Who sets price in the labor market: The case of dynamic CEOs

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ABSTRACT

CEO contracting schemes are the product of a negotiation between the firm and the CEO. As such, CEO and firm-specific preferences play a role in contract design, with the bargaining power of the two parties shifting in the cross-section. We investigate this phenomenon in a sample of CEOs that change firms. We find that firm-specific preferences are a significant determinant of the total and cash compensation paid to the new CEO, on average. At the same time, we find a significant relation between CEO-specific preferences and compensation levels. Despite the firm relation with total pay, we find that the proportion and level of equity pay is only related to CEO-specific preferences. In addition, CEOs with greater bargaining power receive compensation schemes that more closely match their preferences in level and form. Overall, our results suggest CEO wages are set in a competitive labor market where the bargaining position shifts with CEO, firm, and labor market characteristics.

1.   Introduction

CEO contracting schemes vary on several dimensions. Agency theory predicts that resolving agency problems that arise from the separation of ownership and control help explain some of the variation. Following these theories, extensive empirical research investigates the determinants of pay-for-performance sensitivity, the propensity of CEOs to extract rents from the firm in the absence of strong governance mechanisms, and how accounting and tax regulations influence contract design. Despite theoretical and documented determinants, there remains little evidence to explain a large extent of the broad sweeping variation in contracting schemes. We conjecture that CEO- and firm-specific preferences jointly play significant roles in contract design. We also predict significant cross-sectional variation in the weights placed on the CEO- and firm-specific preferences. That is, we conjecture that there is predictable variation in the bargaining position of the CEO and the firm.

We provide evidence on who sets prices in the labor market for CEOs by examining the influence of CEO and firm-specific preferences on compensation schemes when CEOs change firms. Specifically, we gather a sample of CEOs that switch firms over the past 20 years. With this sample, we model the CEO's contract with their new firm as a function of the CEO's contract preferences and the new firm's preferences. The CEO's contract with their prior firm is an instrument for the CEO's contract preferences, and the new firm's contract with the outgoing CEO is an instrument for the firm's preferences. We investigate several dimensions of the contracting scheme including the level of total and cash compensation, the level and proportion of equity pay, and pay that deviates from economic predictions.

We find that both CEO and firm-specific preferences are significant determinants of the level of cash and total compensation. This result suggests that, conditional on the matching

process of CEOs with firms, both parties exert discernible power on the contract negotiation process. But, firms have little influence on the level of equity compensation, the proportion of total compensation derived from cash, and the level of pay not predicted by economic inputs. Rather, these elements of pay are driven by CEO preferences. Together, these findings provide evidence that contracting schemes are the product of a negotiation between the firm and the CEO, where each party influences the level of cash and total compensation, but firms are price takers with respect to the level of equity, the form of the compensation, and pay that deviates from economic predictions. This is consistent with wages being set in a competitive labor market, where the CEO holds a greater bargaining position with respect to the form of pay.

The tests above focus on average affects. The bargaining position of the parties, however, varies with CEO, firm, and labor market characteristics. We consider this variation and test how characteristics that alter the bargaining position of the parties influence the relationship between the contract and the preferences of the CEO and firm. The context of these tests extends from the neoclassical labor economic theory (e.g., Boyer and Smith, 2000; Hicks, 1963), where wages established in the labor markets are the price mechanisms through which employers induce workers to fill jobs in their organizations. These tests also extend from more recent work by Graham et al. (2012), who conclude that "manager fixed effects are more important than firm fixed effects in determining the level of pay" (p. 146).

Focusing on firm-specific characteristics, we find that CEO's who are sought after by larger, better performing firms exhibit a larger influence on their compensation contracts. This is consistent with CEOs in a tighter labor market holding a greater bargaining position, with greater reservation wages. We conduct further tests on CEO characteristics that place them in a stronger bargaining position (more talented, with skills that are unique to the new firm, and in tighter

labor markets). We find consistent evidence that CEOs in a greater bargaining position either due to their characteristics or a more constrained labor market exert greater influence on the compensation scheme. The greater bargaining position results in more lucrative contracts that are also more consistent with their preferences for the form of compensation.

Our results also indicate that managers who exhibited greater bargaining power in their prior position are able to translate that power into greater influence on their current contract. Additionally, we find weak evidence that extended tenure with the prior firm provides the executive a benefit in his current contract. We do however; find that the negotiation process is tipped in favor of the executive when he moves between firms within the same industry. This suggests that power arises from the knowledge, shared skills, or lower information asymmetry of running a similar firm. Despite the results of bargaining positions influencing contract design, we do not find evidence that abnormal pay persists after a CEO turnover.

Our evidence provides important insights into the labor market for top executives by differentiating managers that are price-takers from those with greater bargaining positions, presumably because of their unique talents or abilities. The results of our study contribute to the literature on several dimensions. First, we identify elements of contracting schemes that are firm-specific from those that are CEO-specific. Second, we provide evidence on the labor market for CEOs with respect to their influence on the contracting scheme. Specifically, we identify the characteristics of CEOs and firms that lean the contract negotiations in their favor. Together, we document that firm and executive preferences play a role in contract design where the bargaining position shifts in predictable ways. Finally, we contribute to the growing literature on manager fixed effects in executive compensation by documenting cross-sectional variation in the existence of these CEO-specific effects.

2.   Hypothesis Development

Prior literature documents CEO-specific effects on compensation design. For example, Fee and Hadlock (2003) focus on the market for managerial talent by examining when lower level managers become the CEO at other firms. Bertrand and Schoar (2003) argue that CEOs have unique management styles and leave their imprints on the firms they manage. Focusing on compensation design, Tervio (2008) and Gabaix and Landier (2008) provide talent assignment models that explain pay based on heterogeneity of CEO talent. A stream of literature examines the firm returns to a variety of heterogeneous CEO skills (e.g., Bandiera et al., 2011; Edmans and Gabaix, 2011; Eisfeldt and Kuhnen, 2010; Graham et al., 2010; Pan, 2010). Finally, Murphy and Zábojník (2004), Murphy and Zábojník (2007), Frydman and Saks (2010) suggest that general management skills are more transferable across firms, which improves a manager's outside options, increases the reservation wage and the firm's willingness to pay for talent.

