, which consists of firms from the *Fortune* 500, may be biased towards the large corporation. Similar research is necessary to establish whether such results hold with smaller firms. One might speculate that in young and especially fast-growing firms, relative

stockholdings of top executive teams may be larger than in the large, mature corporations, and supplant the need for golden parachutes as protection against takeover. However, research on top managerial incentives and discretion in smaller firms could be done with a research design similar to this study to examine whether the results hold in that setting.

Key parameters of the golden parachute contract itself can shed light on top management and board relationships. The patterns of relationships in these results underscore the need to consider ownership structure of the firm, and particularly the proportion of stock owned by top management, tenure of top management teams vis-à-vis outside directors, and the composition of ad-hoc committees of the board as important variables in predicting board-level decisions.

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