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M. P. Narayanan
University of Michigan Business School

Anant K. Sundaram
The American Graduate School of International Management

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M. P Narayanan
University of Michigan Business School
<mpn@umich.edu>

Anant K. Sundaram
Thunderbird, The American Graduate School of International Management
<sundaram@t-bird.edu>

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The authors are, respectively, Associate Professor of Finance at the University of Michigan Business School, Ann Arbor, Michigan 48109, and Associate Professor of Finance at Thunderbird, The American Graduate School of International Management, Glendale, Arizona 85306. We are deeply grateful to Tanja Bilic, Sandeep Dahiya, Christie Meyer, and Erik Solomon for their outstanding research assistance, and to our respective institutions for their research support. We are grateful to Raj Aggarwal, Viktoria Dalko, Ken Ferris, Graeme Rankine, and Dennis Logue for comments on previous drafts. Contact author: Anant Sundaram (602-978-7173).

A Safe Landing? Golden Parachutes and Corporate Behavior

Abstract

The original motivation for golden parachutes was to provide managers the incentive to maximize shareholder wealth without concerns of job loss from change of control. But they may also create the incentive to run down a firm and make it an attractive takeover candidate, especially in the case of poorly performing firms that require substantial turnaround effort. Such concerns led to the US Congress passing laws that limit tax deductibility to golden parachutes and levy additional taxes on such payments. Our study of a sample of 245 first-time golden parachute adopting firms during 1980-94 indicates that such concerns (and the legislation) are misplaced. Regardless of whether they are under- or overperformers prior to parachute adoption, managers do not appear to run down their firms: They do not put the firm up for sale any more often than average, CEO turnover does not increase, and firms' operating, financial, and stock performance subsequent to adoption show no evidence of value-destruction. In contrast, we find a dramatic increase in both inward and outward corporate control activity, leading us to the conclusion that golden parachutes have simply given managers the confidence (and a cushion) to restructure their firms without having to worry about losing their jobs from the firm being put in play.

I. Introduction

Executive compensation in the US continues to be a controversial and much-debated issue. There are debates about the amount of compensation and whether the structure of compensation aligns managers' and shareholders' interests.¹ While there is general agreement concerning the advantages of the various performance-related components of incentive compensation such as stock options and restricted stock, the one compensation component that has been controversial since its appearance in the late 1970s is a performance-unrelated compensation agreement, the golden parachute (GP): i.e., an agreement with a firm's CEO and other top executives for a severance payment that is contingent on a change in the ownership or effective control of the corporation, or in the ownership of a substantial portion of the assets of a corporation.

Academic views, on whether GP adoptions are beneficial to shareholders or not, are eclectic. Proponents of GP claim that it provides senior managers the incentive to seek (or at least, not resist) shareholder value-maximizing takeovers, and to do so without fear of substantial loss of income. Opponents argue that GP contracts simply transfer wealth from shareholders to managers as they remove (or at least, attenuate) the discipline imposed by the market for corporate control.

In the public policy and media realms, however, GP contracts have aroused a great deal of suspicion, and even scorn. So much so that GP contracts have drawn US lawmakers' scrutiny and legislative action since the mid-1980s. In the Deficit Reduction Act of 1984, the US Congress created a new section to the Tax Code (Section 280G) which denies tax benefits to corporations making 'excess golden parachute payments,' where 'excess' is defined as payments that have a present value greater than three times the executive's base pay. Another

¹ For an excellent survey of the literature and empirical evidence on executive compensation, and the debates surrounding it, see Murphy (1998). For a review of the theory in relation to compensation practice, see Baker, Jensen, and Murphy (1988).

part of the Code (Section 4999) imposes a 20% excise tax on such 'excess' payments. Subsequently, in 1992 under the Budget Reconciliation Act, the US Congress broadened the scope of this rule by adding a Section 162(m) to the Tax Code, which disallows the tax deductibility of performance-unrelated compensation (including, therefore, GP contracts) greater than \$1,000,000 for each of the five highest-paid employees of a company (see Macey (1997) for a detailed discussion of the issues and debates).

One important concern among both academics and legislators has been that managers, who find that the firm is not doing well and that the effort it takes to improve its performance is prohibitive, might choose to make the firm "attractive" for a potential buyer by driving down its performance and stock price. In some cases, a parachute adoption might be done with this tactic in mind. For instance, Bowie and Fischer (1996) argue that managers of some companies with golden parachutes might be "promoting mergers and acquisitions that benefit executives of target companies more than their shareholders." (p. 17). A recent article ("When Bosses Get Rich from Selling the Company", *Business Week*, March 30, 1998, pages 33-34) speculates that GP compensation has become so large that managers are doing deals just to cash in.²

Much of the past empirical research on golden parachutes has focussed its attention on the effect of GP adoptions on shareholder wealth, by measuring the announcement effects. But there has been no study that investigates whether adoption of GP has the intended consequence: i.e., whether it changes a manager's incentive to maximize shareholder wealth without career concerns. In this paper, we conduct a broad-based and detailed investigation of GP adoptions

² One of the (three) reasons cited by the House and Senate Joint Committee on Taxation in their adoption of Sections 280G and 4999 was that the ".....existence of such [golden parachute] arrangements tended to encourage executives and other key personnel involved to favor proposed takeovers that might not be in the best interests of shareholders and others." (See Macey (1997) for details). See also: "On Golden Parachutes: Following the Leader and Other Fallacies/Are the Parachutes Working? A CEO Debate," *Directors and Boards*, Summer 1982, p. 22; "Those Executive Bailout Deals," *Fortune*, December 13, 1982, p. 82; Philip Cochran and Steven Wartick, "Golden Parachutes: A Closer Look," *California Management Review*, Summer 1984, p. 111; Peter Scotese, "Fold Up Those Golden Parachutes," *Harvard Business Review*, May/June 1985, p. 168; "A Golden Parachute Protects Executives, But Does It Hinder or Foster Takeovers?" *The Wall Street Journal*, December 8, 1992, p. 56.

to answer this question. We also investigate the concern that GP contracts might give some managers—especially those who are (or see themselves as likely to be) poor performers—an incentive to run down a firm with the hope of finding a buyer. We do so by comparing firms that underperformed prior to GP adoption with those that overperformed. We investigate whether the post-GP operating, financial, and stock price performance, corporate control activities, and CEO turnover of these two groups are different. In particular, we explore if there is any evidence of pre-adoption underperformers ‘running down’ their firms or putting them up for sale.

Our sample consists of 245 first-time GP adopters on the New York Stock Exchange (NYSE) during the fifteen-year period 1980-94 (the largest sample in studying such GP adoptions, to our knowledge). Our main findings are as follows. We find a substantial increase in the corporate control activities of GP adopters.³ There is a general increase in such activity among our sample firms as targets of corporate control, but such increase is mostly attributable to increased divestitures and stake sales, and *not* to an increase in M&A activity among GP adopters. There is also, however, a dramatic increase in corporate control activity of our sample firms as *initiators* of such activity, and this increase is fairly across-the-board and similar between both under- and overperformers.

We find that firms adopting GP contract are, on average, riskier than a typical firm and more likely to have been underperformers relative to the average S&P 500 stock. This might be *prima facie* cause for concern that GP adopters could, indeed, run down their firms with the hope of finding a buyer and cashing in. But a detailed examination of a range of operating and financial characteristics suggests that GP adoptions have simply no impact on the post-adoption behavior of the firms, regardless of whether they performed well or poorly prior to adoption.

³ We include under the umbrella of ‘corporate control activities’ all forms of corporate restructuring such as purchase or sale of assets, spinoffs of acquisitions of divisions, share repurchases, and takeovers—in short, a range of activities that put the firm in play and therefore might trigger a change of control.

From the standpoint of announcement effects, GP adoptions are market-neutral events.⁴ In the year following adoptions, both under- and overperformers' stocks perform in line with the market average, and there is no significant difference in the one-year excess returns of the two groups. But over three years, the two groups revert to their under- and overperformance, respectively.