We expand on these studies by considering how compensation design, including the level and form, reflect firm- and CEO-specific preferences. We also examine how labor market conditions, firm-specific characteristics such as firm size, and CEO-specific characteristics such as unique talents influence the bargaining power of the parties and lead to cross-sectional variation in the weights placed on CEO and firm preferences for compensation schemes.

2.1   Firm- and CEO-specific preferences on compensation design

We conjecture that compensation schemes are the product of a negotiation between the firm and the CEO. These negotiations exist in an environment fraught with frictions. Rajgopal et al. (2011) consider frictions in the CEO labor market highlighting the role of talent agents. The

frictions in the labor market extend from at least two sources: information asymmetries, and the separation of ownership and control. Information asymmetries exist about the firm, the CEO, and how a CEO's expertise matches with the firm's operations and opportunities. For example, greater uncertainty about the firm's investment opportunities increases the risk imposed on a potential CEO that is not informed about the investment opportunities. There also exists information asymmetry about a CEO's abilities because firm performance is a noisy signal of CEO ability. In addition, there remains uncertainty regarding whether the CEO's skills match with those that are most beneficial for the firm. As a result, agency problems including adverse selection and moral hazard problems arise.

Compensation contracts help resolve agency problems on at least two dimensions. First, compensation schemes that link executive wealth to firm performance help resolve moral hazard problems. Compensation contracts also help resolve adverse selection problems by signaling a firm's or CEO's type. For example, a less risk-averse CEO with higher ability is more likely to accept a contract that consists of larger components of incentive-based pay. Similarly, a firm that requires an innovative manager that is less averse to risk may offer compensation schemes that include greater amounts of equity pay.

We conjecture that *both* firm-specific and CEO-specific factors play a role in contract design. We expect both CEO and firm preferences to play a role in contract design because both parties maintain private information at the bargaining table that becomes resolved in the contract negotiations and over time.

We test this conjecture by considering compensation schemes when CEOs change firms. We expect CEO contracts with the new firm to exhibit characteristics that are consistent with the new firm's contract with their prior CEO. At the same time, we expect contracts to maintain

elements of the new CEO's contract with their prior firm. The proposed relation between the new contract and prior contracts relies on the assumption that prior contracts represent CEO and firm preferences. That is, the contract at the new CEO's prior firm is an instrument for the CEO's contract preferences, and the new firm's contract with the outgoing CEO is an instrument for the firm's preferences. Because prior contracts are also the product of negotiations, these instruments are noisy measures of CEO and firm preference sets. We address this concern with several additional tests and other instruments.

2.2 Firm characteristics and the bargaining position

Although we conjecture that CEO and firm preferences jointly determine compensation schemes, we expect the bargaining position of the parties to vary in predictable ways. Specifically, when the firm carries a greater proportion of bargaining power, we expect the contract with the new CEO to more closely resemble the firm's contract with their prior CEO. That is, we expect the firm to impose their contract preferences on the CEO to a greater degree when the firm's bargaining position is stronger and the CEO's bargaining position is weaker.

We predict that the firm's bargaining position is positively related to their private information about the firm and the supply of CEOs in the labor market that meet the firm's needs. Specifically, we expect the firm's bargaining position to be greater for larger firms with more growth opportunities that perform better. Larger firms are generally more complex with more opaque information environments, which increases the information asymmetry about the firm. Similarly, information asymmetry about the firm is greater for firms with more growth opportunities. These arguments suggest that the firm-specific weight on the compensation scheme is greater when the new CEO moves to a larger firm with more growth opportunities. In

addition, firms that compensate their CEO beyond levels predicted by economic determinants are likely to continue to pay their new CEO more than the characteristics in the pay model predict.

An alternative hypothesis, however, is that pool of CEOs with skills that match with larger, better performing firms with more growth opportunities is more constrained, which shifts the bargaining power towards the smaller supply of CEOs with the appropriate skills.

2.3   CEO characteristics and the bargaining position

When the CEO holds greater bargaining power, we expect the contract at the new firm to more closely resemble the CEO's preferences. We expect more seasoned, better performing CEOs of larger firms to hold greater bargaining power. Greater information is known about older CEOs with longer tenures because of a longer history of their performance. Thus there exist weaker adverse selection problems regarding the CEO's abilities, which favors the CEO in contract negotiations (conditional on the CEO having performed well at the previous position(s)).[1] Performance at the CEO's prior firm is a signal of a CEO's abilities, such that CEOs that have performed well at their prior firm carry greater value in the labor market, and greater bargaining power. Finally, as suggested in the alternative to the firm's bargaining position, CEO's that have managed larger firms demonstrate their skills in managing more complex organizations, which increases their opportunities at other large firms.

The labor market and the specialized needs of the firm also play a role in the bargaining position. CEOs with more specialized skills that are required to run the new firm hold greater bargaining power. Thus, we expect CEO contracts in markets with a lower supply of specialized talent to influence the contract to a greater degree. We also expect CEOs of firms that operate in similar industries as the new firm to exhibit skills that are more likely to transfer to the new firm,

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[1] Because our sample focuses on CEOs that change firms and retain the CEO position, we focus primarily on

and carry greater bargaining power. In addition, firms that earn abnormal pay at their existing firm likely exhibit greater bargaining power that translates to their new firm.

3. Methodology

3.1 Sample Selection

Our sample starts with all firms listed in ExecuComp over the life of the database (1992-2011). We then identify the current year CEO, and retain CEOs that change firms in the sample at least once. Any firm years for which multiple CEO's are associated with a single firm are eliminated from the sample. We then identify 172 CEO changes where we can trace that the executive moved from the CEO position of a firm in our sample to the CEO position of another firm in our sample. This is comparable to Bertrand and Schoar (2003) who find 117 CEO-to-CEO changes from 1969-1999 using a similar sample of Forbes 800 files and Execucomp. We then require compensation and firm-specific data on the CEO at their former firm for their last full fiscal year, the CEO at the new firm for the first full fiscal year, the final full fiscal year for the former CEO of the new firm. Requiring the additional data on complete fiscal years restricts our sample to 134 observations of CEO-to-CEO changes. Focusing on the first and last *full* year improves the comparability of the compensation schemes and reduces the influence of exit payments and signing bonuses on our tests.[2]

