

Managerial Reputation in Financial and Labor Markets

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Abstract: This paper investigates whether or not firm's top managers acquire reputation for ability based on the performance of the firms they manage. We show that financial markets' reaction to the news of a top manager's departure from a company is related to the prior performance of the firm under the manager; moreover, the subsequent labor market progress of the manager is related to the way in which the markets react to the departure news. We also find that prior compensation is a good predictor of future outside career opportunities when governance is good and managers are not entrenched. This complements prior work that shows that compensation in better run firms is less related to random events and more to managerial skill. Finally, we show that the markets' perception of ability is consistent with the performance of the firm that loses a top manager: a more negative announcement effect to the departure news is associated with worse accounting performance one and three years after the departure.

I Introduction.

The role of the managerial labor market as an incentive device has received substantial academic attention. Theory (e.g., Fama [1980], Holmström [1982]) suggests that if managers are concerned with external career prospects, they should make decisions at their current employers that increase their outside opportunities. Theory also demonstrates that these decisions may or may not be in the best interest of their current employer. However, the extent to which current actions affect future career opportunities outside the CEO's organization is relatively unexplored.

The answer to this question depends on the role that the top management, especially the Chief Executive Officers (CEO), play within the firm. One possibility is that they are just another competitive, homogeneous, input in the production function of the firm. Under this scenario, some managers get lucky and their firm thrives, others do not and their firm suffers, even though there is no real difference in managerial quality (Williams et al. [1990]). This view is not entirely without empirical support. For example, Jensen and Murphy [1990] conclude that CEO pay-market value performance sensitivities are "low" in the sense that they correspond to a median sharing rate of only about 0.325%. Bertrand and Mullainathan [2001] and Daines et al. [2005] find that CEO compensation is often more related to luck than to any kind of managerial actions. They report that this situation is particularly true in firms with weaker corporate governance.

An alternative view, however, is that managers are not all equal and some can increase the firm value (e.g., Bertrand and Schoar [2003], Hayes and Schaefer [1999]).¹ If this is the case, and if labor markets could recognize the benefit of superior managers, then managers *perceived to be of better ability* should have better career prospects and greater outside opportunities. Of course, some managers may be perceived to be of high ability because they are lucky; however, if markets form their beliefs rationally, lucky managers can enjoy better career prospects only if the market's priors allow for ability differences across managers.

¹ The fact that the CEO's ability matters for firm value is implicit in several lines of work. A fairly large literature has developed on the idea that the manager's action choices are affected by the inference that the managerial labor market can draw about her *ability* from the outcomes of such actions. Implicitly, this literature assumes that the managerial labor market rewards managers according to ability. Examples of papers along these lines are Fama [1980], Holmstrom [1982], Holmstrom and Ricart i Costa [1986], Narayanan [1985], Scharfstein and Stein [1990], Hirshleifer and Thakor [1992]. A number of "ability matching models" (e.g., Rosen [1982] and Waldman [1984]) argue that the difference in firm value from a more able manager, compared to a less able one, depends on firm characteristics. In these models, managers with particular ability are matched with firms where the marginal impact of their ability is the highest.

Markets, however, can have unreasonable priors. Hence, to merely establish that the market's perceptions of ability are consistent with labor market progress of the top managers does not imply that managerial ability matters for firm performance: it could well be that the market is fooled consistently by random outcomes that are not in the control of top management. Therefore, to tell whether there managerial ability differences really exist or whether ability is "only in the eyes of the beholder", we need to go beyond relationships of perceived managerial ability and managerial career progress. We explain below how we discriminate between these alternatives.

In this paper, we investigate these issues by compiling a sample of CEOs who left their jobs and examining the consequences of the departure. First, we ask if financial markets relate a firm's past performance to the CEO's perceived ability. In other words, do CEOs develop reputations for being effective managers? Second, if this is the case, does the perceived managerial ability (or reputation) translate into better career opportunities? Third, are the markets rational in attributing values to managers?

To investigate whether financial markets relate value creation to the managers' ability, we examine the stock market reaction around the announcement of a CEO departure. Our hypothesis is that the magnitude of the reaction should be negatively related to the company's past performance if financial markets attribute part of this performance to the ability or actions of the managers. Further, if more capable managers receive better pay relative to other executives in the company – possibly because they receive outside offers that are matched - then the market reaction should be negatively related to relative pay as well. Our results are consistent with this view. We find that both the buy-and-hold return over the preceding three years, as well as the relative pay of the CEO, are significantly negatively associated with the abnormal return around the CEO departure. This result is robust to alternative specifications. We also find that the buy-and-hold return is negatively related to the announcement effect for a sample of top tier (non-CEO) executive departures to CEO positions in other companies (for this sample, relative pay is not meaningful as the rank or position of the top executive varies).² This suggests that managers can generate personal reputation in financial markets.

We then investigate whether perceived managerial ability or reputation translates into better career opportunities. We test three implications of this idea. First, if the announcement effect is more negative, then the CEO should have a higher reputation and his career prospects should be better on average. Second, if the labor market infers the

² These are simply those cases in our CEO turnover sample where an outsider who was not a CEO of his previous company became the new CEO of a company in our CEO turnover sample.

CEO ability directly from past stock price performance, then the career progress should be better for those running better performing firms. Third, if companies reward their CEOs according to their perceived ability, we should also see better career progress for the better paid CEOs once they leave their companies. While Bertrand and Mullainathan (2003) argue that luck helps top management receive better pay, they also show that this happens primarily in poorly governed firms. Hence, in better governed firms, pay should correlate more with managerial ability, so that ability driven pay-progress relationships should be confined to firms with better governance. This, then, is one way to test whether real, as opposed to perceived (or luck-driven) managerial ability explains managers' career progress. We test this proposition using various definitions of governance quality.

Our results are consistent with our hypotheses. First, we find that a more negative stock price reaction around the announcement of the CEO's departure results in better career progress for the manager, especially when the CEO leaves a firm with good governance. As expected, and consistent with Fee and Hadlock (2003), we find that the returns over the past three years predicts the CEO's career progress. Third, we find that the CEO's pay relative to the four other top executives of the company is a good predictor of his progress when he leaves a company; however, consistent with Bertrand and Mullainathan (2003), this result only holds for CEOs from firms with good governance where pay is less likely to be related to luck.³

These results show that the financial and labor markets perceive managerial ability similarly. We next investigate whether these markets are rational when they attribute values to the managers. To investigate the contribution of CEOs to firm performance, we study the relation between the perceived value of CEO to the firm and the firm's performance after the CEO departure. Consistent with the notion that CEO ability matters, we find that more negative announcement period abnormal returns are generally followed by a more serious deterioration in ROA, again controlling for the past ROA of the firm and the change in industry ROA. Further, these results also hold for a sample of executive moves from non-CEO to CEO positions.⁴ These results complement those of Huson et al. [2004] who also document that announcement period abnormal returns are positively related to subsequent accounting performance for a sample that comprises forced turnovers and voluntary turnover. However, their voluntary turnover sub-sample,

³ We use three criteria previously used in the literature to identify firms with poor governance. Our results hold across various sub-samples of good and poor governance firms irrespective of whether all three criteria or *any* two of the three criteria are imposed simultaneously to identify firms with poor governance.

⁴ In principle, a similar test could also be done on the performance of the new firms: do executives perceived to be more capable improve the performance of the company they join? In section VI, we explain why we do not pursue such a test.

comprising more than 70% of the overall turnover sample, includes retirements, and the mean and median announcement period abnormal return for this sub-sample is positive. Therefore, they are not specifically picking up departures that indicate the loss of executives who are “above average” in ability.

One possible explanation of our results is that managers leave the firm when they anticipate a deterioration of the firm’s performance. If this were the case, and markets realized this incentive, then the market reaction would be negative if a manager voluntarily left his job for another employment (good or moderate as opposed to poor progress in the labor market). Moreover, a negative market reaction would be associated with worse subsequent performance. On the other hand, if the manager was forced to quit because of non-performance, and was replaced by a more competent CEO, then the announcement effect could be positive and performance could improve subsequently (Huson et al. [2004]). However, we show that the announcement period returns predict subsequent performance even if we restrict attention to the sample of CEO departures that are associated with good or moderate progress, and for the sample of non-CEO-to-CEO moves. Since there is no reason why managers’ private information about the state of the firm should be systematically related to their future career progress, this alternative explanation would not explain a positive relationship between the announcement period return and subsequent accounting performance within these sub-samples.

This paper contributes to the literature in several different ways. At a general level, we bring together within one framework and test several related hypotheses about managerial ability and reputation formation for a sample of managerial turnovers that occur in a large cross-section of firms. As we shall discuss below, different sample selection criteria in existing studies makes comparisons difficult, and it is also not clear how these different results collectively “add up”. Thus, we integrate existing results. However, we also make a number of specific contributions. First, we show that prior compensation is a good predictor of future outside career opportunities when governance is good and managers are not entrenched. This complements prior work by Bertrand and Mullainathan [2001] and Daines et al. [2005] who show that compensation in better run firms is less related to random events and more to managerial skill. Our results extend this result by showing that potential employers pay attention to the amount of compensation paid to the manager and use it as a way to filter prospective employees. Second, we show that while pay and past performance predict abnormal returns around managerial departures in a way that is consistent with managerial reputation formation, there is information content about managerial ability in the announcement period abnormal returns

that is not subsumed in prior performance and pay. Hayes and Schaefer [1999] show that firms that lose managers to other firms experience negative abnormal returns, while Fee and Hadlock [2003] find that executives who jump to other firms come from firms with superior stock performance compared to control groups. We generalize these results by showing that the magnitude of the return around the CEO departure is systematically related to the CEO career outcome. Third, we show that the market's perception of the manager's ability is related to the subsequent performance of the firm that loses the manager – providing direct evidence that managerial ability matters. These results extend Huson et al. [2004] to sub-samples where departure announcements are associated with negative abnormal returns, indicating that when managers of above-average ability leave the firm, accounting performance worsens.

The rest of the paper is organized as follows. Section II reviews prior literature. Section III discusses the data and our sample. Section IV reports our empirical test on the existence of managerial reputation, while section V discusses its effect on the career progress of CEOs. Section VI considers the performance of the firm after the CEO's departure. Section VII concludes this paper.

II Literature Review.

1) Cross-sectional differences in CEO ability.

Our first research question asks if financial markets recognize or perceive ability differences across CEOs. This pre-supposes the existence of cross-sectional differences among managers in general, and CEO in particular. The empirical literature on this topic is fairly limited but supportive of the idea that these differences exist and matter. For example, Lieberman et al. [1990] find significant CEO fixed effects in productivity in the U. S. and Japanese automobile industry. More recently, Bertand and Schoar [2003] find that CEOs have different managerial styles that are carried as they go from one firm to another. They provide evidence that these differences matter for a wide range of corporate decisions such as investment, and financial/organizational practices. In addition, management styles appear to be related to manager's performance and pay.