Performance prior to GP adoptions are not in any way meaningfully impacted by CEO characteristics (such as age, tenure with the company or as CEO, nature of compensation) nor do we observe GP adoptions resulting in higher post-adoption CEO turnover. (If anything, GP adopters have lower CEO turnover than the average large NYSE firm.)

Our evidence, therefore, suggests that concerns about golden parachutes are misplaced. Regardless of whether they are underperformers or overperformers prior to adoption, GP adopters do not appear to run down their firms—they do not put the firm up for sale any more often than average, they do not leave in droves, and their operating, financial, and stock price performance subsequent to adoption show no evidence of value-destruction. Indeed, from the dramatic increase in the corporate control activity that we document, we surmise that all golden parachutes have done is to give managers the confidence (and a cushion) to restructure their firms without having to worry about losing their jobs.

Section II outlines the main arguments for and against GP contracts, and develops the hypotheses of this paper. Section III describes the data, sources and methodology. Section IV analyzes the results, Section V discusses our findings, and Section VI concludes.

II. Impact of GP Adoptions on Performance: Hypotheses

In this section we outline the arguments for and against golden parachutes. The original motivation behind the GP, called the 'incentive alignment' hypothesis by Larcker and Lambert

⁴ However, as we explain in Section IV.1 below, given the nature of the adoption announcement, event study-type analyses—in both our study and in the previous literature—are of somewhat questionable value.

(1985), is that it removes managerial resistance to takeovers that might jeopardize their jobs and the associated wages and perquisites, and thus aligns their interest to that of shareholders by seeking (or not resisting) value-maximizing takeovers. Knoeber (1986) suggests that GP contracts are bonds posted by shareholders to assure managers that they will not opportunistically renege on implicit long-term compensation contracts in a takeover. The benefit to shareholders of GP contracts is that without it, managers would not agree to long-term contracts and would demand immediate compensation, which will have to be based on less precise information about the manager.⁵ Harris (1990) argues that golden parachutes enable the target firm managers to be tough bargainers and increase shareholder value by providing them compensation to offset their welfare loss in a takeover.⁶

While several arguments have been put forth in favor of GP contracts, some concerns have also been raised. Lambert and Larcker (1985) point out that they might transfer wealth from shareholders to management by insulating management from takeover discipline and inducing them to operate the firm inefficiently. Machlin, Choe, and Miles (1993) suggest that managers might do a quick takeover to collect on their golden parachutes instead of negotiating a bid that maximizes shareholder value. This concern has also been raised by Bowie and Fischer (1996) who ask whether the size of the golden parachutes has so distorted managerial

⁵ A related insight arises from Shleifer and Vishny (1990) who argue that corporate managers develop short investment horizons resulting from their perceived risk of being fired or taken over, in the context of short arbitrageur horizons. Logically then, by attenuating the impact of such threats, golden parachutes should provide corporate managers the incentive to invest for the long-term. In an empirical study of the relation between managerial compensation and takeover threats, Agrawal and Knoeber (1998) find that shareholders pay managers more so as to get them to supply asset-specific human capital in the presence of an externally generated threat to their jobs. However, this effect is present only in the case of firms that do *not* offer their managers GP contracts. Agrawal and Knoeber thus suggest that golden parachutes *weaken* the implicit contract between managers and shareholders. However, it is also possible that the presence of golden parachutes obviates the need for higher compensation to get managers to supply asset-specific human capital.

⁶ However, in an empirical study, Cotter and Zenner (1994) find that GP contracts have no significant effect on managerial resistance to takeovers.

incentives to maximize shareholder value that they actually promote takeovers to cash in.

The extant empirical literature has largely relied on share price reaction on the announcement of GP adoptions to evaluate whether it is a worthwhile form of incentive compensation. Lambert and Larcker (1985), the first to study this, find a significant positive abnormal stock price reaction to the announcement of GP adoptions, using a sample for the period 1975-1982. However, Mogavero and Toyne (1995) find a significant negative abnormal stock price reaction using a sample for the period 1982-1990. Born and Trahan (1993) compare the announcement effects of GP adoptions when firms are in play with that when they are not, and find that there is no effect for firms that are already in play at the time of GP adoption, while there is a positive effect if they are not. They conclude that this finding is consistent with the hypothesis that golden parachutes signal an increased probability of takeover.

Machlin, Choe, and Miles (1993) test if the positive announcement effects of GP adoptions are due to increased likelihood of takeovers or the higher takeover premiums paid to targets with golden parachutes. Comparing a sample of firms with GP contracts to a control group of firms without such contracts, they find that the presence of GP increases the likelihood of takeover. They also find that takeover premiums of targets with GP contracts are positively related to the size of contract. These results suggest that golden parachutes are serving their stated purpose of inducing managers to maximize shareholder wealth.

None of these papers, however, tests directly whether golden parachutes have their intended consequence of inducing managers to conduct corporate control activities that might put the firm in play and jeopardize the managers' jobs. In this paper, we investigate whether the extent of corporate control activities of the firm changes after GP adoptions. In addition to analyzing takeover activity, we consider a broad range of corporate control activities that might put the firm in play. We consider corporate control activities in which the firm is the 'target' (such as asset sales, stake sales, spinoffs, firm sales), and activities in which the firm is the

'initiator' (such as asset purchases, stake purchases, outright acquisitions). In addition, we also consider share repurchases, since sometimes repurchases can be defensive measures in response to perceived or actual takeover threats.

We use two approaches to investigate whether managers are motivated by personal considerations induced by the GP, instead of maximizing shareholder value. First, if managers were motivated by the benefits of cashing in the GP, they are likely to operate the firm in such a manner as to make it an attractive takeover candidate. One way to do so would be to run down the firm to lower its operating performance and its stock price, so that an acquirer can add value by increasing improving efficiencies. This suggests that, if managers are motivated by personal gain, the operating and stock price performance of the firm after GP adoption might be worse than the performance prior to the adoption. Another way to attract acquirers is to reduce debt so that is not a deterrent to takeover.⁷ It also makes the firm more attractive because of the unused interest tax shields. These motivations are likely to be stronger especially if the firm has been performing poorly prior to GP adoption. Since it would require more effort to turn around a poorly performing company, the management is more likely throw in the towel (rather than expend the effort) and make the firm a more attractive takeover candidate by running it down (thereby cashing in their GP).

We conduct another test to see if managers run down the firms to benefit from the GP. If managers indeed are interested in benefiting from their golden parachutes at the expense of shareholders, we should expect to see greater turnover of senior managers in companies that have been GP adopters compared to those that are not. We would expect this effect to be magnified in the sample of underperforming firms due to the increased incentive of managers to cash in their GP.

⁷ Stulz (1988) and Israel (1991) provide models that explain how debt can be used as a deterrent to takeovers. Palepu (1986) and Davis et. al. (1994) provide empirical evidence that debt lowers the probability of being taken over.

Taking these issues into account, our empirical analysis of performance prior to and following first-time GP adoptions examines four broad aspects of the firm: (i) stock price performance; (ii) corporate control activities; (iii) operating and financial performance; and (iv) CEO characteristics (including compensation and turnover). Specifically, we examine whether there are differences between firms that ‘underperformed’ and those that ‘overperformed’ prior to GP adoption. There are four possible scenarios of post-GP adoption performance relative to pre-adoption performance: Either group can under- or overperform subsequent to GP adoption (i.e., the four possibilities of pre- and post-adoption performance are: under-/under-; under-/over-; over-/under-, and over-/over-).

If both under- and overperformers significantly improve their operating, financial, and stock market performance post-GP adoption, that would be evidence consistent with the ‘incentive alignment’ hypothesis. If both groups witness a deterioration in post-GP adoption performance *or* if overperformers see a post-adoption reversal in performance while underperformers continue to be underperformers, that would be evidence consistent with the ‘rundown’ hypothesis. If, however, we find that there are no performance differentials pre- and post-adoption, it would suggest that GP adoptions are either neutral events or they simply allow managers to go about their business without having to worry about job losses resulting from change of corporate control.