We focus on CEO-to-CEO changes to reduce the variation in pay that exists when executives move up in an organization. We also limit our analysis to CEO changes to avoid the influence of promotions on the bargaining positions. In addition, contract negotiations and

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[2] We conduct tests using the average compensation of the last/first two years in office to limit the influence of a single year of compensation. Requiring an extra year of data for each observation limits our sample to 105 observations.

information asymmetries are likely to be more severe when executive move firms, which increases the importance of the negotiations in contract design

3.1   Empirical models

Our first set of tests focus on CEO compensation at the new firm as a function of firm- and CEO-specific preferences. We utilize the unique incidence of a CEO moving from one firm to another, while maintaining the CEO position to isolate and test these effects. Specifically, we test the conjecture that a CEO's compensation is a function of the CEO's compensation at their prior firm and how the hiring firm compensated the prior CEO, where these effects are instruments for the CEO and the firm preferences. This relationship is represented by the following equation:

$$CEOComp_{a,t,i} = \alpha + \beta_1 CEOEffect_{b,t-1,i} + \beta_2 Firm\ Effect_{a,t-1,j} + \varepsilon \qquad (1)$$

Where *CEOComp*, *CEO Effect*, and *Firm Effect* represent the total compensation, cash compensation, equity compensation, percentage of cash compensation, or abnormal compensation; *a* refers to the new firm at which the CEO is employed; *b* refers to the CEO's prior firm; *t* refers to the period in which the compensation is received; *i* refers to the CEO; and *j* refers to the former CEO of the new firm. Thus, $CEOComp_{a,t,i}$ is the CEO's contract at the new firm, $CEOEffect_{b,t-1,i}$ represents the CEO's compensation at their prior firm, and $Firm\ Effect_{a,t-1,j}$ represents the new firm's compensation with their former CEO.

Models of executive compensation generally must control for firm- and manager-specific traits using available data. Our model does not rely on collecting additional control variables,

because the prior pay captures the influence of these characteristics, in expecattion. This is illustrated below:

$$CEOComp_{a,t,i} = f(FirmChars_{a,t}, CEOChars_{t,i}) \qquad (2)$$

$$CEO\ Effect_{b,t-1,i} = f(FirmChars_{b,t-1}, CEOChars_{t-1,i}) \qquad (3)$$

$$Firm\ Effect_{a,t-1,j} = f(FirmChars_{a,t-1}, CEOChars_{t-1,j}) \qquad (4)$$

Assuming that the changes in *FirmChars* and *CEOChars* between t and t-1 are, on average, small,[3] including $CEOComp_{b,t-1,i}$ and $CEOComp_{a,t-1,j}$ controls for firm and CEO characteristics that influence the compensation scheme in time t. In addition, to the extent that the variation in *CEOComp* is correlated with the variation in *CEOEffect*, β_1 from Eq. (1) isolates CEO specific effects because the firm characteristics change. Similarly, to the extent that the variation in *CEOComp* is correlated with the variation in *FirmEffect*, β_2 from Eq. (1) isolates the firm specific effect as CEO characteristics change.

In addition to examining the average CEO and firm-effects by estimating Eq. (1), we also test for the cross-sectional determinants of the CEO- and firm-specific bargaining power predicted in Section 2. We test these cross-sectional determinants by including them as interaction effects as follows:

$$\begin{aligned} CEOComp_{a,t,i} = {} & \alpha + \beta_1 CEO\ Effect_{b,t-1,i} + \beta_2 Firm\ Effect_{a,t-1,j} \\ & + \beta_3 CrossSectionalVar + \beta_4 CEO\ Effect * CrossSectionalVar \qquad (5) \\ & + \beta_5 Firm\ Effect * CrossSectionalVar + \varepsilon \end{aligned}$$

where the *CrossSectionalVar* includes the various firm- and CEO-specific determinants predicted in section 2. We estimate Eq. (5) separately for each of our cross-sectional determinants.

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[3] This is a reasonable assumption in our sample, as evidenced by the median change in total assets from t to t-1 of zero.

3.3   Variable Measurement

We measure several components of the compensation scheme. We include tests of total CEO compensation (*TotalComp*), which we calculate as the sum of salary, bonus, non-equity incentives, and equity compensation grants.[4] We also separately examine cash compensation (*CashComp*) defined as the sum of salary, bonus, and non-equity incentives;[5] equity compensation (*EqComp*) defined as fair value of equity grants; and the percentage of cash compensation (*CashPct*) defined as the quotient of *CashComp* and *TotalComp*. In addition, we examine pay that deviates from economic determinants, where *AbnormalPay* is measured as the residual from a model of executive compensation provided in Core and Guay (1999) and Graham et al. (2012), where the paramtere estimates extend from annual estimations of the full ExecuComp sample. This measure is estimated separately for the new CEO, the prior CEO, and the new CEO at the prior firm.[6] These metrics serve as the basis for *CEO Comp*, *CEO Effect*, and *Firm Effect*.[7]

To estimate Eq. (5), we identify several variables to capture the hypothesized differences in weights on the firm- and CEO-specific factors. To examine these cross-sectional differences

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[4] Because our sample spans the 1992-2010, equity compensation is not uniformly reported. In the post SFAS 123R period we use fair value of options or stock awarded, to be consistent with the pre-SFAS123R period, where we use the sum of the reported Black-Scholes value of option and the reported value of restricted stock grants. We also choose not to include other variables included in the EXECUCOMP total compensation measure (TDC1), such as "other compensation", as these variables are more likely to contain one-time bonus/severance payments which we are attempting to exclude from our analysis.

[5] We follow several prior studies (e.g., Cadman et al., 2010; Hayes et al., 2012) and sum bonus (BONUS) and non-equity incentive compensation (NONEQ_INCENT) as reported in EXECUCOMP as our measure of cash incentive based compensation. To the extent that NONEQ_INCENT includes equity-based payments introduces noise to our estimate of cash compensation.

[6] We do not include the variable for the standard deviation in returns in our estimation of the Graham et al. model as it is measured over a five-year window. Including this variable further restricts our already small sample. The exclusion of this variable does not result in a significant departure from the R^2 estimates presented in Graham et al. (2012).