2) Firm performance and career opportunity

Our second research question asks if the perceived differences in managerial skill affect CEO careers.⁵ Hayes and Schaefer [1999] look at announcement returns around a sample of CEO-to-CEO moves (24 cases) and non-CEO-to-CEO moves (105 cases)⁶, and compare the announcement returns with that of a control sample of CEO deaths (29 cases). They find that for the former sample, abnormal returns average -1.51% compared to 3.82% for the latter. They find further that the announcement effects are more negative the larger is the ratio of assets of the new firm to the old firm. They argue that this evidence is consistent with Rosen's [1982] matching model which postulates that managerial skills are complementary to the scale of resources under their control; hence, more capable managers are likely to move to bigger firms and the loss of firm value to the existing firms will be greater (corresponding to more negative announcement effects) when these managers are raided by larger firms. Finally, they find that abnormal returns for firms losing top managers and those hiring the same individuals as CEOs (presumably, around the announcement of hiring – details are not provided in the paper) are weakly negatively related, suggesting the loss to one firm is related to the gain to the other. Coughlan and Schmidt [1985] and Warner et al. [1988] find that CEO turnover is negatively associated with stock performance.

More recently, Fee and Hadlock (2003) study whether prior performance of firms affects the probability of a top executive in that firm being “raided” by another firm. Their main sample is constructed based on identifying CEO changes firms in the top 1000 firms listed in both Compustat and CRSP at the beginning of the fiscal year based on book assets, sales or market value over the 1990-1998 period, and then considering cases of outside hires. They then identify the cases in which the outside successor CEOs are from other public companies, and determine the rank of the newly appointed CEO in the previous company. They identify 43 cases of CEO-to-CEO moves and 214 cases of jumps to CEO positions from non-CEO positions. They also classify those cases in which the appointment appears to be an immediate jump to a new job – and call these “raids”, i.e., instances of top-tier executives being poached by other firms. They find that based on five year buy-and-hold returns immediately before the departures, firms losing executives to CEO positions elsewhere outperform their benchmarks, especially for raids and for executives with CEO rank in their earlier organizations. Fee and Hadlock (2003) construct a second sample based on the S&P 500 firms in the ExecuComp database over the period

⁵ Previous empirical literature has considered the effect of performance on outside opportunities for mutual fund managers (Chevalier and Elison [1999]), investment advisors (Graham [1999]) or security analysts (Hong et al. [2000]).

⁶ The period is 1979-1994, and the source of data is Lexis/Nexis Executive Changes and News databases.

1993-1998. They determine all executive changes from ExecuComp for these firms, and then use the Dow Jones Interactive database to determine the executive's fate. This classification produces 128 cases of managers jumping to new public firms, of which 5 are CEO-to-CEO moves, and 44 are non-CEO-to-CEO moves. The main result is that 5 year buy-and-hold return has a significant positive coefficient for jump to CEO positions, and an insignificant coefficient for jumps to non-CEO positions. This is consistent with other evidence provided in the paper that moves to non-CEO positions are essentially lateral moves and do not look like raids. Executives who move to non-CEO positions typically end up in smaller firms and have modest increases in pay.

Fee and Hadlock (2004) provide an extensive analysis on the career progress of executives – including CEOs and non-CEOs – that leave S&P 500 firms. The sample is constructed in the same way as their second sample (sample 2) in the earlier paper. They provide a comprehensive classification of the reasons and circumstances around the departure, i.e. whether or not the executive left the company for exogenous reasons, was fired, or there were other reasons such as policy differences or a scandal. One of the main findings is that executives leaving S&P 500 firms do not typically do well, and seem to move to inferior jobs, in terms of both relative size and relative pay. In fact, even executives moving from non-CEO positions in S&P 500 firms to CEO positions elsewhere end up in firms with a median book value of assets that is 4% of that of the firms they leave.

3) Compensation, skill and entrenchment.

Prior literature has shown that managerial entrenchment and poor governance have two effects on CEO compensation: one on the level, and the other on its sensitivity to managerial effort or performance. Rose and Shepard [1997] test whether it is CEO ability or the degree of CEO entrenchment that accounts for CEO pay. They argue that compared with CEO in focused firms, those in diversified firms could command a higher premium either because it requires more able CEO to manage these firms, or because diversification makes CEO more entrenched. They show that it is CEO ability, not entrenchment, that explains compensation. Bertrand and Mullainathan [2001] show that, consistent with a skimming model, CEO pay responds as much to a lucky dollar (a dollar generated by a totally exogenous event) as to a general dollar. Also consistent with skimming, they find that better governed firms pay their CEO less for luck. More recently, Daines et al. [2005] examine whether highly paid CEOs are “skilled” in the sense that they are able to continue past good performance and reverse past poor performance. They find that highly paid

CEO are more skilled than their industry counterparts when firms are small, when there is a large shareholder and the CEO has high stock-based incentives, and when firms face fewer environmental constraints on managerial discretion. By contrast, pay is negatively related to skill in firms constrained by environmental conditions. They also consider a sample of CEO turnovers and show that firms' post-turnover performance is less similar to pre-turnover performance if the new CEO's pay is not similar to the old CEO's pay. Collectively, these papers suggest that conditioning on corporate governance quality is important when considering CEO behavior.

4) Post-turnover accounting performance and announcement effects

Huson, Malatesta and Parrino (2004) construct a CEO-turnover sample based on the Forbes annual compensation surveys over the 1971-1995 period. This method gives them a sample of 1344 CEO turnovers at large public firms. The authors classify the turnovers as either "fired", "takeover related" or "voluntary", where the latter category includes retirements as well as cases in which the CEO takes up "comparable positions elsewhere". The latter category comprises 73% of the turnover sample; however, the focus of the study is the forced turnover category, for which the authors document a number of important facts. The average announcement period abnormal returns from a day before to the day of the turnover announcement for the entire sample is 0.34% and is significant at the 1% level; it is 0.26% (significant at the 1% level) for the 1097 cases of voluntary turnovers and 2.14% (t-statistic of 1.86) for the 111 cases of forced turnovers in which an outsider is appointed CEO.⁷ For the 94 cases of forced turnover where an insider is appointed as CEO, the announcement period abnormal return averages -0.83% and is insignificantly different from zero; however, the difference between abnormal returns for the outsider succession and insider succession is statistically significant from zero.

The main results focus on operating performance changes around the turnover events. The authors show that industry and control-group adjusted operating performance deteriorates prior to turnover and improves subsequently – and the effects are the strongest for the forced turnover sample (although multivariate analysis does not generate a statistically significant coefficient for the forced turnover dummy for change in operating performance from one year before to three years after the turnover). The authors also find that higher institutional ownership improves operating performance after management changes, and that the role of outsider directors in improving operating performance was

⁷ It is unclear for what percentage of the sample the identity of the eventual successor is announced along with the departure news of the incumbent CEO.

stronger in the 1988-94 sub-period than in the previous period. Most relevant for our analysis, they find that the two-day announcement period abnormal returns are positively related to the change in operating performance.

III Sample.

1) Turnover sample.

We compile a sample of CEOs who left their jobs before the age of 61 (to minimize the possibility that the departure is a retirement) from two databases: the Annual Compensation Surveys published in Forbes (covering 1992 to 2000) and Compustat's ExecuComp database (covering CEO in the S&P 500, the S&P Mid-Cap 400, and the S&P Small-Cap 600 from 1992 through 2002). In addition to the availability of proxy statements around the CEO departure, we also require the announcement to be recorded in Lexis-Nexis database. We use ExecuComp to identify changes in the identity of the CEO of a firm from one year to another year. For firms in the Forbes Surveys, we have information on the length of the CEO's tenure, and we can identify firm years with CEO turnover where the executive had been the CEO of the firm for no more than one year, indicating a recent CEO turnover. We then search Lexis/Nexis for information on both the incoming CEO, and identify the firms where they were previously employed. If the incoming CEO was the CEO of another company not already in our sample, this gives us additional cases of CEO departure. We then retrieve information on the length of the CEO's tenure (in addition to a number of other variables such as compensation data, data on board composition, and beneficial shareholding used in our regressions) from proxy statements,⁸ and then exclude cases in which the CEO tenure is less than 18 months. We also eliminate observations where the CEO change was caused by death or by a merger and acquisition activity (since we do not have the necessary information to calculate the stock price reaction to the announcement of the CEO departure). As a result, we identify 440 CEO departures.

Our search also identifies a sample of career moves from non-CEO to CEO positions. We conduct news search based on the Lexis/Nexis database to identify the announcement date when the non-CEO executive relinquished his or her earlier position in the previous company. We require the previous company to be a publicly listed company so that we can obtain stock returns data. These requirements leave us with 216 non-CEO-

⁸ Since the CEOs identified by this process are not all from ExecuComp, we rely on compensation data from the proxy statements.

to-CEO moves. Announcement effects are calculated around the departure announcement date whenever such a date is available. If no such date is available, but an announcement of new appointment is made, and from the news it appears that the top executive is still employed in the “old” company, then we take that to be the departure announcement date.

2) *Classification of labor market progress.*

We use the Lexis/Nexis database to collect the information on the career progress of the departing CEO. We search for the announcement of the next new appointment of the departing CEO that is made within three years subsequent to the CEO departure. Although we use several classifications to test the robustness of our results, our main one classifies the departing CEOs into three categories. CEOs are classified as experiencing poor progress if they only have new directorships (33 cases), or no new appointments (226 cases). CEOs who end up as a top executive of another public company and either have a new salary at least 90% of the old salary or move to a company that is larger than the old company are classified as having good career progress and are called the “good progress” group (69 cases). We initially use a 90% cut-off because newly appointed CEOs are often granted options and other deferred compensation that are fully vested immediately. The remaining CEOs are classified as having “moderate progress” (112). This category includes CEOs who take up a position in a smaller public company with a new salary less than 90% of the previous salary; those who join a private company; and those who become a public servant, a politician, a partner or an educator.

Panel A of Table 1 reports details of the subsequent employment for the “good progress” and “moderate progress” groups. For the “good progress” group, there are 7 cases (constituting 10% of this category) where the CEO does not become a CEO in the new company but the salary at the new company is *at least* 90% of the salary in the old company or the size of the new company is larger than that of the old company. Further investigation shows that the salary of 6 of these 7 departing CEOs was higher in the new company. In the “moderate progress” group, there are 28 cases in which the CEO retained a CEO position at the new company, the new salary was less than 90% of the old salary and the new company was smaller in size than the old company. The (untabulated) mean and median ratios of the new total compensation to the old total compensation for these 28 executives are 0.69 and 0.61, respectively.

Panel B of Table 1 reports the new salary in relation to the old salary and the size of the new company in relation to the old company for “good” and “moderate” progress

groups (as well as the non-CEO-to-CEO moves group).⁹ The mean relative size and the mean and median relative salary of the new company with respect to the old company are higher for the “good progress” group than the “moderate progress” group, and moreover, these ratios are above 1 for the former group but below 1 for the latter group. We conclude that our “good” and “moderate” progress classifications broadly capture career progress for those CEOs who end up with alternative employment within three years. Nevertheless, as discussed below, we perform several sensitivity checks to see if our results are sensitive to this classification.

Finally, in Panel C of Table 1, we report the cumulative abnormal returns based on the market model for two windows: from day -1 to +1 and from day -1 to +7 of the departure announcement. The mean and median cumulative abnormal returns are significantly negative for the good and moderate progress groups. This indicates that the market associates these departures with loss of value, and is consistent with Hayes and Schaefer’s [1999] interpretation that these are managers of above-average ability. The poor progress group and the non-CEO-to-CEO group do not indicate statistically significant abnormal returns, however.