As far as CEO characteristics are concerned, a significant increase in post-adoption CEO turnover among underperformers (but not the overperformers) would be consistent with CEOs using GP as a means to insulate themselves against a job loss even if the firm is run down. Simultaneously, if we observe that underperformers are more likely to be targets of successful mergers or acquisitions compared to overperformers, that would also be evidence consistent with the ‘rundown’ hypothesis.

III. Data Sources, Definitions, and Sample Characteristics

III.1. Data Sources

The list of first-time GP adopting firms is drawn from the “1995 Golden Parachute Report,” published by Executive Compensation Reports (ECR), a division of the publishing firm Harcourt Brace and Company. Through its ‘ECRInfo’ database, ECR maintains (and regularly updates) all manner of compensation data relating to top managements and boards of 1016 large firms that comprise the combined Fortune 1000 and Standard & Poor’s 500 lists (55% of the firms in their sample have golden parachute agreements with top management). ECRInfo contains data on change-of-control (COC; this would include events such as acquisition of a certain proportion of voting power; a change in the board majority; a sale, merger, or acquisition; a liquidation; etc.) and severance agreements such as year of first GP adoption, subsequent GP adoptions and modifications of previous agreements, whether it has other forms of severance agreements (such as ‘tin’ parachutes⁸), who in the firm is covered by such agreements, payouts and payout formulas under such agreements, and so forth.

Data on operating and financial performance of firms (sales, assets, net income, free cash flow, R&D and capital expenditures, price multiples, etc.) in our sample are drawn from the Compustat and Compact Disclosure databases, and from the proxy statements filed with the SEC during the year of first GP adoption. Daily stock price performance data for analysis of announcement effects rely on the Center for Research on Security Prices (CRSP) database, while long-run stock performance data are derived from Compustat. Data on CEO age, tenure, compensation, and turnover draw upon the annual list published by *Forbes* magazine on the CEOs of the 800 largest firms in the US, from 1981 to 1995. Data on corporate control activities of sample firms (both as initiators and targets of such activities) come from the M&A

⁸ Tin parachutes are COC severance agreements for salaried employees other than the officers of a company. Approximately 7% of the ECRInfo database companies have tin parachutes.

database of the Securities Data Corporation (SDC). The SDC database provides information on activities such as asset purchases and sales, firm purchases and sales, stake purchases and sales, failed versus successful attempts at sale or purchase of the firm or asset or stake, etc.

III.2. Sample Characteristics and Definitions of Key Items of Data

Our final sample consists of 245 non-financial firms listed on the New York Stock Exchange (NYSE) whose CEOs adopted golden parachutes for the first time during the 15-year period 1980-1994.

Our initial sample consisted of 600 non-financial firms which initiated any type of severance agreement with its CEO. From this initial sample, we eliminated 20 firms listed on the American Stock Exchange, 41 firms listed on the NASDAQ, and 120 firms for which we could not find a ticker symbol on any of the three exchanges. Out of the remaining 419, a further 129 firms were eliminated since their CEO severance agreements did not specify a trigger of change-of-control, thus leaving 290 firms. A further 15 firms were eliminated since there was no information on the year of first GP adoption. Finally, 30 firms were eliminated from our sample since their GP adoptions coincided with their going public for the first time or with their being spun-off or carved-out from a parent company (all of which precluded our being able to obtain pre-adoption operating, financial, and stock price data). This leaves us with a final sample of 245 NYSE firms.

The GP adoption date that we consider as meaningful is the year in which a firm first adopts an agreement with its CEO for a severance payment that is contingent on a change in the ownership or effective control of the corporation, or in the ownership of a substantial portion of the assets of a corporation.⁹ Almost all the firms in our sample have subsequent adoptions or

⁹ This definition of GP is the one adopted by the Internal Revenue Service under Section 280G of the Internal Revenue Code. Recall that Section 280G was created by the US Congress as an appendage to the Deficit Reduction Act of 1984, with a view to deny tax benefits to corporations making 'excess golden parachute payments,' where 'excess' is defined as payments that have a value greater than three times the executive's base pay.

modifications of initial agreements, and in some instances, they have non-COC related severance agreements for CEOs. We do not consider either of these in our analysis.

Table 1 shows the temporal pattern on first-time GP adoptions in our sample. Most of the adoptions—about three-quarters—occur during the six-year period 1984-1989, and nearly 90% occur during the nine-year period 1982-1990. It would thus seem *prima facie* that this flurry of adoptions coincides with the heightened levels of takeover activity observed during the 1980s. However, contemporaneous, leading, or lagging correlation coefficients of GP adoptions with aggregate numbers of takeovers are not statistically significantly different from zero.¹⁰

Table 2 summarizes the operating, financial, and stock performance characteristics of firms in our sample.¹¹ In the year of GP adoption, the average firm in our sample has revenues of \$3.3 billion, and an asset base (book value) of about \$3.0 billion. It is profitable (\$150 million in net income), has negative free cash flows (-0.27% of sales), spends 3.48% of its sales on R&D and 8.2% on capital expenditures, and has a market-to-book equity ratio of 2.02 (significantly greater than 1, with t-statistic of 12.34). Long-run excess returns (measured as the monthly compounded returns in excess of a similar return for the S&P 500 for one year or three years, implicitly therefore assuming a beta equal to one) are slightly negative during the year prior to, year of, and year following GP adoption, but not significantly different from

¹⁰ The contemporaneous correlation coefficient between first-time GP adoption and number of *Mergerstat Review* mergers and acquisitions is 0.271 (N = 15); the correlation coefficient with GP lagged one year is 0.109, and GP leading is 0.338 (N = 14 for both). None of the three is significant even at the 10% level.

¹¹ While our total sample consists of 245 for most data items, some variables such as R&D expenditures (N = 150), betas and alphas (N = 206) have fewer observations.

zero. Firms in our sample have an average beta of 1.362,¹² significantly greater than 1 ($t = 10.02$), suggesting that they are perceived by the market as having substantially higher systematic risk than the average S&P 500 firm. The average alpha is zero.

Since a major focus of our study is to examine whether there are corporate control and performance differentials between firms that were 'underperformers' versus those that were 'overperformers' prior to GP adoption, Table 3 examines a list of variables similar to that in Table 2 for the two categories. We define these two categories based on the individual firm's stock return relative to the return on a portfolio of S&P 500 stocks (i.e., implicitly assuming a beta equal to one): Firms with compound annual return less than the compound annual return of the S&P 500 during the year *prior to* first-time adoption are defined as underperformers, while those with returns equal to or exceeding the S&P 500 are defined as overperformers.¹³ This categorization results in 140 underperforming firms and 105 overperforming firms in our sample.

We note from Table 3 that, with the exception of the market-to-book ratio, none of the variables differs significantly between the two categories. Moreover, even though the market-to-book ratio of the overperformers (2.45) is higher than that for the underperformers (1.71; the t -statistic of difference is 4.95), they are significantly higher than 1 for both categories. (Note that there is a large difference between the two categories in their pre-adoption stock price performance, but that is because the categories have been defined based on this metric).

¹² Betas are calculated from the CRSP data base, using 200 days of pre-GP adoption total returns from Day -50 to Day -250 and the S&P 500 as the 'market,' where the GP-adoption 'announcement date' is the filing date of the proxy statement that first makes the information public (see Section IV.1 for a detailed discussion). We are able to find proxy filing dates for only 206 firms in our sample and hence, calculate the betas for only these 206 firms.

¹³ In what follows (and in the tables shown), we discuss only the *one-year* prior excess return based on a value-weighted S&P 500 portfolio. We replicated all of our analysis with the equal-weighted portfolio, and with under- and overperformance defined based on *three-year* excess returns. None of our results or conclusions change.