[7] All compensation variables are winsorized at the 99% level to minimize the effect of an outlier on small sample model estimation.

we rely on interactions between the level of compensation and a median split generated indicator variable for each of the cross-sectional variables of interest. We implement this transformation for two reasons. First, the continuous variables are not normally distributed, likely as a result of the small sample size.[8] Second, the incremental differences in cross-sectional variation are less meaningful in understanding the relative bargaining power than the relative difference between the high and low groups of each variable of interest. That is, our predictions focus on a relative bargaining position that is not likely to be linear in our proxies for this variation.

Our first set of cross-sectional variables focuses on the firm-specific factors by measuring differences in the characteristics of the prior firm and the new firm. The first group of these firm-specific variables examines the difference between the variables of interest at the CEO's former and new firms. This group contains the following variables: *LgPosΔAT* which measures the difference in total assets; *LgPosΔMVE* which measures the difference in market value of equity; *LgPosΔROA* which measures the change in the return on assets; *LgPosΔ1YRRet* which measures the difference in the one-year buy and hold dividend reinvested return; *LgPosΔMTB* which measures the difference in the market-to-book ratio.[9] Following the discussion in the previous section, we predict that the firm's bargaining position is greater when the new firm is larger, better performing, and has greater opportunities for growth than the CEO's prior firm.

In addition, we measure two other firm-specific cross-sectional variables. The first, *TimetoFill*, measures the time it takes the new firm to fill their open CEO position. As this lag increases, it could represent either caution on the part of the firm to hire a new CEO or caution

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[8] Tests for normality were performed on each cross-sectional variable but are untabulated. The Chi-squared statistics reveal a high likelihood of non-normally distributed data, p-value<0.001.

[9] All underlying firm variables (e.g., total assets, market value of equity, etc.) are winsorized at the 99% level to minimize the effect of an outlier on the small sample model estimation.

on the part of the labor market's willingness to accept a position at the new firm. Because of these competing predictions, we do not provide a directional prediction for this variable.

Finally, we investigate the effect of *AbnormalFirmPay*, measured as the residuals from the model of executive compensation for the prior CEO at the new firm as in Core and Guay (1999) and Graham et al. (2012). Firms who have paid high levels of abnormal pay in the past may take the change in management as a chance to readjust their compensation or alternatively the prior abnormal pay may be descriptive of the pay policies of the firm and continue with the new executive.

In addition to these firm related cross-sectional variables, we also measure several CEO-specific characteristics. Similar to the firm characteristics, these variables are measured using indicators based on splits at median of the underlying characteristic. The CEO-specific variables are as follows: *CEOPower* measures the difference between the total compensation of the CEO and second highest paid executive at the executive's prior firm; *CEOTenure* measures the tenure of the CEO in his prior firm; ΔInd is an indicator variable taking the value of one if the NAICS code of the CEO's new firm is not equal to that of his old firm; *AbnormalCEOPay* measures the level of abnormal pay the CEO received at his prior firm using the residuals from the model for compensation. We predict the CEO's bargaining position with the new firm to be greater when the CEO held greater power and longer tenure at their prior firm. We also expect the CEO's bargaining position to be greater when moving to a firm in the same industry. Finally, we expect that CEO's who garnered larger amounts of abnormal pay in their prior firm are likely to sway the negotiations in their favor at the new firm.

For a subset of CEO's in our sample, compensation decreases when the CEO moves to the new firm. After reviewing a random sample of the Compensation Discussion and Analysis

section of the DEF 14a proxy statement for these firms, it does not appear that these decreases stem from a coding error, but rather a unique sets of circumstances (e.g., balloon payment in final year).[10] Nevertheless, to control for the possibility that CEO switches with decreases in pay are systematically different than other CEO transfers in our sample, we include an indicator variable (*DecComp*) taking on the value of one if the total compensation of the CEO decreased between his old and new firms. We test the sensitivity of our results to the inclusion of this variable in robustness tests. All models include year and industry fixed effects and all reported standard errors are Huber-White robust.[11]

4. Results

4.1 Descriptive statistics

Table 1 reports descriptive statistics for our sample of CEOs from three perspectives: the new firm in the current year, the new firm in the prior year, and the CEO's prior firm in the year prior to their departure. On average there is not a significant difference between the total compensation the executive receives at the new firm compared with the pay the outgoing executive received at this same firm. There is also no significant difference between what the outgoing executive and the current CEO received in the prior year. There is however, a significant increase in compensation for the executive who moves. Specifically, the executive who changes firms receives on average $1.7MM more in his new position. At the same time, CEO's receive about $800,000 more cash compensation at their new firm compared with the cash compensation at their prior firm, and almost $700,000 more cash compensation than the outgoing CEO of the new firm. The level of equity compensation is not significantly different

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[10] In subsequent sensitivity tests, we consider the average pay over two years to reduce the influence of such termination payments.
[11] Industry fixed effects were calculated using industry indicators created following Barth et al. (1998).

when the CEO moves firms or when the firm hires a new CEO. Similarly, there is not a significant difference in the proportion of cash compensation for the CEO at the new firm relative to their pay at their former firm or between the incoming and outgoing CEOs.[12]

Turning to the firm-specific characteristics, we find that, on average, CEO's move to larger firms than their prior firm as measured by both assets and market value of equity. In addition, the new firms in our sample report significantly higher net income than the firm's from which the new CEO originates. There is no significant difference in returns between the CEO's prior and new firms.

4.2 Multivariate analysis of CEO and firm preferences on compensation schemes

We conjecture that the CEO's new contract with their new firm is the product of a negotiation such that both firm- and CEO-specific preferences determine the compensation scheme. Eq. (1) models the compensation scheme of the new CEO at the new firm as a function of how the new firm compensated the former CEO and how the new CEO was compensated by their previous firm, where the prior compensation is an instrument for the CEO and firm preferences. Table 2 presents the results from estimating Eq. (1) for the various forms of pay including tests of the first and last full fiscal year and the average of the first and last two fiscal years following the change in CEO. We find consistently significant evidence that the new CEO's total compensation is a function of the total compensation the new CEO received at their prior firm ($\beta_{1\text{-}1YR}$=.724, p-value <.01; $\beta_{1\text{-}2YR}$=.684, p-value <.01). Total compensation, however, is related to the compensation the firm paid their outgoing executive only when considering the two-year average of total compensation ($\beta_{2\text{-}2YR}$=.081, p-value <.05). Cash compensation for the new CEO is a function of both the firm's cash pay to their prior CEO ($\beta_{2\text{-}1YR}$=.564, p-value

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[12] We also test for differences in medians and find qualitatively similar differences

<.01;$\beta_{2\text{-}1YR}$=.694, p-value <.01) and the CEO's cash compensation at their prior firm ($\beta_{1\text{-}1YR}$=.646, p-value <.01; $\beta_{1\text{-}2YR}$=.850, p-value <.01).