3) Comparison with other samples.

One difficulty with connecting together results of existing studies on CEO turnover is that these are often based on different samples, and it is not clear to what extent the results generalize. Our sample is chosen with the specific objective bringing together within one framework and testing several related hypotheses about managerial ability and reputation formation for a sample of managerial turnovers that occur in a large cross-section of firms. We identify a total of 90 cases of CEO-to-CEO moves that satisfy our data requirements – a larger number than the 24 cases in Hayes and Schaefer [1999], the 43 cases in sample 1 in Fee and Hadlock [2003], 5 cases in sample 2 of Fee and Hadlock (2003) and 12 cases in Fee and Hadlock [2004]. Moreover, we identify 216 cases of non-CEO-to-CEO moves – this is comparable to Fee and Hadlock (2003), but much larger than the 51 cases in Fee and Hadlock [2004] and 105 cases in Hayes and Schaefer [1999]. Also, Huson et al. [2004] study a sample of voluntary turnovers and find a positive relationship between announcement period abnormal returns and subsequent operating performance. However, their sample of voluntary turnovers is a large sample that also includes retirements, and the announcement period abnormal returns are significantly positive.

⁹ For the latter group, we do not include relative salary information as the old salary is likely to be reflect the rank of the executive in the old company, which varies for our sample.

Therefore, this is unlikely to be a sample in which the departing CEO is of “above average” ability. Finally, in our sample of non-CEO-to-CEO moves differs from the sample 2 in Fee and Hadlock [2003] or Fee and Hadlock [2004] in that the non-CEOs in our sample move to bigger firms than in theirs. The median ratio of the size of the new firm to that of the old firm in Fee and Hadlock is only 4% - which is not surprising because the executives are from S&P 500 firms. In contrast, the same ratio in our sample has a mean of 100% and median of 20%.

IV Do CEOs develop reputations in the financial market for being effective managers?

1) Empirical setting

We first ask whether CEOs develop a reputation for being a good or a bad manager. To answer this question, we examine if financial markets relate value creation to the managers who run the firms. To this end, we regress the market reaction around the announcement of the CEO departure on the industry-adjusted stock price performance of the firm during the three years preceding the departure. If financial markets attribute part of this past performance to the CEO, the market reaction should be negatively related to past performance. Specifically, we estimate the following model using an ordinary least square (OLS) estimator with robust standard errors and clustering of observations by year:

$$(1) \text{ CAR}_{i,t} = \alpha + \beta_1 \text{ BHAR}_{i,t} + \beta_2 \text{ COMP}_{i,t} - \gamma_1 \text{ ROA}_{i,t} + \gamma_2 \text{ SALECHG}_{i,t} + \gamma_3 \text{ SIZE}_{i,t} + \\ \gamma_4 \text{ GOODperf}_{i,t} + \gamma_5 \text{ BADperf}_{i,t} + \gamma_6 \text{ GOODother}_{i,t} + \\ \gamma_7 \text{ BADother}_{i,t} + \gamma_8 \text{ RESTRU}_{i,t} + \gamma_9 \text{ BUSEXPAND}_{i,t} + \varepsilon_{i,t}$$

where *CAR* is the cumulative abnormal return for firm *i* at time *t* around the CEO departure announcement. We use two specifications: $\text{CAR}_{i,t}(-1,+7)$ is the cumulative abnormal return from *t*-1 to *t*+7 day using a market model; $\text{FFCAR}_{i,t}(-1,+7)$ is similar but based on the Fama-French Three Factor Model (1993). *BHAR* is the industry-adjusted past three-year buy-and-hold return. *COMP* is the salary of the CEO relative to that of the other four highest paid executives of the company. *ROA* is the industry-adjusted most recent net income before extraordinary items and discontinued operations divided by the total assets. *SALECHG* is the industry-adjusted most recent year-to-year percentage

change in sales prior to CEO departure. *SIZE* is the log of assets of the firm in the year before the turnover.

In addition, we also include controls for other announcements that are made at the time of the departure and could contaminate the announcement effect of CEO departure. To this end, we search Lexis/Nexis for news between a day before and 7 days after the announcement date. We classify the news into six categories: good performance, bad performance, other good news, other bad news, expansion and restructuring. We form six dummies (*GOODperf*, *BADperf*, *GOODother*, *BADother*, *RESTRU*, *BUSEXPAND*) that take the value of one if we find one of these types of news, and zero otherwise. The “good performance” category includes news reporting improvement in performance of the firm, such as an increase in dividend payment, an improvement in earnings, sales or operating performance. The “bad performance” category includes news reporting deterioration in performance of the firm, such as a dividend cut, a decrease in earnings, sales or deterioration in operating performance. The “other good news” category comprises of news reporting other good news associated with the company, such as an upgrade in credit rating. The “other bad news” category comprises of other bad news associated with the company, such as a downgrade in credit rating. The “expansion” category reflects news revealing some expansion of business, including the formation of partnerships and strategic alliances and winning of new contracts. The “restructuring” category includes news revealing restructuring of the company, including employment reduction and plant sale.

2) Empirical results.¹⁰

We present our findings in Table 2.¹¹ Before reporting results from our multivariate model in column 3 and 4, we report those from a univariate model in column 1 and 2. As expected, we find a significantly negative relation between past performance (*BHAR*) and the *CAR* and *FFCAR* in all specifications. We conclude that managers are able to develop a reputation for affecting firm value. However, this reputation is derived from his capacity to generate superior stock returns, not superior accounting performance.

¹⁰ All results are for non-winsorized data. Winsorization often generates more significant coefficients for some of the key tests. Our results are not attributable to extreme observations in the sample. Also, all our tests are based on robust standard errors and by-year clustering.

¹¹ We have a total of 440 CEO departures. Among them, there are 41 cases in which we do not have sufficient information to calculate *CAR*(-1,+7) and *FFCAR*(-1,+7). There are 89 cases in which we could not compute *CAR*(-1,+7), *FFCAR*(-1,+7), or the industry adjusted past 3-year buy-and-hold stock return. Consequently, we end up with 351 cases for the first two columns in Table 2. There are 5 more cases with missing value for the other explanatory variables in Table 2. Therefore, we have 346 observations for the third and fourth columns in Table 2.

Most other control variables are insignificant in the multivariate models. The only exception is *BADperf* (our proxy for the disclosure of news concerning bad performance), which is unsurprisingly negative. *Relative Pay* has a negative relationship with *CAR*, which is consistent with the idea that more capable managers are rewarded with higher pay and their departures are associated with more negative market reaction. However, the coefficient of this variable is insignificant in both regressions, though marginally so when the market model is used to calculate abnormal returns. In the last two columns of Table 1, we report the results for the non-CEO to CEO sample. Results are very similar.¹²

To test the robustness of these results, we perform several additional tests (results not tabulated).¹³ First, we adjust the buy-and-hold return by subtracting the corresponding return of the industry, size and book-to-market-matched portfolio, where there are 10 size groups and 5 book-to-market groups. The groups are either based on the CRSP and Compustat universe or are matched by industry (at the 2 digit SIC code). Our results hold. Further, they also mostly hold when the dependent variable is *CAR(-1,+1)* or *FFCAR(-1,+1)* : the results for the non-CEO sample are weaker and *BHAR* is marginally insignificant at conventional levels. They also hold when we substitute market value of assets as a control for size.

Finally, following Hayes and Schaefer [1999], we classify the non-CEO-to-CEO sample into two groups based on relative size of the new to the old firm. Rosen's [1982] matching model postulates that managerial skills are complementary to the scale of resources under their control; hence, more capable managers are likely to move to bigger firms and these are more likely to be "raids". Consistent with this notion, we find that the past 3 year buy-and-hold returns are significantly negative for the "above-median" group, but insignificant for the "below-median" group. Results are reported in Panel A of Table A1 in the Appendix.

V CEO reputation and career prospects.

2) Empirical specification.

¹² For the non-CEO to CEO sample, we do not control for other news announcements, because a preliminary search revealed that such announcements are much less common for this sample around the departure announcement. Moreover, we do not calculate relative pay, as the position and rank of the non-CEO-top executive varies. We begin with 216 non-CEO-to-CEO moves. Among them, there are 9 cases in which we could not compute *CAR(-1,+7)* and *FFCAR(-1,+7)*. When we calculate the industry adjusted past 3-year buy-and-hold stock returns, we further lose 46 observations. As a result, we only have 159 observations in the last two columns in Table 2.

¹³ All untabulated results that are discussed in the text are available from the authors on request.

We next examine how a CEO’s reputation or perceived ability affects his career progress. To do so, we regress an indicator for career progress on the CEO’s pay relative to the pay of the other top four executives in the company, the cumulative abnormal returns (*CAR*) for the firm they leave (henceforth, “old firm”) around their departure and two measures of past CEO performance: the 3 year industry-adjusted “Buy-and-Hold” return (*BHAR*) of the old firm, and a measure of industry-adjusted accounting performance. We calculate cumulative abnormal returns over two windows using two specifications: *CAR*(-1,+1) is computed from the market model over a day before to a day after the departure announcement, and *CAR*(-1,+7) is calculated similarly from a day before to seven days after the announcement. Adding the Fama-French factors to calculate abnormal returns (i.e., *FFCAR* instead of *CAR*) produces very similar results (these results are not reported). *BHAR* is as in section IV. To proxy for compensation, we use *SR4*, the ratio of the CEO’s salary to the salary of the four highest paid executives of the company over the three full fiscal years prior to CEO departure. Salary is the dollar value of the base salary (cash and non-cash) earned during the fiscal year. All our compensation data was drawn from proxy statements. As a robustness check, we also use relative total pay as well as “excess salary” which is the residual of a regression on the CEO’s base salary using firm and CEO characteristics as controls (including the average base salary of the other four highest paid executives). To measure accounting performance, we use the industry-adjusted return on assets. In addition, we consider two control variables: the manager’s age and the size of the firm (measured by the log of total assets). Specifically, we estimate the following model (an ordered logit estimator with robust standard errors):

$$(2) \quad \text{PROGRESS}_{i,t} = \delta_1 \text{CAR}_{i,t} + \delta_2 \text{BHAR}_{i,t} + \delta_3 \text{COMP}_{i,t} + \delta_4 \text{ROA}_{i,t} + \delta_5 \text{SIZE}_{i,t} \\ + \delta_6 \text{AGE}_{i,t} + e_{i,t}$$

We expect that the different measures of past firm performance should positively affect the CEO’s career progress. Therefore, we expect both δ_2 and δ_4 to be positive. To the extent that the *CAR* around departure announcement captures the value of the manager and that this value is not entirely firm specific, we expect δ_1 to be negative. Moreover, if compensation at the old firm captures managerial skill, we expect δ_3 – the coefficient of compensation *COMP* - to be positive. However, following Bertrand and Mullainathan (2003), we expect this to be particularly true in firms where corporate governance is good and the CEO is not entrenched. Table 4 gives the correlation matrix for the explanatory variables in Equation (2).

3) Empirical results.