Table 4 compares the proportions of under- and overperformers in our sample relative to that for all firm-years of S&P 500 stocks during the period 1980-1994. During this period, about 55% of S&P 500 firm-year returns exceeded the average—i.e., more than half were overperformers according to our definition. However, only 43% of the firms in our sample are overperformers (the t-statistic of difference in a test of proportions is 3.69, significant at the 1% level).

In summary, although they have respectable market-to-book ratios and are profitable on average, the typical GP-adopter is riskier and more likely to have been an underperformer relative to the average S&P 500 stock. This might, *prima facie*, give the impression of support for our 'run down' hypothesis. However, more detailed empirical analysis reveals that it is not so.

IV. Empirical Results on GP Adoptions and Corporate Behavior

IV.1. Announcement Effects of GP Adoption and Post-Adoption Stock Performance

Previous studies have found mixed evidence of market reaction to GP adoption announcements. This is not surprising, for at least three reasons. One, there is often a lag between the time that a GP adoption is public knowledge (firms have to disclose this information in the first proxy statement filed with the SEC after the adoption) and when the information is reported in the financial press, raising the question of whether researchers should use the proxy filing date or the financial press reporting date as the announcement date. Two, very few GP adoptions are actually reported in the financial press. Three, the use of the proxy filing date (rather than the press date) as the announcement date raises the problem of confound with other potentially significant contemporaneous events: Proxy statements contain a great deal of information on all manner of governance-related issues and on matters coming up for shareholder vote (e.g., board changes, shareholder resolutions, CEO compensation changes and so forth).

Despite 245 GP adoptions in our sample during a fifteen-year period, press announcements (from scanning both the *Lexis/Nexis* and the *Dow Jones News Retrieval* databases for the period 1980 to 1994) identify only 31. We are able to locate proxy statement (the filing preceding the announcement date) for 15 of these. In each of these instances, the GP adoption information is publicly known from the proxy statement, i.e., prior to the press date. The average lag between proxy filing date and the press date in our sample is 34.9 days (with the range being 1 day to 210 days). Clearly, therefore, the use of press dates to study the announcement effects of GP adoption is suspect. As a result, we use the proxy filing date as the announcement date for the event study. (But that, of course, creates the problem of information confound).

For these reasons, we have few expectations of anything meaningful emerging from the event study.¹⁴ We assess the announcement effects primarily for the sake of completeness of the empirical analysis.

Proxy statements and filing dates are available for 206 out of the 245 firms in our sample. Announcement effects are assessed using the standard event-study procedure. Using the proxy filing date as Day 0, we calculate the cumulative abnormal return (CAR) for the event window $(-1,0)$ based on the actual minus predicted market-adjusted daily return. The CAPM beta for the subsample of 206 firms is estimated using returns for a 200-day period, Day -250 to Day -50 .

Table 5 contains the results of the event study. We see that GP adoption announcements (as revealed by the proxy statements) are a 'non'-event: The average CAR for the full sample is 0.06% (insignificant), with 47.08% positive. CARs continue to be insignificant when the sample is split into under- and overperformers. Although the proportion of positive announcement effects for overperformers (51.25%) is higher than that for underperformers

¹⁴ Other authors too (e.g., Lambert and Larcker (1985)) acknowledge the problem.

(44.44%), the difference is not statistically significant.¹⁵

Table 5 also looks at the long run—one-year and three-year, assuming a beta equal to one relative to S&P—post-GP adoption excess returns of under- and overperformers, starting with the fiscal year following the year of GP adoption. In the year following adoption, stocks of underperformers register a negative excess return of -2.88% while overperformers register a positive 2.84% (with $t = 1.03$ and $t = 0.82$, respectively, neither is statistically significantly different from zero). The difference in one-year post-adoption excess returns between under- and overperformers is not significant ($t = 0.47$). However, examined over the longer period of three years following adoption, those firms that underperform prior to adoption register a negative three-year excess return of -10.9% post-adoption ($t = 3.82$ on annualized means and standard deviations, significantly different from zero at 1%), while overperformers register a positive excess return of 7.45% ($t = 2.67$, significantly different from zero at 1%). The difference in the mean (annualized) three-year excess returns is significantly different between the two groups ($t = 4.53$).

Summarizing the results from the standpoint of stock market reactions, GP adoptions are market-neutral events. In the year following adoptions, both underperformers and overperformers perform in line with the market average, and there is no significant difference in the excess returns of the two groups. But over the longer term (three years), the two groups revert to some degree of under- and overperformance, respectively, although the extent of such long-run under- or overperformance (-3.5% and $+2.4\%$ annually, respectively) is not nearly as

¹⁵ We also examined (but do not report as a table) whether there is any impact on the announcement effect of: (i) the level of takeover activity during the 1980s (by splitting our sample into periods characterized by 'high' and 'low' levels of takeover activity), or (ii) the adoption of the Congressional legislation in 1984 which imposed a tax penalty on GP payments over three times a CEO's base salary. Neither analysis results in an announcement effect.

sizeable as during the year before GP adoption (-25.6% and +30.1%, respectively).¹⁶

IV.2. GP Adoption and Corporate Control Activity

Previous studies (Machlin et. al. (1993); Born and Trahan (1993)) have found that GP adoptions have a significant impact on adopters' behavior as targets of corporate control activity. Specifically, Machlin et. al (1993) find that GP adoptions lead to an increase in the likelihood that a firm becomes a target of a merger or acquisition, while Born and Trahan (1993) find that whether or not a firm is 'in play' when they adopt GP has an impact on the adoption announcement effect.

We examine the link between GP adoptions and corporate control behavior across a wide range of corporate control activity, by whether the firm under- or overperformed, and for up to two years following GP adoption (compared to two years prior to GP adoption).¹⁷ We not only look at GP adopters as *targets* of corporate control activity (i.e., asset sales, stake sales, firm sales, and spinoffs), but also as *initiators* (i.e., asset purchases, stake purchases, firm purchases, and share repurchases). Moreover, we separately examine both successful and unsuccessful outcomes to adopters' corporate control efforts. The results of our analysis are shown in Tables 6 and 7 (for the sample firms as targets of corporate control activity) and Tables 8 and 9 (for the sample as initiators of corporate control activity).

Table 6 shows that both successful sales and unsuccessful sale attempts of GP adopters increase significantly in the two years following adoption compared to the two years prior to

¹⁶ Given that underperformers had a mean excess return of -25.56% in the year prior to adoption, the return reversal to come into line with market averages could therefore be interpreted as a significant *positive* turnaround.

¹⁷ We look at such a wide range of corporate control activities for a number of reasons: (i) A higher incidence of corporate control activities is more likely to put a firm in play; (ii) Since GP contracts generally cover the CEO and other top executives, top managers of subsidiaries may also be similarly covered, therefore making them less concerned about asset sales and spinoffs from the parent; (iii) Share repurchases can be a defensive maneuver against takeovers.

adoption ($t = 3.23$ and $t = 2.00$, respectively). It would thus appear, *prima facie*, that the evidence found in previous studies that GP adopters 'put themselves up for sale' holds up. A closer inspection reveals that it is not quite so. In the case of successful sales, the statistically significant increase following GP adoptions is attributable to asset sales and stake sales, *not* sale of the firm itself. (Indeed, number of sales of the whole firm register a statistically insignificant *decline* following GP adoptions). Table 7 reveals that the aggregate pattern holds true regardless of whether the firms were under- or overperformers. We also find, contrary to the prediction of the 'rundown' hypothesis, that overperformers sell proportionately more assets than underperformers (the t-statistic of difference in proportions between the two groups is 2.52, significant at 1%); overperformers also have more unsuccessful sale attempts, but the difference is not statistically significant.