Although the results in Columns (1) and (2) suggest that total and cash compensation are a function of both CEO and firm-specific factors, equity compensation and the proportion of cash compensation are predominately driven by the CEO. Column (3) shows that equity compensation is determined by the equity compensation paid to the new CEO at their prior firm ($\beta_{1\text{-}1YR}$=.628, p-value <.01; $\beta_{1\text{-}2YR}$=.554, p-value <.01). But equity pay is not related to the compensation paid to the outgoing executive (neither $\beta_{1\text{-}1YR}$ nor $\beta_{1\text{-}2YR}$ are significantly different from zero). The results in Column (4) of Table 2 suggest that the percentage of cash compensation, is predominately determined by the proportion of CEO cash compensation at their prior firm ($\beta_{1\text{-}1YR}$=.509, p-value <.01; $\beta_{1\text{-}2YR}$=.371, p-value <.01). This result is further supported by a negative coefficient on the firm effect in Column (4).

Finally, we examine determinants of the level of pay that deviates from economic predictions. The results presented in Column (5) suggest that there is a significant positive association between the level of abnormal compensation of the executive at his prior firm and the level of abnormal compensation at the new firm (β_1=.468, p-value <.05). Together these results suggest that the firm and executive negotiate to determine the overall level of compensation but the manager determines the form of compensation. That is, on average, we find evidence that CEOs and firms negotiate in the labor market, but CEOs exert greater influence over the form of compensation. In addition, CEOs whose pay positively deviated from economic predictions are able to carry that deviation with them across firms.

Another interpretation of these findings is that firms and CEOs use the form of compensation to help resolve adverse selection problems that arise due to information

asymmetries. In the cross-sectional tests that follow, we shed additional light on these interpretations. It is also interesting to note that the fit of our models, as indicated by the adjusted R^2 are greater than 50%, suggesting that the firm- and CEO-specific factors capture a significant portion of the variation in compensation schemes.

4.3 Multivariate analysis of variation in bargaining power

4.3.1 Firm characteristics

The results of estimating Eq. (1) provide evidence of average effects. We also predict that cross-sectional differences in firm, manager, and labor market characteristics influence the bargaining position of the parties when negotiating the new compensation scheme. The first set of cross-sectional variables focus on firm-specific characteristics between the CEO's new and prior firm. Table 3 Panel A presents the results of estimating Eq. (5) where the dependent variable is total pay including interactions for differences in assets, market value of equity, ROA, returns, market-to-book value, and deviations from economically expected pay of the prior CEO. We also examine the effect of the time it takes to fill the vacant position on the relative bargaining power of the executive and firm. The results presented in Column (1) indicate that the CEO is a determinant of the executive's current contract after controlling for the size effect ($\beta_{1\text{-}1YR}$=.263, p-value<.05). The coefficient on the difference in firm size indicator is not significantly different than zero indicating no difference in intercept across the two groups. When the CEO moves to a larger firm, however, the CEO's influence on compensation is significantly greater than when the CEO does not move to a larger firm ($\beta_{4\text{-}1YR}$ =.808, p-value <.01; $\beta_{4\text{-}2YR}$=.484, p-value <.10). This result is not consistent with the prediction that a firm's bargaining power is increasing in firm size. Rather, this finding supports the alternative

hypothesis that the pool of CEOs equipped to manage larger firms is smaller, shifting the bargaining power towards the CEO. We explore the bargaining position of the CEO further when we consider CEO labor market in subsequent tests. Column (2) presents results where firm size is measure and with the market value of equity. The results are generally similar to those reported in Column (1).

We next turn to differences in firm performance between the CEO's new firm and their prior firm. The results presented in Column (3) suggest that compensation for CEOs who move to firms with similar return on assets (ROA) is only significantly determined by the CEO's compensation preferences ($\beta_{1\text{-}1YR}$ =1.077, p-value <.01; $\beta_{1\text{-}2YR}$=.938, p-value <.01). Interestingly, CEO's who move to firms with higher ROA have significantly less influence on their compensation contract (β_2=-.563, p-value <.10). The results for cross-sectional tests on market returns, presented in Column (4), are similar to those where we consider ROA, however, when returns are controlled both the CEO and firm are significant determinants of total compensation ($\beta_{1\text{-}1YR}$=.615, p-value <.05; $\beta_{1\text{-}2YR}$=.583, p-value <.10; $\beta_{2\text{-}1YR}$=.194, p-value <.05; $\beta_{2\text{-}2YR}$=.066, p-value <.05). Neither effect, however, changes when the CEO moves to a better performing firm (neither β_4, nor β_5 are significantly different from zero). Overall, these results suggest that the relative bargaining power of the executive and firm do not change as the performance of the firm differs between the new and prior firm. This suggests that accounting performance helps firms distinguish CEOs in the labor market. But, relative performance across the hiring firm and the CEO's prior firm is not an important determinant of contract negotiations.

Column (5) reports results after including the difference in the market-to-book ratio. Total compensation is significantly lower for firms with a high market-to-book ratio ($\beta_{3\text{-}1YR}$=-3514.97, p-value <.05; $\beta_{3\text{-}1YR}$=-2574.84, p-value <.10). Executives who move to firms with

higher market-to-book ratios exert greater influence on their compensation contract ($\beta_{4\text{-}1YR}$=.694, p-value <.01, $\beta_{4\text{-}2YR}$=.654, p-value <.05). These findings suggest that executives moving to a firm with greater growth opportunities are able to exert more power in the contract negotiations.