Results are presented in Table 5.¹⁴ Column 1 shows the results for the overall sample. We only report results from multivariate regressions but results from univariate regressions are very similar. In column 2 and 3, we partition the sample according to the quality of the governance. We define a firm as having bad governance if three conditions are met: the CEO is also Chairman of the Board, there is no large shareholder on the board and the CEO has a long tenure.¹⁵ Results for the bad governance sample are reported in Column 3. Results for the good governance sample are reported in Column 2.

As expected, we find that δ_2 , the coefficient on *BHAR*, is significant in the three samples. Also consistent with our hypotheses, δ_3 , the coefficient on compensation, is significantly positive in the overall sample and for firms with good governance but it is insignificant when governance is poor and the manager is likely to be entrenched. In this case, a higher salary is more likely to signal the existence of a quasi-rent rather than managerial skill. Also consistent with our expectations, δ_1 , the coefficient on *CAR*, is significantly negative in the sample of firms with good governance. However, it is positive in the sample of firms with bad governance (the insignificance for the overall sample can be seen as the average of the two sub-samples).

This positive result for firms with bad governance is initially surprising. After all, if the stock price falls on announcement of the departure, the CEO should be valuable and future career progress should be good. However, the opposite result for the poor governance sub-sample can be explained when we examine other news that is released around the departure of the CEO. Table 3 shows the proportion of the sample firms for which there were other news announcements between a day before and 1 (respectively, 7) days after the announcement date of CEO departure. It is evident that the proportion of the firms that have bad performance announcements is far less for the good progress group than for the poor progress group. It is possible that if governance is good, the market is less “surprised” by the announcement of bad news and the reaction is less negative. In unreported results, we find that the dummy variable for bad news (*BADperf*) is more economically and statistically significant in the *CAR* regressions (described by model (1))

¹⁴ We have 327 observations for Table 5 compared to 346 observations in columns 3 and 4 in Table 2 because there were 19 cases in which we did not assign a progress classification. For example, some of the departing CEOs remained in the old company where they relinquished the title of the CEO. Most of them remained as the Chairman of the Board. There are also cases where they remained as a consultant and a director. Eliminating these observations from the regressions in table 2 has no material effect on the results.

¹⁵ Information concerning the power of the CEO, the board of directors and beneficial ownership was also drawn from the proxy statement for the year immediately prior to CEO departure.

for firms from the poor governance sub-sample. Table 3 also shows that for the poor governance sub-sample, the “other bad news” and news of “expansion” (to which the market generally reacts negatively) occur much more frequently than for the good governance group. Finally, note that in Panel D of Table 1, abnormal returns in bad governance firms are in fact more negative for the poor progress group. These results are not surprising: firms where the manager is entrenched probably need bad news to trigger the latter’s departure.¹⁶

As for the other independent variables, δ_5 , the coefficient for *SIZE*, is positive in the overall sample and for firms with good governance. δ_6 , the coefficient for *AGE*, is negative but insignificant in the three specifications. This suggests that career prospects are not seriously affected by age. Finally, δ_4 , the coefficient on accounting performance, is insignificant in most regressions. We obtain comparable results (untabulated) if we use the change in earnings before extraordinary items and discontinued operations scaled by beginning of the period assets (adjusted for the industry median, see Engle et al. [2003]) or if we use a dummy for the existence of a loss. The only specification where δ_5 is significant is when we concentrate on firms with poor governance – but the negative sign is unexpected.

The most striking aspect of the results reported in Table 5 is perhaps that the prior performance of the firm is not a sufficient statistic for managerial reputation. The relative pay and the market reaction on announcement have additional information content about managerial ability. Put differently, the residuals from the regression in Table 2 also contain information about managerial ability. Clearly, the financial markets form perceptions about managerial ability in a variety of ways – and not just from past performance and the pay of the manager.

To test the statistical robustness of our results, we perform a number of additional tests. We discuss these below.

3.1 Alternative progress classifications

We check the sensitivity of our results to alternative classifications of progress. First, we run a logit regression where the dependent variable takes the value of one if CEO progress

¹⁶ The positive sign of the CAR coefficient for the poor governance sub-sample does not disappear if we include the presence of particular news announcements in the return model, similar to the last two columns of Table 2. Presumably, the news dummies imperfectly control for the magnitude of the impact of other news announcements on returns. In unreported tests, we confirm that the positive relationship between CAR and progress for the poor governance group is driven by negative abnormal returns.

is moderate or good (zero otherwise). Results (reported in the first panel of Table 6A) show that the sign and significance of the key variables – *CAR*, *Relative Pay* and *BHAR*, across the various samples is very similar to those in Table 5. It appears, therefore, that our key explanatory variables also explain a coarser classification of progress. However, this does not mean that the assignment of progress categories correctly between “good” and “moderate” is irrelevant for our results. In untabulated tests, we flipped the ordering of “good” and “moderate” progress classifications and re-estimated the ordered logit model. The main casualty was *Relative Pay*, which was now insignificant even for the good governance sample, and the other key variables were also weaker in significance.

Another potential concern is that because we include pay in the new company relative to that in the old company as part of our criteria for progress classification, somehow the relative pay (CEO pay in the old company relative to that of the top four highest paid executives) is “hardwired” to be positively related to progress: CEOs who are highly paid could be more likely to accept jobs that pay more. To address this concern, we re-define a good progress as those cases in which the new firm was bigger than the older firm, the new appointment was a CEO appointment, or a simultaneous announcement of departure and announcement was made (the CEO is more likely to be “raided” under such circumstances). In other words, we completely drop relative salary as an indicator of good progress. Poor progress is defined as before, and the residual category is defined to have moderate progress. Our ordered logit results (reported in the second panel of Table 6A) are qualitatively the same.

Finally, we adopt a sharper classification of progress by splitting our good progress category into two categories.¹⁷ Results – reported in the third panel of Table 6A - are very similar to our results in Table 5 and we conclude that our results are robust to alternative classifications.

3.2 *Circumstances around departure*

Second, we examine the effect of the circumstances surrounding the CEO departure. To this end, we run model (2) but we also add a series of dummy variables. The POLICY DIFFERENCE category includes any case in which articles suggest that the CEO left because of a policy difference between the board and the CEO. The

¹⁷ The “very good progress” category includes cases in which the CEO ends up as a top executive of another public company within 3 years following CEO departure, and either his new salary is higher than the old salary, or the CEO departure and the new appointment are announced in the same day. The “marginally good progress” category includes other CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer.

PERFORMANCE RELATED category includes departures related to poor performance. The RETIREMENT category includes any departures described as “retired”, “retiring” or “a retirement”. Untabulated results indicate that departure caused by performance issues or by retirement leads to fewer career opportunities. The effect of policy disagreement is positive but only marginally so (the p-value is between 10% and 15%). Our other findings are otherwise qualitatively similar.

3.3 Is progress attributable to negative announcement effects?

We also estimate a “coarser” sensitivity of progress to the announcement effect of departure by creating an additional dummy variable that takes the value of one if the CAR is negative. Results (untabulated) indicate that this dummy is significantly positive in the sample of firms with good governance. The CAR itself is not significant, though negative. Thus, our results are primarily coming from negative announcement effects: these represent actual value loss for the company, which is indicative of above-average perceived managerial ability, and also correspond to better career progress for these managers.

In addition, in untabulated tests, we check the robustness of our results by estimating abnormal returns in a regression similar to columns 3 and 4 in Table 2, in which news announcement dummies around the departure announcement are included. Our results remain unchanged.

3.4 Alternative governance classifications and measures of pay

In Table 5, we find that higher relative pay is associated with better career progress for the CEO in the sample of firms with good governance, but not in the sample of firms with poor governance. Bertrand and Mullainathan (2003) show that luck affects CEO pay less in companies with better governance. Hence, pay should be more correlated with real ability, as opposed to what outsiders might *perceive* as ability if the CEO is simply lucky, in firms with better governance. Therefore, if better pay translates into better career progress for CEOs in firms with superior governance, this would suggest that real, as opposed to perceived, ability is related to labor market progress.

Our results in Table 5 are consistent with this view. We perform robustness checks for these results based on alternative governance classifications. In Table 5, a firm is defined to have poor governance if three conditions are met: the CEO is also Chairman of the Board, there is no large shareholder on the board and the CEO has a long tenure. We alternatively define poorly governed firms if *any two* of these conditions are met, and

define well-governed firms as the complement set. As reported in Table 6B, our results are unchanged.

We next change the definition of pay. First, instead of the salary, we define relative pay for the CEO in terms of total pay.¹⁸ Our results (reported in Table 6C) are unchanged – in particular, relative total pay has a positive significant coefficient in the progress regressions for firms from good governance samples but the coefficient is insignificant for firms from poor governance samples (these results hold for all the different governance classifications discussed above). We also estimate a measure of “abnormal pay” for the CEO as the residual from the following regression:

$$\begin{aligned} \text{CEO salary over the past three years} = & a0 + a1 * \text{average stock return over the past} \\ & \text{three years} + a2 * \text{average market value over the past three years} + a3 * \\ & \text{average sales over the past three years} + a4 * \text{other top four executives'} \\ & \text{salary over the past three years} + \text{industry dummies} + e. \end{aligned}$$

This regression is done for all firms in ExecuComp year-by-year, and the residuals for our turnover sample constitute excess pay. Once again, excess pay has a positive significant coefficient in good governance samples, but an insignificant coefficient in poor governance samples. These results are not tabulated.

3.5 Buy-and hold returns: Non-linearities and various adjustments

A final set of robustness check addresses issues concerning the buy-and-hold returns in Table 5. One concern is that relative pay and CAR could reflect potential non-linearities in the relationship between the buy-and-hold returns and progress. To address this concern, we replicate the results in Table 5 by incorporating higher order terms of the buy-and-hold return. The results (not tabulated) are unchanged. We also check the robustness of our results by adjusting the buy-and-hold returns with respect to industry, size and book-to-market portfolios. The results are unchanged.

VI. CEO departure and post-departure firm performance

Having shown that managers are able to generate personal reputation in the financial market and that this reputation is a good indicator of career opportunities, we

¹⁸ Total pay includes salary, bonus, total value of restricted stock granted, total value of stock options granted (using S&P's modified Black-Scholes), long-term incentive payouts and all other compensation not properly categorized as salary, bonus, restricted stock, stock options or long-term incentive payouts during the fiscal year.

then investigate if the markets are rational in developing these reputations. We focus on accounting performance, as measured by ROA. Evaluating post-departure performance based on stock returns is potentially problematic, for a number of reasons. First, such tests depend on the market being slow to react to the significance of the CEOs departure for the value of the company. Second, the nature of succession and the corporate strategy that is put in place after the departure of the CEO could affect the risk-profile of the company and hence the expected returns. Third, the literature has documented evidence of serial correlation in returns that could confound inferences based on post-departure returns.¹⁹

In Table 7, we examine the effect of CEO departure on post-departure accounting performance. We examine whether the change in the industry-adjusted ROA is negatively related to the announcement period CAR associated with the departure of the top executive. Since a more negative CAR signifies the loss of an executive perceived to be more valuable for the firm, a positive relationship between the CAR and subsequent change in ROA is consistent with the hypothesis that the announcement period CAR is negatively related to the CEO's ability. To distinguish between the predictable component of CEO ability based on past performance of the firm and the part that is not predictable but reflected in the market's response to the news of the announcement, we include in the regression the predicted CAR (*PCAR*) from the regressions in Table 2 as well as the residuals from the same regressions (*RCAR*). To accommodate the possibility that the relationship may be stronger for low (negative) values of *PCAR* or *RCAR*, we include in the regressions the square of *PCAR* and *RCAR* as well. We also control for the past industry-adjusted *ROA* of the firm. Specifically, we estimate the following model:

$$(3) \quad \text{CHANGE_ROA} = a + b*PCAR + c*PCAR^2 + d*RCAR + e*RCAR^2 + f*PAST_ROA + \text{error}$$

Here, *CHANGE_ROA* is the difference between the industry-adjusted *ROA* of the firm that lost the top executive from one year before to either one or three years after the departure of the top executive, *PCAR* is the predicted value of the dependent variable in the

¹⁹ Moreover, at least for the sample of CEO departures for poorly governed firms, we noted that there is a major incidence of news announcements (mostly negative news) about the company around the time of departure. It is possible that these announcements merely represent the proverbial "tip of the iceberg" and that other negative announcements follow the departure for some time. This would affect post-departure returns without conveying any information about how the departure, per se, affects the subsequent performance.

regression reported in column (3) of Table 2, and *RCAR* is the residual. *PAST_ROA* is the *ROA* one year before the departure.