Tables 8 and 9 examine similar evidence from the perspective of adopters as initiators of corporate control activity. The results here are generally stronger than in the case of adopters as targets. We find (see Table 8) that there is a highly significant increase in both successful purchases ($t = 7.12$) and unsuccessful purchase attempts ($t = 5.37$). This holds true for both under- and overperformers (see Table 9; all t-statistics are significant at the 1% level). Share repurchases register a significant increase for both under- and overperformers (again, significant at the 1% level). We find that the increase in corporate control activity of adopters as initiators shows an across-board increase (see Table 8): asset purchases increase (significant at 1%), stake purchases increase (significant at 10%), firm purchases increase (although the increase is not significant), as do share repurchases, failed bids, and intended acquisitions (all significant at 1%). Table 9 reveals, however, that there are more across-the-board and consistent increases for the underperformers in our sample, relative to the overperformers, although the difference in proportions of activity between the two groups is not statistically significant.

Summarizing the evidence on corporate control activity in relation to GP adoptions in our sample, we find the following: (i) While there is a general increase in the corporate control activity of our sample firms as *targets*, it is mostly attributable to increased divestitures and stake sales; (ii) We do *not* observe an increase in mergers and acquisitions activity with GP adopters as targets of such activity; (iii) Overperforming firms are, overall, more likely to be targets for sale of assets or the whole firm, than underperforming firms; (iv) There is a dramatic increase in corporate control activity of our sample firms as *initiators* of such activity, and this increase is fairly across-the-board and similar between both under- and overperformers; (v) There are significant increases both in successful sales/purchases and in unsuccessful sale/purchase attempts.

IV.3. Operating and Financial Performance Pre- and Post-GP Adoption

To test whether the increase in corporate control activity is an attempt by managers to cash in their GP by not expending effort, we examine operating and financial characteristics of GP adopters starting two years prior to adoption, and ending two years after, with the sample further split into under- and overperformers (Table 10). We see that GP adoptions lead to no significant changes in post-adoption (relative to pre-adoption) growth in sales or assets. There are no significant changes in capital structure, no significant increase in profitability and free cash flows (although profit and free cash flow growth swing from negative to positive), no significant changes in expenditure patterns on key items such as such SG&A expenses or capital expenditure (although we observe that R&D spending as a percentage of sales declines; but R&D data are available for only 150 firms in our sample), no significant changes in management of working capital, and no significant changes in the firms' price-to-earnings or market-to-book ratios. Further, there is no significant difference between pre- and post-adoption performance in eleven out of the twelve variables for underperformers, and no significant difference between pre- and post-adoption performance in *any* of the twelve

variables for overperformers.

The analysis of operating and financial characteristics thus suggests that GP adoptions have simply no impact on the post-adoption performance of the firms, regardless of whether their stock has performed well or poorly prior to adoption.

Table 11 examines the effects of some of these financial and operating characteristics on the one-year excess (beta = 1) returns in the fiscal year following the GP adoption year. Specifically, we examine whether a firm's revenue growth rate in the post-adoption year (relative to pre-), its increase in debt, its free cash flow growth rate, and increases in its investment in future growth opportunities (as proxied by growth rates of R&D and capital expenditures) have an impact on its post-adoption stock price performance.¹⁸ With the exception of the revenue growth rate, none of the variables has a consistently significant impact: The share prices of those GP adopters who increase their post-adoption revenue growth do better.¹⁹

IV.4. CEO Characteristics and GP Adoption

We now examine how CEO characteristics interact with the quality of pre-adoption performance. Specifically, we ask: (i) whether CEO age and experience differ between under- and overperformers; (ii) whether the nature of non-GP CEO compensation—fixed salary and stock-based compensation—differs between under- and overperformers; and (iii) whether we

¹⁸ We examine revenue growth rate, free cash flow growth rate, R&D spending and capital expenditures as proxies for investments in future growth opportunities following GP adoptions; 'run down' behavior would be consistent with underperformers slowing their growth and cutting back on such expenditures and hence, a negative stock price reaction associated with increases in these variables. We examine the debt ratio as a proxy for a defensive mechanism to prevent takeovers; 'run down' behavior would be consistent with a negative stock price impact associated with increased use of debt.

¹⁹ This result holds true also when the regressions are run on the split sample (we do not report the result as a table). In other words, the stocks of growing firms perform better post-adoption, regardless of whether they are under- or overperformers prior to GP adoption.

observe increases in CEO turnover following GP adoption, and if such turnover happens with greater frequency among underperformers.²⁰ Table 12 summarizes the results.

CEOs of overperforming GP adopters are younger (but only by about two years, on average), but neither their tenure in the company nor their tenure as CEO differs significantly. Overperforming CEOs are paid a slightly higher fixed salary and bonus in the year of adoption compared to underperformers, but the difference is not statistically significant. Neither the proportion of CEOs compensated by stock, nor the change in the value of their stock compensation (as a proportion of their fixed salary plus bonus) differs between under- and overperformers.

The most interesting result concerns CEO turnover: There is no significant difference between under- and overperforming firms in the rate of CEO departures following GP adoption. In the two years following adoption, 7.53% (3.76% annually) of underperformer CEOs leave the company; the proportion is 6.20% (3.10% annually) for overperformers. This result is interesting because, for all the firms represented in the annual *Forbes* list between 1980 and 1994 (approximately 12,000 firm-years) the average annual CEO turnover is 4.9%. Thus, if anything, a *lower* proportion of CEOs—although the difference is not statistically significant—leave their companies following a GP adoption.

Overall, therefore, the results of the CEO analysis reveal that performance prior to GP adoptions are not in any way meaningfully impacted by CEO characteristics, nor do we observe GP adoptions or quality of prior performance resulting in higher CEO turnover.

V. Discussion of Empirical Findings

Our goal in this paper was two-fold—one, to investigate whether golden parachutes

²⁰ We expect that 'run down' behavior would be consistent underperforming firms having less experienced and perhaps younger CEOs, with a greater reliance on fixed (as opposed to stock-based) compensation, and having greater post-adoption CEO turnover (all compared to overperforming firms).

provided managers the incentive to engage in corporate control activities that might result in the firm being put in play with the resulting threat of job loss and two, to examine more generally if managers of firms that adopted golden parachutes engaged in value-decreasing activities. In particular, the paper investigated if this incentive is greater for firms that had underperformed prior to the golden parachute adoption. If managers engaged in such value-decreasing activities that made the firm more attractive as a takeover candidate, we would also observe greater CEO turnover among underperformers.

We find strong evidence that corporate control activities of firms increased after the adoption of GP. Both inward and outward corporate control activities—i.e., where sample firms were targets (asset sales, stake sales, spinoffs) and where they were initiators (asset purchases, stake purchases, share repurchases)—increased significantly. This provides direct evidence that golden parachutes do indeed have the intended consequence of increasing corporate control activity.

While such corporate control activities could be a result of top management's desire to collect on the golden parachutes at the expense of shareholders, the analysis of performance of the firms before and after GP adoption across a wide range of operating, financial, and stock price characteristics shows that there is simply no systematic difference. Moreover, there is no evidence that firm performance suffers post-adoption, even for underperformers, who are presumably more likely to cash in on their GP.

The evidence from CEO turnover and CEO characteristics also does not support the rundown hypothesis. We find CEO turnover for GP adopters to be no different than the overall average. Therefore, our analysis offers no support for the hypothesis that managers attempt to cash in on their GP at the expense of shareholders.

Perhaps these results should not be that surprising. There are several factors that dissuade managers from such opportunistic behavior. First, compensation practices have

evolved significantly over the last two decades with incentive compensation, in the form of stock options and restricted stock, becoming a more significant portion of top management's compensation.²¹ Second, value based measures, such as Economic Value Added (EVA) or its variants, are being increasingly employed to measure performance on an annual basis, making it difficult to mask value destruction. Third, awareness among investors of the notion of value has increased with the publication of corporate rankings based on value created.²² Fourth, corporate governance standards have changed quite substantially during the past two decades, with boards becoming more active in monitoring the management.²³ Given this changed environment, and despite the dramatic growth in the popularity of golden parachutes since the 1980s, it is not surprising that management is reluctant to engage in running down a company to simply to cash in on them.