Next, we examine the effect of the time it takes to fill the vacant executive position on the relative bargaining power of the firm and the executive. The results, presented in Column (6), show that after including the time to fill the CEO position, only the executive's prior compensation significantly determines compensation at the new firm ($\beta_{1\text{-}1YR}$=1.091, p-value <.01; $\beta_{1\text{-}2YR}$=1.045, p-value <.01). In addition, the bargaining power of the executive decreases ($\beta_{4\text{-}1YR}$=-.717, p-value <.01; $\beta_{4\text{-}2YR}$=-.659, p-value <.01) as the length of time to fill the position increases. This is consistent with the firm exercising caution in the hiring process and therefore exerting more power on the contract negotiations.

Finally, we investigate the impact of the level of abnormal compensation the firm provided its outgoing executive. The results suggest both an executive and firm main effect ($\beta_{1\text{-}1YR}$=1.42; p-value <.01, $\beta_{1\text{-}2YR}$=.563, p-value <.10; $\beta_{2\text{-}2YR}$=.323, p-value <.05). In addition, the model of one-year compensation suggests that the level of total compensation is greater for firms who previously paid large amounts of abnormal compensation ($\beta_{3\text{-}1YR}$=3817.94, p-value <.10). The interaction coefficients indicate that the total compensation of the new executive less closely resembles the prior contract ($\beta_{4\text{-}1YR}$=-.784, p-value <.10) and the firm's prior contract ($\beta_{5\text{-}EQ}$=-.262, p-value <.10). This result suggests that firms adjust compensation towards the empirical equilibrium market when switching CEOs.

Taken together these results suggest that CEO's who are sought after by larger firms with better growth opportunities exhibit a larger influence on their compensation contracts. This is consistent with a constrained pool of talented CEOs able to manage larger, better performing

firms, which shifts the bargaining power towards this smaller set of CEOs. In addition, firms who take a longer time to fill their vacant positions exert more power in the negotiation process suggesting a choice to wait not a lack of interest in the position. Finally, abnormal pay by the firm does not persist when hiring a new CEO. We pursue these explanations further by examining cross-sectional differences in CEO characteristics in the following tests.

4.3.2   CEO characteristics

We predict that differences in CEO-specific traits and the labor market alter the CEO's bargaining position in contract negotiations. Panel B of Table 3 presents the parameter estimates of predicting total compensation as in Eq. (5) after including interactions with CEO characteristics. Column (1) presents the results from tests that include an indicator variable taking a value of one if the gap between the CEO and second highest paid executive at the prior firm is greater than the median pay gap, where the pay gap represents a stronger bargaining position for the CEO at the prior firm. The results show an overall CEO and firm effect on total compensation and that more powerful CEOs earn significantly higher pay (β_3 =3314.18, p-value <.10). In addition, consistent with predictions, the coefficient β_5 is significant and negative ($\beta_{5\text{-}1YR}$ =-.336, p-value <.10; $\beta_{5\text{-}2YR}$=-.274, p-value <.10), suggesting that firms have less influence over total compensation for CEOs that exhibited more power at their prior firm.

Column (2) presents the results when we include the CEO's tenure with their prior firm. We expect that more information is known about more seasoned executives, such that, conditional on the firm's choice of manager, CEOs with longer tenure have greater influence over the new compensation contract. The overall firm and CEO effect on compensation remain after considering CEO tenure. In addition, more seasoned CEO's have greater influence over the

compensation scheme than CEOs with shorter tenures ($\beta_{4\text{-}1YR}$ = .48, p-value <.10; $\beta_{4\text{-}2YR}$=.698, p-value <.05).

Next, we consider whether CEOs with specialized skill sets carry greater influence over the compensation scheme. We identify a firm's need for specialized skill sets, and a manager's ability to match with those skills by identifying CEOs who change firms within the same industry.[13] We conjecture that moving within the same industry suggests a need for specialized skills for the new firm that limits the pool of management, tightens the labor market, and places greater bargaining power with the new CEO. Column (3) provides results when we include an indicator for CEOs that switch firms *across* industries. Consistent with our predictions, CEOs who switch firms across industries have less influence on their compensation ($\beta_{4\text{-}1YR}$ =-.670, p-value <.01; $\beta_{4\text{-}2YR}$=-.978, p-value <.01).

Finally, we examine the effect of the level of abnormal pay the CEO received at the prior firm on the relative bargaining power in the current contract negotiation. The results in Column (4) suggest that CEOs receiving large of abnormal compensation at the prior firm, lose influence over the compensation scheme at the new firm ($\beta_{4\text{-}1YR}$=-1.055, p-value <.05; $\beta_{4\text{-}2YR}$=-.737, p-value <.10), while the firm gains influence ($\beta_{5\text{-}1YR}$=1.309, p-value <.05). This finding supports our earlier finding that abnormal pay does not persist when CEOs change firms.

Together, the results on the CEO characteristics, suggest that managers with greater bargaining power at their prior firm, more experience, and specialized skills have a greater influence over the compensation contracts at their new firm. The CEO's ability to garner abnormal pay at the prior firm does not, however, transfer to the current contract negotiation.

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[13] As an example, all CEO switches within the banking industry remain in the same industry.

4.3.3   Tests of Bargaining Power on Cash and Equity Compensation

The tests above examine the relative bargaining power of the executive and firm on the total level of compensation. But, as we document in the initial tests, CEOs and firms have differential influence over the various forms of the compensation. We also examine cross-sectional variation in firm and CEO influence over cash and equity portions of executive compensation. The models for cash and equity compensation are estimated based on Eq. (5) including the one-year measure of each compensation variable as the dependent variable. The results are broadly similar when we estimate the model including the two-year average of compensation prior to and following the CEO turnover.

Panel A of Table 4 presents results for cross-sectional differences in the bargaining power of the firm. As in the tests above, we focus on firm-specific variables for assets, market value of equity, ROA, returns, market-to-book value, abnormal pay of the prior CEO at the new firm, and the time required to fill the position. Column (1) indicates that there is an incremental effect of both CEO and firm bargaining power when the executive moves to a larger firm. Specifically, when the CEO moves to a larger firm, he loses some of his bargaining power for cash ($\beta_{4\text{-CASH}}$=-.432, p-value <.05), although the average CEO effect is retained ($\beta_{1\text{-CASH}}+\beta_{4\text{-CASH}}$>0). At the same time, the firm's bargaining power in the negotiations for cash also increases when the executive moves to larger firm ($\beta_{5\text{-CASH}}$=.665, p-value <.01). The results for equity compensation, on the other hand, indicate that executives who move to a larger firm, as measured by total assets, are able to exert significantly more power in the negotiations for equity pay ($\beta_{4\text{-EQ}}$=.793, p-value <.01). These results indicate that while the executive loses some

bargaining power over cash pay when moving to a larger firm, he gains additional power over the equity pay.