Results are reported in Table 7. Three sets of results are reported – the first two columns report results for the CEO departures only; the third and fourth columns report results for the CEO departures from the good governance group, and the last two columns report results for departures from non-CEO to CEO positions. The results are stronger for *RCAR* than for *PCAR*. Consistent with the view that the firms losing more capable executives – as proxied by lower announcement period returns – perform worse, the coefficient “d” of *RCAR* is positive and significant in all but two of the specifications – in the latter two, it is positive but insignificant at conventional levels. The coefficient “e” of the square term ($RCAR^2$) indicates the non-linearity of the relationship. A negative sign for the coefficient “e” indicates that for low (negative) values of *RCAR* associated with higher perceived managerial ability, the positive effect of *RCAR* on the dependent variable is reinforced.²⁰ We notice that “e” is negative and either significant or marginally insignificant in all regressions.²¹

Results are weaker for the predictable component of *CAR*. None of the coefficients for either *PCAR* or $PCAR^2$ are significant. However, for the CEO sample, $PCAR^2$ is negative and significant at the 15% level for the change in accounting performance over the $t-1$ to $t+1$ window.²²

In the first four columns in the lower panel of Table 7, we repeat the test for a much smaller sample – the sample of CEOs with either good or moderate progress. This is a much smaller sample than our overall sample (for the purposes of the present test, it is even smaller because we need to exclude all cases where the new company is not a publicly traded company or does not have the relevant accounting information). Nonetheless, *RCAR* remains significant for the sample consisting of all CEO departures, and is marginally insignificant for the sample of CEO departures from firms with good governance, which is an even smaller sample. $RCAR^2$, though not significant at conventional levels, is negative for the $t-1$ to $t+3$ changes, as in the regressions in the top

²⁰ The “sensitivity” of the dependent variable to the *RCAR* is obtained by differentiating the right-hand-side with respect to *RCAR*: the derivative is $d + 2e*RCAR$. This is greater than d if e is negative and *RCAR* is negative.

²¹ Notice also that our results on poor post-departure performance are not driven by firms with bad governance which have poor announcement period returns because of unfavorable news announcements around the departure event. In columns 3 and 4 of the top panel of Table 7, we confine attention to firms with good governance. The results still hold.

²² The lower panel in Table A1 in the Appendix reports the results for the non-CEO-to-CEO sample separately for those cases in which the relative size of the new firm to that of the old firm is above or below median. Consistent with Rosen (1982), the results are driven by the above-median group.

panel. Finally, in the last two columns, we report results for the poor progress group. Interestingly, here also, it is the square terms of PCAR and RCAR that are significant; thus, most of the performance improvement is coming from the turnover cases that are associated with negative CARs. We suspect that these are the cases associated with significant additional negative information associated with the turnover.

The results on the non-CEO sample as well as those on the CEO sample restricted to good and moderate progress are helpful in distinguishing our hypothesis from an alternative explanation of our results. This alternative explanation is as follows. Suppose managers leave the firm when they anticipate a deterioration of the firm's performance. If this is the case, and markets realize this incentive, then the market reaction would be negative if a manager voluntarily left his job for another employment (good or moderate as opposed to poor progress in the labor market). Moreover, a negative market reaction would be associated with poor subsequent performance. On the other hand, if a manager were dismissed for non-performance, announcement returns could be positive, and performance could subsequently improve. In fact, the latter is precisely what Huson et al. [2004] find.

To understand how this alternative explanation might work, assume that the manager's career progress is described by an ordered categorical variable d – for example, d could represent good, moderate or poor progress. For the alternative explanation to work, d would need to be negatively correlated with the private information of the manager about the future prospect of the firm under his management. In general, this cannot happen – there is no reason why a manager who believes that the prospects for his company are very bad should do better in the labor market. However, if we think of managers who leave the firm voluntarily for jobs elsewhere (i.e. those comprising both the good and the moderate group) as a group that possesses adverse information about the future prospects, and the group that is presumably forced to resign (the poor progress group) as one that is merely entrenched but not possessing similar information, then such an interpretation is possible.²³ However, for the non-CEO sample, there is no poor progress group – and it is hard to argue that the market can infer the *extent* of deterioration in the performance of the firm from the decision of the top manager to quit. In other words, variations in the CAR are likely to reflect differences in managerial ability rather than differences in the future prospect of the firm. A similar argument applies to the sample restricted to good and moderate progress only. Thus, together, our results provide strong support for the idea that

²³ Such an interpretation even has some plausibility since when we collapse the good and moderate progress groups into one category, we still find that the Table 5 results hold.

managers establish reputation in financial markets, and this reputation determines their labor market progress. The market's perception of managerial ability is "real": the departure of managers perceived to be especially valuable for their firms has more serious consequences for the subsequent performance of the firms.

Finally, we comment on why we do not try to correlate the top executive's perceived ability and the performance of the firms they join. If top executives leave and are replaced by new executives of "average" ability, then the more capable executives will be replaced by people who are not as good, and the less capable executives will be replaced by people who are better, on average. The market reactions to the announcements of departure news are therefore expected to be inversely related to the departing top executive's ability. Our results are consistent with this expectation. However, this market reaction is not necessarily related to the change in the performance of the new company that the executive joins. The latter depends on whether the departing top executive is perceived to be better or worse than the CEO he replaces in the new company. In other words, it is the announcement effect in the new company to the appointment news that is relevant. However, even this announcement effect is potentially problematic since the new company is often already without a CEO when the appointment news is announced, and the market may have formed some expectation about the replacement – so the announcement effect could be a reaction to that expectation rather than the incremental value added by the new CEO over the old one.²⁴

VII. Conclusion.

We examine whether firm's top managers develop reputations in financial and labor market. First, for both a sample of CEO as well as a sample of non-CEO top managerial departures, we find that the magnitude of the stock price reaction for the firm losing the CEO or top manager around the departure announcement is negatively related to the company's past performance under the CEO or top manager. This suggests that financial markets attribute part of the firm performance to the actions of its managers and that the top manager can generate personal reputation in the financial markets. For a sample of CEO departures, we then investigate how this reputation affects the CEO's career progress. We find that for firms with good governance, a more negative announcement effect of the CEO's departure news is associated with better career progress

²⁴ The time interval between departure news and news of new appointment could be quite high for our sample. For the good and moderate progress groups combined, the mean and median duration were 357 days and 166 days, respectively (excluding 22 cases of simultaneous announcement).

for the CEO. However, somewhat surprisingly, for a sample of firms with poor governance, the relationship between the announcement effect and career progress is the opposite. We also find that the CEO's pay relative to the four other top executives of the company is a good predictor of his progress when he leaves a company with good governance but not when he leaves a firm with poor governance. This result is consistent with the idea that in firms with poor governance, CEO pay may have no relationship with the CEO's ability or outside opportunities – since entrenched CEOs will enjoy quasi-rents. In addition, we find that the returns over the past 3 years predict the CEO's career development. We find no empirical support for the hypotheses that the career is affected by poor accounting performance. Finally, we find that a lower (more negative) announcement return to the departure news is associated with worse accounting performance over the next three years, suggesting that markets correctly recognize CEO ability.

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Table 1. Employment opportunities following CEO departures and departure announcement effects

“Good progress” category includes those CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer. “Moderate progress” category includes the remaining departing CEOs who take up a position in another public company, but whose new employer is smaller than the old employer and whose new salary is less than 90% of the old salary; those who join a private company; those who become a public servant, a politician, a partner or an educator. Panel A reports post-departure career of departing CEOs. Panel B compares the new and old positions of these departing CEOs. The new salary is the dollar value of the base salary (cash and non-cash) earned during the first full fiscal year under the new appointment. The old salary is the dollar value of the base salary earned during the last full fiscal year under the old appointment. The employer’s size is the book value of the total assets of the employer as of the fiscal year in which the CEO leaves his or her old employer.

Panel A: Post-departure career		
	Moderate progress (Frequency)	Good progress (Frequency)
<i>Top manager at another public company</i>		
Chairman, CEO and President	4	10
Chairman and CEO	10	20
CEO & President	11	29
CEO	3	3
Chairman	9	1
Vice Chairman, Chief Accounting & Financial Officer	0	1
Vice Chairman	1	0
Chief Operating Officer and Executive Vice President	1	0
Chief Operating Officer	0	1
Chief Financial Officer and Executive Vice President	0	2
President	2	2
Group Vice President	2	0
Senior Vice President	1	0
Vice President	2	0
Senior Advisor	1	0
<i>Top manager at a private company</i>		
Chairman, CEO and President	4	0
Chairman and CEO	13	0
CEO and President	13	0
CEO	10	0
Chairman	10	0
Vice Chairman	1	0
President	2	0
Vice President	1	0
Advisor	2	0
Public Servant/Politician	4	0
Partners	4	0
Educator	1	0

Table 1. continued

Panel B: New vs. old positions				
	Moderate Progress	Good Progress	Non-CEO-to-CEO Moves	
Mean (New Salary ÷ Old Salary)	0.8191	1.3817		
Median (New Salary ÷ Old Salary)	0.6105	1.2727		
Mean (New Employer's Size ÷ Old Employer's Size)	0.9143	1.3058	1.0100	
Median (New Employer's Size ÷ Old Employer's Size)	0.9992	1.0018	0.2102	

Panel C: Departure announcement effects				
	CAR(-1,+7) in %		CAR(-1,+1) in %	
	Median (p-value)	Mean (p-value)	Median (p-value)	Mean (p-value)
CEO departures	-1.54 (0.00)	-2.52 (0.01)	-1.12 (0.01)	-1.53 (0.04)
Good progress	-1.86 (0.01)	-4.58 (0.02)	-2.16 (0.01)	-3.17 (0.04)
Moderate progress	-3.72 (0.00)	-3.51 (0.02)	-1.84 (0.00)	-1.75 (0.09)
Good & moderate progress	-2.66 (0.00)	-3.94 (0.00)	-1.90 (0.00)	-2.32 (0.01)
Good & moderate progress and good governance	-3.72 (0.00)	-4.70 (0.00)	-2.32 (0.00)	-3.16 (0.00)
Good & moderate progress and bad governance	-1.41 (0.29)	-0.20 (0.91)	-0.50 (0.29)	+1.81 (0.35)
Poor progress	-0.34 (0.34)	-1.28 (0.40)	0.07 (0.56)	-0.85 (0.48)
Poor progress and good governance	-0.27 (0.43)	0.74 (0.65)	-0.08 (0.50)	-0.18 (0.89)
Poor progress and bad governance	-1.49 (0.33)	-7.22 (0.03)	0.10 (0.66)	-2.82 (0.05)
Non-CEO-to-CEO moves	-0.43 (0.13)	-0.95 (0.18)	-0.19 (0.34)	-0.96 (0.05)