VI. Conclusion

The original motivation for golden parachutes was that they would provide senior

²¹ Murphy (1998) reports that median (constant) pay levels for manufacturing CEOs have increased by 68%, from \$1.9 million in 1992, to almost \$3.3 million in 1996, and that '....the increase in pay is largely attributable to the increases in the grant-date value of stock option grants.' (p. 7). He also reports that, with the exception of utilities, stock options replaced basic salaries as the single largest component of compensation. Elsewhere (p. 16), Murphy (1998) reports that 62.7% of CEOs of the largest 1000 companies received stock option grants in 1992, and that an additional 12% of the firms offered stock options to non-CEO executives. Since 1992, these proportions have, in all likelihood, gone up.

²² For instance, *Fortune* magazine publishes an annual ranking of firms based on their economic value added and their market value added.

²³ Boards have become more active for a number of reasons. First, increased institutional ownership has likely imposed more discipline on managers. Second, shareholder lawsuits have made boards more aware of their fiduciary responsibility, as highlighted by new guidelines issued by the National Association of Corporate Directors that seek to eliminate inattentive, passive, and uninformed board directors (see "Listen Up," *Business Week*, November 25, 1996 page 100 – 106). Finally, rankings of boards and their governance performance by publications such as *Business Week* and by institutional investors such as CalPERS have put pressure on boards to be better representatives of shareholders. For a detailed analysis of the role of board activism and its impact on firm performance as measured by EVA, see Millstein and MacAvoy (1998).

managers the incentive to seek (or not resist) shareholder value-maximizing takeover bids, or more generally, the incentive to go about doing their jobs despite the possibility of job loss. However, golden parachutes also potentially create the perverse incentive to run down a firm and make it an attractive takeover candidate (so that managers can cash in on their golden parachutes), especially in the case of poorly performing firms that may require a great deal of turnaround effort.

As we pointed out in the introductory section of the paper, golden parachutes have caused a great deal of concern among the public and among policy makers. In response, the US Congress passed laws that limit tax deductibility to golden parachute payments, and levy additional taxes on such payments.

But our study suggests that these concerns are misplaced. Regardless of whether they are underperformers or overperformers prior to adoption, managers do not appear to run down their firms—they do not put the firm up for sale any more often than average, they do not leave in droves, and their operating, financial, and stock price performance subsequent to adoption show no evidence of value-destruction. Indeed, from the dramatic increase in the corporate control activity that we document, we surmise that all golden parachutes have done is to give managers the confidence (and a cushion) to go about restructuring their firms without having to worry about losing their jobs. It appears that critics of golden parachutes view its effects in isolation of other aspects of incentive compensation structures or other sources of managerial discipline.

If our findings have any validity, then the laws passed by the US Congress have simply imposed an additional burden on shareholders in the guise of protecting their interests. By limiting tax deductibility to "excess" GP payments, Section 280G of the Deficit Reduction Act of 1984 and Section 162(m) of the Budget Reconciliation Act of 1992 have imposed a direct additional cost on residual cash flows. Section 4999 of the Deficit Reduction Act of 1984, by

imposing an excise tax of 20% on the recipient, adds to this burden since it is effectively passed on the shareholder by "grossing up" the GP payment.²⁴ It appears that lawmakers might do shareholders a huge favor by repealing these provisions, and by letting the corporate governance process and the market for corporate control discipline managers.

²⁴ Bowie and Fischer (1996) find that 45% of GP agreements for all executives and 55% of CEO agreements promise to pay such excise tax gross-ups. Also, only about one-third of the agreements stipulate that payouts will be reduced to stay under the Section 280G ceiling.

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Table 1

Time Pattern of Golden Parachute Adoptions for 245 Sample Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994

Year	No. of Adoptions
1980	2
1981	9
1982	11
1983	13
1984	26
1985	33
1986	25
1987	28
1988	33
1989	35
1990	13
1991	6
1992	3
1993	6
1994	2
Total	245

Source: ECRInfo Database.

Table 2

Descriptive Statistics for Fiscal Year of Golden Parachute Adoption for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994

Variable	Mean	Standard Deviation	Median	Minimum	Maximum	N
Sales (\$ mn)	3290.28	4659.72	1712.55	127.31	39011.00	245
Assets (\$ mn)	2971.46	4639.86	1466.63	109.90	38528.00	245
Net Income (\$ mn)	150.04	296.57	76.13	-581.00	2946.00	245
R&D Expenditure (as % Sales)	3.48%	3.94%	2.12%	0.00%	25.32%	150
Free Cash Flow (as % Sales)	-0.27%	24.17%	2.07%	-312.15%	48.37%	236
Capital Expenditure (as % Sales)	8.20%	9.54%	5.40%	0.00%	106.62%	241
Market-to-Book Ratio	2.02	1.30	1.72	0.38	11.50	245
P/E Ratio	12.38	15.83	12.50	-85.45	97.88	243
1-year CAR: Year of adoption ^a	-0.67%	35.11%	-3.03%	-80.29%	150.38%	245
1-year CAR: Year <i>prior to</i> adoption ^b	-1.74%	37.37%	-5.20%	-72.10%	240.19%	245
1-Year CAR: Year <i>after</i> adoption ^c	-0.39%	35.92%	-1.01%	-95.62%	128.32%	245
3-year CAR: Year of adoption ^d	-2.15%	19.17%	-2.23%	-55.61%	95.37%	232
Beta ^e	1.362	0.518	1.311	0.036	3.474	206
Alpha ^f	0.000	0.001	0.000	-0.004	0.005	206

^a Annual cumulative abnormal return relative to the S&P 500 index, derived from returns compounded during the 12-month period comprising the fiscal year of adoption of golden parachute, assuming a beta = 1.

^b Annual cumulative abnormal return relative to the S&P 500 index, derived from returns compounded during the 12-month period comprising the fiscal year prior to the adoption year, assuming a beta = 1.

^c Annual cumulative abnormal return relative to the S&P 500 index, derived from returns compounded during the 12-month period comprising the fiscal year after the adoption year, assuming a beta = 1.

^d Average annual cumulative abnormal return relative to the S&P 500, derived from returns compounded during the 36-month period ending with the fiscal year of golden parachute adoption, assuming a beta = 1.

^e Derived from CRSP data using standard event study methodology (see Section IV.1 for description).

^f The intercept term in the regressions to calculate the beta above (see Section IV.1 for description).

Table 3

Comparison of Descriptive Statistics for Fiscal Year of Golden Parachute Adoption between Underperformers^a and Overperformers^b for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994

Variable	Underperformers ^a	N	Overperformers ^b	N	t-statistic ^c
Sales (\$ mn)	3403.06	140	3112.09	105	0.001
Assets (\$ mn)	2878.30	140	3065.53	105	0.000
Net Income (\$ mn)	118.94	140	191.59	105	0.055
R&D Expenditure (as % Sales)	3.28%	84	3.67%	66	0.978
Free Cash Flow (as % Sales)	0.00%	136	-0.55%	100	0.392
Capital Expenditure (as % Sales)	8.43%	138	7.92%	103	0.543
Market-to-Book Ratio	1.71	140	2.45	105	4.946***
P/E Ratio	11.12	138	14.26	105	1.181
1-year CAR: Year of adoption ^d	-0.40%	140	-1.03%	105	0.045
1-year CAR: Year prior to adoption ^e	-25.56%	140	30.05%	105	10.182***
1-Year CAR: Year after adoption ^f	-2.88%	140	2.96%	105	0.365
3-year CAR: Year of adoptions ^g	-9.94%	130	7.80%	102	3.921***
Beta ^h	1.360	126	1.365	80	0.098
Alpha ⁱ	0.000	126	0.000	80	0.000

a Defined as firms whose annual cumulative abnormal return during the year prior to the year of golden parachute adoption is lower than the equivalent-period S&P 500 return, assuming a beta = 1.

b Defined as firms whose annual cumulative abnormal return during the year prior to the year of golden parachute adoption is greater than the equivalent-period S&P 500 return, assuming a beta = 1.

c t-statistic of test of difference in means (***) significant at 1%; ** significant at 5%; * significant at 10%.

d Annual cumulative abnormal return relative to the S&P 500 index, derived from returns compounded during the 12-month period comprising the fiscal year of adoption of golden parachute, assuming a beta = 1.

e Annual cumulative abnormal return relative to the S&P 500 index, derived from returns compounded during the 12-month period comprising the fiscal year prior to the adoption year, assuming a beta = 1.

f Annual cumulative abnormal return relative to the S&P 500 index, derived from returns compounded during the 12-month period comprising the fiscal year after the adoption year, assuming a beta = 1.

g Average annual cumulative abnormal return relative to the S&P 500, derived from returns compounded during the 36-month period ending with the fiscal year of golden parachute adoption, assuming a beta = 1.

h Derived from CRSP data using standard event study methodology (see Section IV.1 for description).

i The intercept term in the regressions to calculate the beta above (see Section IV.1 for description).