The results for executives moving to larger firms, as measured by the change in the market value of equity (Column (2)), are qualitatively similar to those for total assets. The persistent findings support the evidence that executives lose bargaining position for cash compensation when moving to a larger firm, but gain power in the negotiation for equity compensation.

Columns (3) and (4) examine the cross-sectional effect of moving to a better performing firm as measured by ROA and returns. The results in Column (3) point to a main effect of the CEO on both the level of cash and equity compensation ($\beta_{1\text{-CASH}}$=.605, p-value <.05; $\beta_{1\text{-EQ}}$=.984, p-value <.01). In addition, there is evidence of a decrease in the CEO specific effect on equity when the executive moves to a firm with greater ROA ($\beta_{4\text{-EQ}}$=-.576, p-value <.05). The results for the cross-sectional difference of an increase in the annual buy and hold return are presented in Column (4). The estimates from the model of cash compensation indicate that both the firm and executive influence the amount of cash compensation ($\beta_{1\text{-CASH}}$=.679, p-value <.05; $\beta_{2\text{-CASH}}$=.606, p-value <.05). But, there is no incremental effect in bargaining power when the executive moves to a better performing firm. The equity compensation results, however, indicate a decrease in the bargaining power of the firm for executives who move to better performing firms ($\beta_{5\text{-EQ}}$=-.207, p-value <.10). Together, these results indicate that the difference in performance does not influence the relative bargaining power in cash compensation negotiations. Equity compensation negotiations, however, shift away from the executive when performance is measured using ROA but towards him when measured with returns. Thus, we cannot form strong conclusions between firm performance and the relative bargaining position for cash or equity

compensation, which points to the difficulty in measuring CEO ability with accounting and market performance.

Column (5) presents the results for the cross-sectional effect of moving to a firm with larger growth prospects, as measured by the market-to-book ratio. The results point to a main effect for CEO influence over equity compensation ($\beta_{1\text{-EQ}}$=.218, p-value <.05) after controlling for differences in growth opportunities. Executives who move to firms with larger growth prospects are able to exert more pressure on the equity compensation negotiation process ($\beta_{4\text{-EQ}}$=.698, p-value <.01). These results indicate that when an executive is moving to a firm with larger growth prospects, he has the ability to sway the negotiation in his favor and demand larger equity compensation taking advantage of the potential for growth, and perhaps help resolve adverse selection problems

The next column tests whether the time it takes to fill the vacant position affects the relative bargaining power of the firm/executive. The cash results in column (6) indicate that there is not a significant incremental effect of time to fill a vacant CEO position on the contract negotiations ($\beta_{4\text{-CASH}}$ and $\beta_{2\text{-CASH}}$ are not significantly different from zero). The results from estimating the equity equations however, indicate that the positive relation found for total compensation and the length of time to fill the position are driven by differences in equity. Consistent with the total compensation results, when the time to fill is long, the executive loses equity bargaining power ($\beta_{4\text{-EQ}}$=-.735, p-value <.01) while the firm gains a bargaining position ($\beta_{5\text{-EQ}}$=.248, p-value <.05). This is consistent with firms using equity grants to help resolve adverse selection problems, which extend the time to fill the CEO position.

Finally, we examine the cross-sectional effect of the level of abnormal pay the firm paid its outgoing executive. Column (7) provides evidence of a decrease in the bargaining power of

the executive ($\beta_{4\text{-CASH}}$=-.599, p-value <.05) and an increase in the power of the firm ($\beta_{5\text{-CASH}}$=.541, p-value <.10) for cash compensation. These results suggest that firms who pay high levels of abnormal compensation are sought after by executives, when the supply of candidates is large the power shifts to the firm. Similar findings persist in the estimation of the model for equity compensation. A main effect for the level of abnormal compensation ($\beta_{3\text{-EQ}}$=2704.550, p-value <.10) exists, suggesting firms who pay high levels of abnormal compensation provide executives with larger amounts of equity compensation as well. Consistent with the cash findings above, executives lose power in the negotiation process when the firm previously paid high levels of abnormal compensation ($\beta_{4\text{-EQ}}$=-1.029, p-value <.10).

Our final set of tests examines the effect of cross-sectional differences in CEO characteristics on the levels of cash and equity compensation. The results are presented in Panel B of Table 4. Column (1) examines the effect of CEO power at the prior firm on the cash and equity negotiation process. Results suggest little effect of CEO power on the negotiation for cash, however, this power does affect the negotiation for equity. Specifically, a main effect for both the executive ($\beta_{1\text{-EQ}}$=.602, p-value <.01) and the level of CEO power ($\beta_{3\text{-EQ}}$=2685.81, p-value <.10) exist, suggesting that more powerful CEOs receive greater equity compensation. At the same time, the firm concedes negotiation power with CEOs that enjoyed greater influence at their prior firm ($\beta_{5\text{-EQ}}$=-.382, p-value <.10).

As discussed above, we expect the level of CEO tenure to affect the contract negotiation process. Specifically, information asymmetry declines for CEOs with longer tenures, which shift the negotiations in their favor. The results for Column (2) support this conjecture for equity compensation ($\beta_{4\text{-EQ}}$=.508, p-value <.05), but not for cash. This result reveals that executives

with longer tenure in their prior firm exert more pressure on the firm in the negotiation for equity compensation.

We also examine the effect of an executive changing industries when he changes firms. A change in industry would result in a loss of industry specific information the executive may have gathered in his prior position as well as increased the uncertainty of the executive's success. The results for estimating the model for cash compensation point to a shift towards the executive in the negotiation for cash ($\beta_{4\text{-CASH}}$=.707, p-value <.05; $\beta_{5\text{-CASH}}$=-.835, p-value <.01). This is consistent with executives demanding greater cash compensation for the risk of entering a new industry. The results from the equity model support this conjecture as the level of equity compensation is significantly lower than in the executive's prior position ($\beta_{4\text{-EQ}}$=-.541, p-value <.01).