Table 2. Stock market reaction to managerial departures and past stock performance

The table reports results of six regressions - the estimated coefficients, their respective t statistics (in parentheses) based on robust standard errors and by-year clustering, R^2 , and number of firm years. The dependent variable is the cumulative abnormal return (CAR) for the window (-1 day, +7 days) around the announcement of a top managerial departure. Results for two CAR measures are reported: $CARs$ based on the Market Model and $FFCARs$ based on the Fama-French Three-Factor Model. *Relative pay* is the ratio of the CEO's salary to the sum of the salary of the other four highest paid executives of the company over the three full fiscal years prior to CEO departure. *3-yr buy-and-hold return*, *ROA*, *Change in sales* are adjusted by subtracting the contemporaneous median measure for all non-turnover firms with the same 2-digit SIC code. *3-yr buy-and-hold return* is the buy-and-hold return for the three-year period before the year of the managerial departure. *ROA* and *Change in sales* are measured over the year before the year of the executive departure. *Size* is the log of total assets. The window for the six news dummy variables is (-1 day, +7 days) around the announcement of CEO departures. *News dummy*^{Good performance} takes a value of 1 if there is news reporting improvement in firm performance, such as an increase in dividend payment, an improvement in earnings, sales or operating performance, and 0 otherwise. *News dummy*^{Other good news} takes a value of 1 if there is other good firm news, such as an upgrade in credit rating, and 0 otherwise. *News dummy*^{Poor performance} takes a value of 1 if there is news reporting deterioration in firm performance, such as a dividend cut, a decrease in earnings, sales or poor operating performance, and 0 otherwise. *News dummy*^{Other bad news} takes a value of 1 if there is other bad firm news, such as a downgrade in credit rating, and 0 otherwise. *News dummy*^{Restructuring} takes a value of 1 if there is news revealing restructuring of the company, including employment reduction and sales of plants, and 0 otherwise. *News dummy*^{Business expansion} takes a value of 1 if there is news disclosing expansion of business, including formation of partnerships and strategic alliances and winning of new contracts, and 0 otherwise. Superscript a, b, and c indicate 1%, 5%, and 10% level of significance, respectively.

Dependent variable:	CEO				Non-CEO-to-CEO	
	Departures				moves	
	CAR	FFCAR	CAR	FFCAR	CAR	FFCAR
<i>Intercept</i>	-0.0130 (-1.55)	-0.0176 ^c (-2.03)	0.0239 (1.22)	0.0154 (0.64)	0.0229 (1.09)	0.0222 (1.01)
<i>3-yr buy-and-hold return</i>	-0.0097 ^b (-3.19)	-0.0074 (-1.80)	-0.0131 ^a (-4.21)	-0.0113 ^a (-3.76)	-0.0138 ^b (-2.74)	-0.0104 ^c (-1.95)
<i>Relative pay</i>			-0.0424 (-1.58)	-0.0371 (-1.27)		
<i>ROA</i>			0.0561 (0.93)	0.0642 (0.98)	-0.1207 ^a (-3.65)	-0.1243 ^a (-3.91)
<i>Change in sales</i>			-0.0143 (-0.70)	-0.0131 (-0.67)	-0.0163 (-0.79)	-0.0151 (-0.71)
<i>Size</i>			-5.69e-8 (-0.90)	-1.24e-9 (-0.02)	-0.0020 (-1.08)	-0.0022 (-1.06)
<i>News dummy</i> ^{Good performance}			0.0104 (0.64)	0.0083 (0.58)		
<i>News dummy</i> ^{Other good news}			0.1704 (1.57)	0.1677 (1.62)		
<i>News dummy</i> ^{Poor performance}			-0.1100 ^c (-2.19)	-0.1170 ^b (-2.26)		
<i>News dummy</i> ^{Other bad news}			0.0453 (0.78)	0.0412 (0.75)		
<i>News dummy</i> ^{Restructuring}			-0.0827 (-1.23)	-0.0864 (-1.37)		
<i>News dummy</i> ^{Business expansion}			0.0224 (0.84)	0.0253 (1.12)		
<i>Number of firm years</i>	351	351	346	346	159	159
<i>R²</i>	0.0045	0.0027	0.0720	0.0717	0.0508	0.0407

Table 3. Other news announcements around the announcement date of CEO departures

The “good performance” category includes news reports of improvement in the performance of the firm, such as an increase in dividend payment, an improvement in earnings, sales or operating performance. The “bad performance” category includes news reports of deterioration in the performance of the firm, such as a dividend cut, a decrease in earnings, sales or deterioration in operating performance. The “other good” category includes news reports of other good news concerning the company, such as an upgrade in credit rating. The “other bad” category includes news reports of other bad news concerning the company, such as a downgrade in credit rating. The “expansion” category includes articles revealing expansion of business of the company, including formation of partnerships and strategic alliances and winning of new contracts. The “restructuring” category includes news revealing restructuring of the company, including employment reduction and sales of plants. “Good progress” category includes those CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer. “Poor progress” category includes those CEOs who only have new directorships or no new appointment within 3 years following CEO departure. “Moderate progress” category includes the remaining departing CEOs who take up a position in another public company, but whose new employer is smaller than the old employer and whose new salary is less than 90% of the old salary; those who join a private company; those who become a public servant, a politician, a partner or an educator. “Good governance” sample consists of firms that according to the most recent pre-departure proxy statement, any of the following three conditions is met: (1) The CEO is not the chairman of the board. (2) There is a shareholder who has 5% ownership of the company and is a director on the board. (3) The CEO tenure is below the median tenure of all the departing CEOs. “Bad governance” sample consists of firms that meet none of the above three conditions.

Window (t-1 day, t+7 day)

	All	Poor progress	Moderate progress	Good progress	Poor governance	Good governance
<u>Types of News</u>	(proportion)					
Good performance	10.85%	10.74%	13.68%	7.41%	9.20%	11.08%
Bad performance	9.70	14.05	5.98	1.23	8.05	8.68
Other good	4.39	3.72	5.13	6.17	2.30	3.59
Other bad	5.54	6.61	3.42	4.94	8.05	3.59
Expansion	6.00	4.96	10.26	2.47	9.20	2.69
Restructuring	4.39	4.96	1.71	6.17	5.75	4.49

Window (t-1 day, t+1 day)

	All	Poor progress	Moderate progress	Good progress	Poor governance	Good governance
<u>Types of News</u>	(proportion)					
Good performance	7.05%	6.20%	8.55%	7.41%	8.05%	8.08%
Bad performance	5.68	8.68	2.56	1.23	5.75	5.99
Other good	1.59	1.65	0.85	2.47	1.15	1.80
Other bad	1.59	2.07	0.85	1.23	4.60	0.90
Expansion	1.82	0.83	4.27	1.23	4.60	1.20
Restructuring	1.82	2.07	1.71	1.23	1.15	1.80
N	440	259	112	69	91	349

Table 4. Correlation matrix for explanatory variables in equation 2 (significance level are in parentheses).

	<i>CAR(-1,+7)</i>	<i>CAR(-1,+1)</i>	<i>Relative Pay</i>	<i>Age</i>	<i>3-yr-buy-and-hold return</i>	<i>ROA</i>
Panel A: Pooled sample						
<i>CAR(-1,+1)</i>	0.7612 (0.00)					
<i>Relative Pay</i>	-0.0714 (0.16)	-0.0663 (0.19)				
<i>Age</i>	-0.0338 (0.50)	-0.0148 (0.77)	0.0089 (0.86)			
<i>3-yr-buy-and-hold return</i>	-0.0733 (0.17)	-0.0621 (0.25)	0.0109 (0.84)	-0.0247 (0.65)		
<i>ROA</i>	0.0182 (0.73)	-0.0262 (0.62)	0.1363 (0.01)	0.1189 (0.02)	0.1248 (0.02)	
<i>Size</i>	-0.0144 (0.77)	0.029 (0.56)	-0.0612 (0.22)	0.0922 (0.06)	0.0414 (0.44)	0.0158 (0.76)
Panel B: Good governance sample						
<i>CAR(-1,+1)</i>	0.7382 (0.00)					
<i>Relative Pay</i>	-0.0394 (0.50)	-0.0318 (0.58)				
<i>Age</i>	-0.0324 (0.57)	-0.0139 (0.81)	0.0284 (0.62)			
<i>3-yr-buy-and-hold return</i>	-0.1008 (0.09)	-0.072 (0.23)	0.0275 (0.66)	-0.0123 (0.84)		
<i>ROA</i>	0.031 (0.60)	-0.017 (0.77)	0.1261 (0.03)	0.139 (0.02)	0.1269 (0.04)	
<i>Size</i>	-0.0063 (0.91)	0.0345 (0.54)	-0.0624 (0.27)	0.0934 (0.09)	0.0442 (0.46)	0.0166 (0.77)
Panel C: Poor governance sample						
<i>CAR(-1,+1)</i>	0.8498 (0.00)					
<i>Relative Pay</i>	-0.2876 (0.01)	-0.3012 (0.01)				
<i>Age</i>	0.0452 (0.68)	-0.0332 (0.76)	-0.1542 (0.16)			
<i>3-yr-buy-and-hold return</i>	0.0648 (0.60)	-0.0092 (0.94)	-0.224 (0.07)	-0.0271 (0.83)		
<i>ROA</i>	-0.051 (0.67)	-0.1056 (0.38)	0.2754 (0.02)	-0.1035 (0.39)	0.1116 (0.37)	
<i>Size</i>	-0.0846 (0.44)	-0.0099 (0.93)	-0.0453 (0.68)	0.0978 (0.37)	-0.0304 (0.81)	-0.0061 (0.96)

Table 5. CEO career progress

The table reports results of maximum-likelihood ordered logistic estimation: the estimated coefficients, their respective z statistics (in parentheses) based on robust standard errors and by-year clustering, pseudo R^2 , and number of firm years. The dependent variable is Progress. It takes a value of 3 if the departing CEO has made good career progress, 2 if he has made moderate progress, and 1 otherwise. “Good progress” category includes those CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer. “Poor progress” category includes those CEOs who only have new directorships or no new appointment within 3 years following CEO departure. “Moderate progress” category includes the remaining departing CEOs who take up a position in another public company, but whose new employer is smaller than the old employer and whose new salary is less than 90% of the old salary; those who join a private company; those who become a public servant, a politician, a partner or an educator. Results for two CAR measures and three samples are reported. $CAR(-I,+7)$ and $CAR(-I,+1)$ are the cumulative abnormal return, based on the market model, for the windows (-1 day, +7 days) and (-1 day, +1 day) around the announcement of the CEO departures. The three samples are good governance, bad governance, and pooled samples. “Good governance” sample consists of firms that according to the most recent pre-departure proxy statement, any of the following three conditions is met: (1) The CEO is not the chairman of the board. (2) There is a shareholder who has 5% ownership of the company and is a director on the board. (3) The CEO tenure is below the median tenure of all the departing CEOs. “Bad governance” sample consists of firms that meet none of the above three conditions. Pooled sample combines “good governance” and “bad governance” samples. *Relative pay* is the ratio of the CEO’s salary to the sum of the salary of the other four highest paid executives of the company over the three full fiscal years prior to CEO departure. *CEO age* is the age of the departing CEO. *3-yr buy-and-hold return* and *ROA* are adjusted by subtracting the contemporaneous median measure for all non-CEO-turnover ExecuComp firms with the same 2-digit SIC code. *3-year buy-and-hold return* is the buy-and-hold return for the three-year period before the year of CEO departure. *ROA* is measured over the year before the year of CEO departure. *Firm’s size* is the book value of the total assets of the company as the end of year before the year of CEO departure. Superscript a, b, and c indicate 1%, 5%, and 10% level of significance, respectively.