Table 4

Comparison of Mean and Standard Deviation of Excess Returns and Proportion of Positive and Negative Excess Returns for Golden Parachute-Adopting Underperformers and Overperformers versus S&P 500 Underperformers and Overperformers during 1980-1994
(Figures in parentheses are t-statistics of difference between the relevant variable for the Golden Parachute Sample and the population of S&P 500 firms)

Statistic	Golden Parachute Sample ^a		All S&P 500 Firms ^b	
	Underperformers	Overperformers	Underperformers	Overperformers
Mean return	-25.56% (3.31) ^{e***}	30.05% (1.79) ^{e*}	-20.30%	24.09%
Std. deviation of return	17.85%	32.65%	16.50%	23.71%
Proportion to total	57.14% (3.69) ^{c***}	42.86%	45.20%	54.80%

^a N = 245 (140 for underperformers + 105 for overperformers).

^b N = 7480 firm-years for the period 1980 to 1994 (= 3376 for underperformers + 4104 for overperformers).

^c t-statistic of test of difference in means and proportions (***) significant at 1%; ** significant at 5%; * significant at 10%).

Table 5

2-Day (day -1 and day 0)^a Announcement Effect (Cumulative Abnormal Return, CAR^b) of Golden Parachute Adoptions, and Comparison of 2-Day Announcement Effect and 1-year and 3-year Excess Returns between Underperformers and Overperformers for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994

Variable	Full Sample (N = 206)	Underperformers (N = 126)	Overperformers (N = 80)	t-statistic ^c
Mean 2-Day CAR	0.06% ^d	0.02% ^f	0.10% ^f	0.604
Std. deviation of 2-Day CAR	1.37%	1.29%	1.48%	
Min (2-Day CAR)	-7.90%	-6.10%	-7.90%	
Max (2-Day CAR)	3.32%	2.91%	3.32%	
Percent 2-Day CAR positive	47.08%	44.44%	51.25%	0.954
1-year post-adoption excess returns		-2.88%	2.84%	0.471
3-year post-adoption excess returns		-10.92%	7.45%	4.532***

a The proxy filing date is treated as Day 0 of the announcement date; this date was available for only 206 out of the total sample of 245 firms.

b Announcement effect CAR is calculated as the actual minus predicted market-adjusted daily return cumulated over the day prior to and the announcement date, where market parameters (alpha and beta) are calculated over a 200-day period from Day -250 to Day -50.

c t-statistic for test of significance between underperformers and overperformers (***) significant at 1%; ** significant at 5%; * significant at 10%.

d None of the mean 2-Day CARs for the full sample, underperformer sample, or the overperformer sample is significantly different from zero.

e Annual cumulative abnormal return relative to the S&P 500 return, derived from returns compounded during the 12-month period and 36-month comprising the fiscal year following the adoption year, respectively, assuming a beta = 1. The sample sizes are 245 (Underperformers = 140; Overperformers = 105).

Table 6

Comparison of Post-Adoption^a versus Pre-Adoption^b Corporate Control Events for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994: Number of Adopters as Targets of Corporate Control Activity

Event	No. of Firms (N = 245)	t-statistic of pre- vs post- ^c
Asset sale		
Pre	78	
Post	99	1.97**
Stake sale		
Pre	37	
Post	58	2.40***
Spin-off		
Pre	10	
Post	6	-1.01
Firm sale		
Pre	19	
Post	15	-0.71
ALL SUCCESSFUL SALES ^d		
Pre	144	
Post	178	3.23***
Failed sale		
Pre	23	
Post	32	1.29
Attempted sale		
Pre	19	
Post	28	1.38
ALL UNSUCCESSFUL SALES ^e		
Pre	42	
Post	60	2.00**

a Two calendar years prior to adoption-year proxy filing date (if date unavailable, treated as June 1).

b Two calendar years after adoption-year proxy filing date (if date unavailable, treated as June 1).

c t-test of proportions of events post-adoption vs. pre-adoption number (***) significant at 1%; ** significant at 5%; * significant at 10%.

d #Successful sales = #Asset sales + #Stake sales + #Spinoffs + #Firm sales.

e #Unsuccessful sales = #Attempted sales + #Failed sales.

Table 7

Comparison of Post-Adoption^a versus Pre-Adoption^b Corporate Control Events by Underperformers and Overperformers for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994: Number of Adopters as Targets of Corporate Control Activity

Event	<u>Underperformers</u>		<u>Overperformers</u>		t-statistic of under- vs. over ^d
	No. of Firms (<i>N</i> = 140)	t-statistic of pre- vs. post ^c	No. of Firms (<i>N</i> = 105)	t-statistic of pre- vs. post ^c	
Asset sale					
Pre	38		40		
Post	52	1.79*	47	0.98	-1.02
Stake sale					
Pre	23		14		
Post	30	1.07	28	2.41***	0.95
Spin-off					
Pre	7		3		
Post	1	-2.15***	5	0.72	2.02**
Firm sale					
Pre	9		10		
Post	10	0.23	5	-1.34	-0.77
ALL SUCCESSFUL SALES ^e					
Pre	77		67		
Post	93	1.96**	85	2.78***	2.52***
Failed sale					
Pre	14		9		
Post	15	0.20	17	1.68*	1.26
Attempted sale					
Pre	10		9		
Post	15	1.05	13	0.90	0.41
ALL UNSUCCESSFUL SALES ^f					
Pre	24		18		
Post	30	0.91	30	1.97**	1.28

^a Two calendar years prior to adoption-year proxy filing date (if date unavailable, treated as June 1).

^b Two calendar years after adoption-year proxy filing date (if date unavailable, treated as June 1).

^c t-test of proportions of events post-adoption vs. pre-adoption number (***) significant at 1%; ** significant at 5%; * significant at 10%.

^d t-test of proportions of proportion of events for overperformers vs. underperformers (***) significant at 1%; ** significant at 5%; * significant at 10%.

^e #Successful sales = #Asset sales + #Stake sales + #Spinoffs + #Firm sales.

^f #Unsuccessful sales = #Attempted sales + #Failed sales.

Table 8

Comparison of Post-Adoption^a versus Pre-Adoption^b Corporate Control Events for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994: Number of Adopters as Initiators of Corporate Control Activity

Event	No. of Firms (N = 245)	t-statistic of pre- vs. post ^c
Asset purchase		
Pre	64	
Post	99	3.36***
Stake purchase		
Pre	25	
Post	38	1.75*
Firm purchase		
Pre	73	
Post	89	1.54
ALL SUCCESSFUL PURCHASES ^d		
Pre	162	
Post	226	7.12***
SHARE REPURCHASE		
Pre	48	
Post	78	3.10***
Failed bid		
Pre	10	
Post	43	4.80***
Intended acquisition		
Pre	12	
Post	25	2.22***
ALL UNSUCCESSFUL PURCHASES ^e		
Pre	22	
Post	68	5.37***

a Two calendar years prior to adoption-year proxy filing date (if date unavailable, treated as June 1).

b Two calendar years after adoption-year proxy filing date (if date unavailable, treated as June 1).

c t-test of proportions of events post-adoption vs. pre-adoption number (*** significant at 1%; ** significant at 5%; * significant at 10%).

d #Successful purchase = #Asset purchase + #Stake purchase + #Firm purchase.

e #Unsuccessful purchase = #Intended acquisition + #Failed bid.

Table 9
Comparison of Post-Adoption^a versus Pre-Adoption^b Corporate Control Events by Underperformers and Overperformers for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994: Number of Adopters as Initiators of Corporate Control Activity

Event	Underperformers		Overperformers		t-statistic of under- vs. over ^d
	No. of Firms (N = 140)	t-statistic of pre- vs. post ^c	No. of Firms (N = 105)	t-statistic of pre- vs. post ^c	
Asset purchase					
Pre	35		29		
Post	60	3.16***	39	1.47	-0.90
Stake purchase					
Pre	15		10		
Post	21	1.07	17	1.44	0.25
Firm purchase					
Pre	44		29		
Post	49	0.63	40	1.62	0.50
ALL SUCCESSFUL PURCHASES ^e					
Pre	94		68		
Post	130	5.37***	96	4.67***	-0.41
SHARE REPURCHASE					
Pre	28		20		
Post	43	2.06**	35	2.35***	0.44
Failed bid					
Pre	7		3		
Post	25	3.38***	18	3.45***	-0.14
Intended acquisition					
Pre	5		7		
Post	13	1.95**	12	1.20	0.54
ALL UNSUCCESSFUL PURCHASES ^f					
Pre	12		10		
Post	38	4.06***	30	3.51***	0.25

^a Two calendar years prior to adoption-year proxy filing date (if date unavailable, treated as June 1).

^b Two calendar years after adoption-year proxy filing date (if date unavailable, treated as June 1).

^c t-test of proportions of events post-adoption vs. pre-adoption number (*** significant at 1%; ** significant at 5%; * significant at 10%).

^d t-test of proportions of proportion of post-adoption-year events for overperformers vs. underperformers (*** significant at 1%; ** significant at 5%; * significant at 10%).

^e #Successful purchase = #Asset purchase + #Stake purchase + #Firm purchase.

^f #Unsuccessful purchase = #Intended acquisition + #Failed bid.

Table 10

Comparison of Post-Adoption^a to Pre-Adoption^b Operating Characteristics for All Firms and between Underperformers and Overperformers for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994

Variable	All Firms (N=245)		Underperformers (N=140)		Overperformers (N=105)	
	% Change Pre-GP	t-stat ^c Post-GP	% Change Pre-GP	t-stat ^c Post-GP	% Change Pre-GP	t-stat ^c Post-GP
Sales	20.34%	-0.33	14.43%	-0.15	28.41%	-0.31
Assets	24.18%	-0.40	20.29%	-0.37	29.64%	-0.13
LT Debt/MV(Equity) ^d	35.69%	0.56	44.34%	0.33	23.76%	0.55
Net Income/Sales	-61.54%	0.09	-73.79%	0.07	-44.61%	0.04
Free Cashflow/Sales	-42.25%	0.12	-39.08%	0.02	-44.18%	0.02
SG&A Exp./Sales	2.89%	1.29%	3.41%	-0.78	1.90%	3.44%
R&D Exp./Sales	7.91%	2.23%	3.93%	-0.39	13.14%	4.16%
Capital Exp./Sales	10.41%	12.77%	6.45%	0.36	5.69%	8.06%
Cash+MS/Assets	56.56%	56.41%	61.17%	0.00	51.76%	54.28%
Current Ratio	-1.89%	-1.49%	-2.50%	0.00	-0.90%	-0.22%
Mkt-to-book Ratio	14.29%	20.19%	3.07%	1.79*	37.12%	13.50%
P-E Ratio	-14.26%	-17.80%	-28.19%	-0.03	5.45%	4.80%

^a Percentage change during two fiscal years prior to golden parachute adoption year.

^b Percentage change during two fiscal years following golden parachute adoption year.

^c t-statistic of difference in means, where a positive number indicates a higher percentage change in the two years following GP adoption compared to the two years prior to adoption, and a negative number indicates a lower percentage change (***) significant at 1%; ** significant at 5%; * significant at 10%.

^d For this variable only, we report the pre- and post-adoption year levels (rather than changes).

Table 11

OLS Regressions of Post-Adoption Stock Performance and Operating Characteristics for 245 Firms on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994: The Dependent Variable is the CAR during the Fiscal Year Following the Adoption Year (POSTCAR), and the Independent Variables are % Growth in Sales in Year Following Adoption Relative to Year Before (SALESG), % Growth in Long term Debt in Year Following Adoption Relative to Year Before (DEBTG), % Growth in Capital Expenditure in Year Following Adoption Relative to Year Before (CAPXG), % Growth in Free Cash Flow in Year Following Adoption Relative to Year Before (FCFG), and % Growth in R&D Spending in Year Following Adoption Relative to Year Before (R&DG)

(t-statistics in parentheses)^a

Dependent Variable: CAR during the Fiscal Year Following the Adoption Year (POSTCAR)^b

	Constant	SALESG	DEBTG	CAPXG	FCFG	R&DG	Adj. R ²	N
(1)	-5.623 (2.208)	26.693 (4.195)***					0.064	245
(2)	0.487 (0.197)		-0.630 (0.833)				0.000	245
(3)	-2.600 (1.059)			5.456 (1.811)*			0.009	241
(4)	-0.701 (0.274)				0.107 (0.167)		0.000	236
(5)	0.003 (0.017)					8.826 (1.338)	0.006	138
(6)	-4.966 (1.883)	31.176 (4.613)***	-1.070 (1.46)				0.079	245
(7)	-5.411 (2.005)	28.229 (3.780)***	-1.118 (1.526)	1.516 (0.446)			0.070	241
(8)	-4.772 (0.017)	18.146 (2.122)**	-1.357 (1.670)*	6.219 (1.656)*	-0.009 (0.014)		0.049	236
(10)	-0.071 (0.017)	30.852 (2.086)**	-4.202 (1.76)*	3.688 (1.591)	-0.537 (0.635)	4.006 (0.489)	0.040	138

^a *** significant at 1%; ** significant at 5%; * significant at 10%.

^b Annual cumulative abnormal return relative to the S&P 500, derived from monthly returns compounded during the 12-month period comprising the fiscal year after the adoption year, assuming a beta = 1.

Table 12

Comparison of CEO Characteristics between Underperformers and Overperformers during Year of Adoption for 245 Firms^a on the New York Stock Exchange Adopting Golden Parachutes during 1980-1994
(Standard Deviations in parentheses)

CEO Characteristic	<u>Underperformers</u>		<u>Overperformers</u>		t-statistic ^b
	Mean (s.d.)	N	Mean (s.d.)	N	
CEO Age (Years)	57.64 (5.48)	96	55.85 (5.97)	82	-1.782*
Tenure in Company (Years)	23.99 (12.44)	96	22.65 (11.63)	82	-0.454
Tenure as CEO (Years)	7.34 (8.23)	96	6.35 (6.13)	82	-0.684
Fixed Salary plus Bonus (\$ '000)	1229.34 (1374.06)	95	1795.99 (2811.22)	80	0.028
Prop'n of CEOs with Equity Compensation	60.00%		56.25%		0.214
Change in Stock Value of Salary as % Fixed Salary plus Bonus ^c	16.08 (70.20)	57	33.74 (126.19)	45	0.167
Proportion of CEOs Changing within Two Years of GP Adoption ^d	7.53%		6.20%		-0.678

^a Data are available for only 176 firms (based on proxy statements).

^b t-statistic of test of difference in means, where a positive number indicates a higher percentage change for overperformers and a negative number indicates a lower percentage change (***) significant at 1%; ** significant at 5%; * significant at 10%.

^c Only for those CEOs also compensated with stock; derived as the dollar value of the total return in beginning of year equity value, divided by the dollar value of the fixed salary plus bonus.

^d Note that only this data item pertains to the two years following the year of golden parachute adoption.