Governance	Pooled	Good	Bad	Pooled	Good	Bad
<i>CAR(-I,+7)</i>	-0.3114 (-0.64)	-1.2805 ^b (-2.42)	2.6468 ^a (3.33)			
<i>CAR(-I,+1)</i>				-0.4679 ^c (-1.75)	-1.7716 ^c (-1.92)	2.6932 ^b (2.50)
<i>Relative pay</i>	0.4837 ^b (2.37)	0.5715 ^a (3.15)	-0.2415 (-0.27)	0.4851 ^b (2.46)	0.5775 ^a (3.15)	-0.0921 (-0.12)
<i>CEO age</i>	-0.0277 (-1.44)	-0.0320 (-1.40)	-0.0314 (-0.77)	-0.0273 (-1.43)	-0.0301 (-1.33)	-0.0175 (-0.40)
<i>3-yr buy-and-hold return</i>	0.1411 ^b (2.49)	0.1052 ^c (1.93)	0.7697 ^a (2.86)	0.1407 ^b (2.44)	0.1069 ^c (1.93)	0.7991 ^a (2.83)
<i>ROA</i>	-0.9418 (-1.22)	-0.4829 (-0.60)	-4.8626 ^b (-1.96)	-0.9599 (-1.21)	-0.5575 (-0.69)	-4.4868 ^c (-1.66)
<i>Firm’s size</i>	1.59e-6 ^a (2.72)	1.98e-6 ^a (3.29)	1.44e-5 (-0.73)	1.63e-6 ^a (2.77)	2.12e-6 ^a (3.26)	-1.74e-5 (-0.94)
<i>Number of firm years</i>	327	261	66	327	261	66
<i>Pseudo R2</i>	0.0183	0.028	0.0891	0.0184	0.0273	0.0824

Table 6A. Robustness check using alternative progress classifications

The table reports results of maximum-likelihood logistic and ordered logistic estimation: the estimated coefficients, their respective z statistics (in parentheses) based on robust standard errors and by-year clustering, pseudo R^2 , and number of firm years. The dependent variable is Progress. For the two-way progress classification, it takes a value of 0 if the departing CEO only has new directorships or no new appointment within 3 years following CEO departure, and 1 otherwise. For the three-way progress classification, Progress takes a value of 3 if the departing CEO becomes the CEO of a bigger company and the departure and the appointment are announced in the same day, a value of 1 if the departing CEO only has new directorships or no new managerial appointment, and 2 otherwise. For the four-way progress classification, Progress takes a value of 4 if the departing CEO has made very good career progress, 3 if he has made good progress, 2 if he has made moderate progress, and 1 otherwise. “Very good progress” category include those cases in which the CEO ends up as a top executive of another public company within 3 years following CEO departure and her new salary is higher than the old salary, and the CEO departure and the new appointment are announced in the same day. “Good progress” category includes those remaining CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer. “Poor progress” category includes those CEOs who only have new directorships or no new appointment within 3 years following CEO departure. “Moderate progress” category includes the remaining departing CEOs who take up a position in another public company, but whose new employer is smaller than the old employer and whose new salary is less than 90% of the old salary; those who join a private company; those who become a public servant, a politician, a partner or an educator. $CAR(-1, +1)$ is the cumulative abnormal return based on the market model for the window (-1 day, +1 day) around the announcement of CEO departure. The three samples are good governance, bad governance, and pooled samples. “Good governance” sample consists of firms that satisfy any of the following three conditions: (1) The CEO is not the chairman of the board. (2) There is a shareholder who has 5% ownership of the company and is a director on the board. (3) The CEO tenure is below the median tenure of all the departing CEOs. “Bad governance” sample consists of firms that meet none of the above three conditions. Pooled sample combines “good governance” and “bad governance” samples. *Relative pay* is the ratio of the CEO’s salary to the sum of the salary of the other four highest paid executives of the company over the three full fiscal years prior to CEO departure. *CEO age* is the age of the departing CEO. *3-yr buy-and-hold return* and *ROA* are adjusted by subtracting the contemporaneous median measure for all non-CEO-turnover ExecuComp firms with the same 2-digit SIC code. *3-year buy-and-hold return* is the buy-and-hold return for the three-year period before the year of CEO departure. *ROA* is measured over the year before the year of CEO departure. *Firm’s size* is the book value of the total assets of the company as the end of year before the year of CEO departure. Superscript a, b, and c indicate 1%, 5%, and 10% level of significance, respectively.

Progress classification	Two-way			Three-way			Four-way		
Governance:	Pooled	Good	Bad	Pooled	Good	Bad	Pooled	Good	Bad
<i>CAR(-1, +1)</i>	-0.6768 ^c (-1.86)	-2.3808 ^c (-1.82)	2.9375 ^b (2.54)	-0.6272 (-1.15)	-2.1774 ^a (-3.04)	3.3971 ^a (4.64)	-0.4923 ^c (-1.83)	-1.7815 ^b (-1.97)	2.6867 ^b (2.51)
<i>Relative pay</i>	0.4408 ^b (1.97)	0.5490 ^b (2.46)	-0.0316 (-0.04)	0.4305 ^c (1.82)	0.2184 ^b (2.39)	-0.0902 (-0.14)	0.4360 ^a (2.70)	0.5079 ^a (3.74)	-0.0450 (-0.06)
<i>CEO age</i>	-0.0364 ^c (-1.76)	-0.0412 ^b (-1.97)	-0.0195 (-0.39)	-0.0590 ^b (-2.03)	-0.0630 ^b (-2.40)	-0.0631 (-0.92)	-0.0301 (-1.52)	-0.0329 (-1.42)	-0.0159 (-0.38)
<i>3-yr buy-and-hold return</i>	0.3064 ^b (2.07)	0.2266 ^c (1.77)	1.0586 ^a (2.57)	0.2681 ^a (3.08)	0.2184 ^b (2.39)	0.8163 ^c (1.89)	0.1360 ^b (2.34)	0.1013 ^c (1.82)	0.8055 ^a (2.82)
<i>ROA</i>	-1.2087 (-1.45)	0.6463 (-0.85)	-8.3278 ^a (-2.83)	-1.6154 ^b (-2.16)	-0.9372 (-1.28)	-8.7873 ^b (-2.29)	-0.8955 (-1.17)	-0.4976 (-0.62)	-4.4182 ^c (-1.70)
<i>Firm's size</i>	6.19e-6 (1.24)	1.44e-5 ^b (2.49)	-2.04e-5 (-0.91)	4.51e-6 ^b (2.46)	5.45e-6 ^a (2.85)	-1.23e-5 (-0.52)	1.62e-6 ^a (2.87)	2.10e-6 ^a (3.37)	-1.75e-5 (0.95)
<i>Number of firm years</i>	327	261	66	327	261	66	327	261	66
<i>Pseudo R²</i>	0.0402	0.0582	0.0847	0.0514	0.0739	0.1553	0.0163	0.0235	0.0778

Table 6B. Robustness checks using alternative governance classifications

The table reports results of maximum-likelihood ordered logistic estimation: the estimated coefficients, their respective absolute z statistics (in parentheses) based on robust standard errors and by-year clustering, pseudo R^2 , and number of firm years. The dependent variable is Progress. It takes a value of 3 if the departing CEO has made good career progress, 2 if he has made moderate progress, and 1 otherwise. “Good progress” category includes those CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer. “Poor progress” category includes those CEOs who only have new directorships or no new appointment within 3 years following CEO departure. “Moderate progress” category includes the remaining departing CEOs who take up a position in another public company, but whose new employer is smaller than the old employer and whose new salary is less than 90% of the old salary; those who join a private company; those who become a public servant, a politician, a partner or an educator. $CAR(-1,+7)$ is the cumulative abnormal return, based on the market model, for the windows (-1 day, +7 days) around the announcement of CEO departure. The three samples are good governance, bad governance, and pooled samples. “Good governance” sample consists of firms that satisfy any of the following *two* conditions: (1) The CEO is not the chairman of the board (Separate roles). (2) There is a shareholder who has 5% ownership of the company and is a director on the board (Large director). (3) The CEO tenure is below the median tenure of all the departing CEOs (Short tenure). “Bad governance” sample consists of firms that meet none of the two specified conditions. *Relative pay* is the ratio of the CEO’s salary to the sum of the salary of the other four highest paid executives of the company over the three full fiscal years prior to CEO departure. *CEO age* is the age of the departing CEO. *3-yr buy-and-hold return* and *ROA* are adjusted by subtracting the contemporaneous median measure for all non-CEO-turnover ExecuComp firms with the same 2-digit SIC code. *3-year buy-and-hold return* is the buy-and-hold return for the three-year period before the year of CEO departure. *ROA* is measured over the year before the year of CEO departure. *Firm’s size* is the book value of the total assets of the company as the end of year before the year of CEO departure. Superscript a, b, and c indicate 1%, 5%, and 10% level of significance, respectively.

Governance measures:	Separate roles & large director		Separate roles & short tenure		Large director & short tenure	
	Good	Poor	Good	Poor	Good	Poor
<i>CAR(-1,+7)</i>	-2.253 ^a (3.34)	2.135 ^c (1.94)	-1.287 ^a (2.23)	1.689 ^c (1.92)	-1.516 ^b (2.33)	2.145 ^a (3.02)
<i>Relative pay</i>	0.569 ^a (2.72)	-0.123 (0.18)	0.554 ^a (3.96)	0.080 (0.14)	0.486 ^b (2.38)	0.460 (0.88)
<i>CEO age</i>	-0.030 (1.04)	-0.056 ^b (2.06)	-0.023 (1.07)	-0.063 ^c (1.65)	-0.036 (1.22)	0.007 (0.17)
<i>3-yr buy-and-hold return</i>	0.047 (1.22)	0.330 (1.07)	0.130 ^c (1.70)	0.114 (0.98)	0.092 ^c (1.77)	0.560 ^b (1.96)
<i>ROA</i>	0.143 (0.13)	-5.207 ^a (3.58)	-0.609 (0.75)	-3.264 (1.39)	-0.782 (0.77)	-1.651 (1.16)
<i>Firm’s size</i>	2.16e-6 ^a (3.26)	-1.36e-5 (1.49)	1.71e-6 ^a (3.24)	-1.38e-6 (0.11)	6.39e-6 (0.95)	1.17e-6 ^b (2.04)
<i>Number of firm years</i>	210	117	241	86	199	128
<i>Pseudo R²</i>	0.0389	0.0772	0.0281	0.0336	0.0296	0.0385

Table 6C. Robustness check using relative total pay

The table reports results of maximum-likelihood ordered logistic estimation: the estimated coefficients, their respective absolute z statistics (in parentheses) based on robust standard errors and by-year clustering, pseudo R^2 , and number of firm years. The dependent variable is Progress. It takes a value of 3 if the departing CEO has made good career progress, 2 if he has made moderate progress, and 1 otherwise. “Good progress” category includes those CEOs who end up as a top executive of another public company within 3 years following CEO departure and either whose new salary is at least 90% of the old salary or whose new employer is larger than the old employer. “Poor progress” category includes those CEOs who only have new directorships or no new appointment within 3 years following CEO departure. “Moderate progress” category includes the remaining departing CEOs who take up a position in another public company, but whose new employer is smaller than the old employer and whose new salary is less than 90% of the old salary; those who join a private company; those who become a public servant, a politician, a partner or an educator. $CAR(-1,+7)$ is the cumulative abnormal return, based on the market model, for the windows (-1 day, +7 days) around the announcement of CEO departure. The three samples are good governance, bad governance, and pooled samples. “Good governance” sample consists of firms that satisfy any of the following *two* conditions: (1) The CEO is not the chairman of the board (Separate roles). (2) There is a shareholder who has 5% ownership of the company and is a director on the board (Large director). (3) The CEO tenure is below the median tenure of all the departing CEOs (Short tenure). “Bad governance” sample consists of firms that meet none of the two specified conditions. *Relative pay* is the ratio of the CEO’s total pay to the sum of the total pay of the other four highest paid executives of the company over the three full fiscal years prior to CEO departure. *CEO age* is the age of the departing CEO. *3-yr buy-and-hold return* and *ROA* are adjusted by subtracting the contemporaneous median measure for all non-CEO-turnover ExecuComp firms with the same 2-digit SIC code. *3-year buy-and-hold return* is the buy-and-hold return for the three-year period before the year of CEO departure. *ROA* is measured over the year before the year of CEO departure. *Firm’s size* is the book value of the total assets of the company as the end of year before the year of CEO departure. Superscript a, b, and c indicate 1%, 5%, and 10% level of significance, respectively.

Governance measures:	Separate roles & large director		Separate roles & short tenure		Large director & short tenure	
	Good	Poor	Good	Poor	Good	Poor
<i>CAR(-1,+7)</i>	-2.722 ^a (-3.93)	2.434 ^b (2.42)	-1.670 ^a (-3.24)	1.822 ^b (2.08)	-1.836 ^a (-2.87)	2.172 ^a (3.30)
<i>Relative total pay</i>	0.545 ^c (1.78)	-0.186 (0.24)	0.511 ^b (2.19)	0.553 (0.64)	0.502 (1.62)	0.605 (0.96)
<i>CEO age</i>	-0.037 (-1.27)	-0.064 ^a (-2.75)	-0.034 ^c (1.70)	-0.064 (1.64)	-0.049 ^c (-1.69)	0.007 (0.16)
<i>3-yr buy-and-hold return</i>	0.059 (1.31)	0.295 (1.00)	0.151 (1.53)	0.136 (1.11)	0.101 ^c (1.65)	0.581 ^b (2.02)
<i>ROA</i>	0.406 (0.36)	-5.086 ^a (-3.64)	-0.313 (0.41)	-3.914 (1.53)	-0.565 (0.59)	-1.714 (1.12)
<i>Firm’s size</i>	2.03e-6 ^a (3.01)	-1.36e-5 (-1.44)	1.58e-6 ^a (2.78)	-2.77e-6 (0.22)	6.02e-6 (0.93)	1.10e-6 ^b (1.97)
<i>Number of firm years</i>	210	117	241	86	199	128
<i>Pseudo R²</i>	0.0434	0.0818	0.0297	0.0389	0.0341	0.0402

Table 7. Post-departure change in ROA of the old employers

The table reports results of six regressions: the estimated coefficients, their respective t statistics (in parentheses) based on robust standard errors and by-year clustering, R^2 , and number of firm years. *Good governance sample* consists of those firms with a CEO departure and according to the most recent pre-departure proxy statement, any of the following three conditions is met: (1) The CEO is not the chairman of the board. (2) There is a shareholder who has 5% ownership of the company and is a director on the board. (3) The CEO tenure is below the median tenure of all the departing CEOs. The dependent variable is the change in industry adjusted ROA from the year before to the first or the third year after the managerial departure ($\Delta ROA1$ or $\Delta ROA3$). Industry adjustment is done by subtracting the contemporaneous median ROA for all non-turnover firms with the same 2-digit SIC code. $pCAR(-1,+7)$ and $rCAR(-1,+7)$ are the predicted and residual cumulative abnormal returns, based on the market model, for the window (-1 day, +7 days) around the announcement of CEO departures from Table 2. *Past ROA* is the industry adjusted ROA over the fiscal year before the managerial departure. Superscript b and c indicate 5% and 10% level of significance, respectively.

Dependent variable:	CEO departures		CEO departures & good governance		Non-CEO-to-CEO movements	
	$\Delta ROA1$	$\Delta ROA3$	$\Delta ROA1$	$\Delta ROA3$	$\Delta ROA1$	$\Delta ROA3$
<i>Intercept</i>	-0.0047 (-0.46)	0.0077 (0.96)	-0.0041 (-0.43)	0.0128 (1.44)	0.0061 (1.45)	0.0101 (1.35)
$pCAR(-1,+7)$	-0.6963 (-0.93)	-0.2118 (-0.20)	-0.5002 (-0.77)	0.0515 (0.04)	0.0950 (0.99)	-0.0661 (-0.75)
$rCAR(-1,+7)$	0.0424 ^c (1.89)	0.0365 ^c (2.20)	0.0461 (1.23)	0.0540 ^c (1.97)	0.0363 (1.53)	0.0400 ^c (2.17)
$pCAR(-1,+7)^2$	-7.5882 (-1.62)	-3.8338 (-0.61)	-6.2111 (-1.61)	-2.2689 (-0.32)	-0.8979 (-1.26)	-0.6647 (-1.21)
$rCAR(-1,+7)^2$	-0.0560 ^a (-4.11)	-0.0797 ^b (-2.71)	-0.0661 ^b (-3.12)	-0.1642 (-1.80)	-0.0568 (-1.72)	-0.0702 ^c (-1.87)
<i>Past ROA</i>	-0.2006 ^a (-5.44)	-0.1720 ^c (-2.03)	-0.2087 ^a (-6.29)	-0.1966 ^b (-2.40)	-0.2006 ^a (-5.40)	-0.1739 ^c (-2.12)
<i>Number of firm years</i>	302	208	239	163	291	200
R^2	0.1343	0.0905	0.1335	0.1014	0.1383	0.0928

Dependent variable:	Good & moderate progress				Poor progress	
	CEO departures		CEO departures & good governance		CEO departures	
	$\Delta ROA1$	$\Delta ROA3$	$\Delta ROA1$	$\Delta ROA3$	$\Delta ROA1$	$\Delta ROA3$
<i>Intercept</i>	0.0120 (1.33)	0.0190 (1.14)	0.0086 (0.94)	0.0221 (1.13)	-0.0007 (-0.13)	0.0037 (0.65)
$pCAR(-1,+7)$	0.1570 (1.38)	-0.3100 (-1.82)	0.2147 ^c (1.95)	-0.2578 (-1.05)	0.1034 (1.36)	-0.0085 (-0.25)
$rCAR(-1,+7)$	0.0821 ^c (1.89)	0.1029 ^c (1.98)	0.0862 (1.66)	0.1094 (1.66)	0.0206 (1.12)	0.0430 (1.66)
$pCAR(-1,+7)^2$	0.3674 (0.35)	-3.1468 ^c (-2.17)	0.4553 (0.50)	-2.9886 (-1.57)	-1.4091 (-1.93)	0.2700 (0.55)
$rCAR(-1,+7)^2$	0.0283 (0.22)	-0.3131 (-1.50)	0.0736 (0.47)	-0.3400 (-1.38)	-0.0408 (-1.55)	-0.0503 (-3.98)
<i>Past ROA</i>	-0.2029 ^a (-3.77)	-0.2384 (-1.50)	-0.2411 ^a (-3.77)	-0.2700 (-1.52)	-0.1918 (-5.02)	-0.1342 (-1.44)
<i>Number of firm years</i>	133	95	110	76	150	105
R^2	0.1368	0.1004	0.1858	0.1117	0.1522	0.2125

Table A1. Further results on non-CEO-to-CEO moves

Panel A: Stock market reaction to managerial departures and past stock performance				
	$\frac{\text{New employer's size}}{\text{Old employer's size}} > \text{median}$		$\frac{\text{New employer's size}}{\text{Old employer's size}} < \text{median}$	
Dependent variable	CAR	FFCAR	CAR	FFCAR
<i>Intercept</i>	0.0572 (1.82)	0.0464 (1.51)	0.0299 (1.41)	0.0439 (1.78)
<i>3-yr buy-and-hold return</i>	-0.0145 (-1.88)	-0.0119 (-1.66)	-0.0093 (-1.31)	-0.0060 (-0.80)
<i>ROA</i>	-0.0957 (-1.88)	-0.1181 (-2.38)	-0.2073 (-1.82)	-0.1647 (-1.37)
<i>Change in sales</i>	-0.0155 (-0.41)	-0.0174 (-0.42)	-0.0203 (-1.23)	-0.0162 (-1.02)
<i>Size</i>	-0.0061 (-1.94)	-0.0055 (-1.69)	-0.0015 (-0.78)	-0.0029 (-1.24)
<i>Number of observations</i>	82	82	77	77
<i>R²</i>	0.0465	0.0437	0.1860	0.1058
Panel B: Post-departure change in ROA of the old employers				
Dependent variable	ΔROA1	ΔROA3	ΔROA1	ΔROA3
<i>Intercept</i>	0.0066 (0.75)	-0.0042 (-0.98)	0.0098 (1.73)	-0.0008 (-0.18)
<i>pCAR(-1,+7)</i>	-0.2827 (-1.03)	0.3400 (1.27)	0.4019 (0.93)	0.2278 (0.94)
<i>rCAR(-1,+7)</i>	-0.1400 (-1.35)	0.0776 (2.01)	0.0149 (0.27)	0.0539 (0.76)
<i>pCAR(-1,+7)²</i>	-0.1407 (-0.03)	-1.8319 (-0.48)	1.3727 (0.36)	-1.2524 (-0.13)
<i>rCAR(-1,+7)²</i>	-0.2488 (-2.08)	0.0793 (1.88)	0.7402 (0.30)	0.6032 (0.54)
<i>Past ROA</i>	-0.0905 (-0.71)	0.0829 (1.68)	-0.0431 (-0.45)	0.0330 (0.74)
<i>Number of firm years</i>	75	66	72	58
<i>R²</i>	0.1026	0.1088	0.0866	0.0486