Our final cross-sectional test examines the effect of the level of abnormal pay the executive received in his prior position. Executives who received high levels of abnormal pay may be sought after by the market who perceives this pay as an indicator of the skill level of the executive or they may consider the pay excessive and adjust. The results from the regressions of cash compensation show a main effect for the executive ($\beta_{1\text{-CASH}}$=.322, p-value <.05) as well as an incremental effect to his bargaining power when his level of abnormal compensation is high ($\beta_{4\text{-CASH}}$=.485, p-value <.10). This finding suggests that when the manager previously extracted high levels of abnormal compensation he is able to pull the negotiations for cash more in his favor. On the other hand, the equity findings suggest that the CEO influence over equity pay is lower when the executive's previous pay deviated from economic predictions ($\beta_{4\text{-EQ}}$=-1.21, p-value <.01). In addition, the firm influence on equity compensation is stronger when the executive previously earned high levels of abnormal compensation ($\beta_{5\text{-EQ}}$=1.36, p-value <.05).

Together, these results suggest that while the executive may be able to influence the negotiation for cash, the firm takes the opportunity to reset the level of abnormal equity compensation the executive received at the prior firm.

4.4   Robustness tests

We recognize that including the decrease in compensation as an indicator variable in our tests influences the results. Indeed, the coefficient on this variable is significant in many of our models. While, we believe it is important to control for the set of CEOs that receive lower pay at their new firm, we also recognize the possible influence of this set of observations on our inferences. To alleviate this concern, we replicate our tests dropping all decrease in compensation observations from our sample. The results are presented in Table 5. While we lose observations, and thus power, we are still consistently able to replicate our results. In addition, we run our analysis suppressing the decrease in compensation indicator from the models. The results (untabulated) are broadly consistent with the documented inferences.

Another concern for models using compensation variables is the non-linearity of relationships. To address this concern, we use log-transformed measures of both our dependent and independent compensation variables. In untabulated results, the results for both the main and cross-sectional tests are qualitatively similar. We also consider industry adjusted returns as a cross-sectional variable of performance and find similar results to those reported for returns. Finally, to address concerns with our choice to dichotomize our cross-sectional variables of interest to address their small sample non-normality, we estimate the models using standardized ($\mu=0$, $\sigma=1$) cross-sectional variables and find qualitatively similar results.

5.   Conclusion

While there is an extensive body of research on the determinants of executive compensation, many unanswered questions remain. Specifically, how executive compensation contracts behave in a dynamic environment and how the labor market and negotiation process impacts these contracts. This study broadens our understanding of executive compensation contracts by examining a unique labor market phenomenon, the CEO to CEO change. By exploiting the empirical controls these changes provide, we are able to further our understanding of compensation contracts in a dynamic environment, which are subject to labor market and negotiation pressures.

Prior research suggests that CEO compensation schemes are the product of CEO and firm specific preferences. Our findings support this conjecture by demonstrating that the levels of total and cash compensation are a function of firm and manager preferences. Contrary to the prediction above, however, we also demonstrate that the level of equity compensation, the form of compensation (cash vs. equity), and the level of pay that deviates from economic predictions is driven by the preferences of the manager. This is also consistent with firms using compensation schemes to help resolve adverse selection problems that arise with information asymmetry about CEOs.

We also find that in circumstances where the CEO holds a greater bargaining position they more likely exert their influence on the compensation scheme. In addition, when larger firms that require specialized skills seek executive talent, the restricted labor market affords CEOs to have greater influence over their contract. We find mixed evidence that firm performance influences the bargaining position. Although, we find consistent evidence, that any bargaining power the firm controlled, on average, declines when it is a high performing firm

seeking a new manager. This supports our conjecture that the constrained pool of talented managers places CEOs in a stronger bargaining position when negotiating compensation schemes.

Our results also indicate that managers who exhibited greater bargaining power in their prior position are able to translate that power into greater influence on their current contract. Additionally, we find weak evidence that extended tenure with the prior firm provides the executive any benefit in his current contract. We do however; find that the negotiation process is tipped in favor of the executive when he moves between firms within the same industry. This suggests that power arises from the knowledge, shared skills, or lower information asymmetry of running a similar firm.

Overall, we find that compensation schemes are a function of both firm and CEO specific preferences, where firm characteristics, CEO characteristics, and labor market conditions alter the bargaining position of the parties in a predictable way. Understanding the influence of labor market conditions and the relative bargaining power is an important step towards a greater understanding of compensation design and the forces that shape these schemes. Using a dynamic contracting approach, this paper provides a richer understanding of the evolution of executive compensation contracts and how information asymmetries are resolved in the negotiation process.

References

Bandiera, O., Prat, A., Guiso, L., Sadun, R., 2011. Matching firms, managers and incentives: National Bureau of Economic Research.

Barth, M.E., Beaver, W.H., Landsman, W.R., 1998. Relative valuation roles of equity book value and net income as a function of financial health. Journal of Accounting and Economics 25, 1-34.

Bertrand, M., Schoar, A., 2003. Managing with style: The effect of managers on firm policies. The Quarterly Journal of Economics 118, 1169-1208.

Boyer, G.R., Smith, R.S., 2000. Development of the Neoclassical Tradition in Labor Economics, The. Indus. & Lab. Rel. Rev. 54, 199.

Cadman, B., Carter, M.E., Hillegeist, S., 2010. The incentives of compensation consultants and CEO pay. Journal of Accounting and Economics 49, 263-280.

Core, J., Guay, W., 1999. The use of equity grants to manage optimal equity incentive levels. Journal of Accounting and Economics 28, 151-184.

Edmans, A., Gabaix, X., 2011. The effect of risk on the CEO market. Review of Financial Studies 24, 2822-2863.

Eisfeldt, A., Kuhnen, C., 2010. CEO turnover in a competitive assignment framework. Available at SSRN 1594785.

Fee, C.E., Hadlock, C.J., 2003. Raids, rewards, and reputations in the market for managerial talent. Review of Financial Studies 16, 1315-1357.

Frydman, C., Saks, R.E., 2010. Executive compensation: A new view from a long-term perspective, 1936–2005. Review of Financial Studies 23, 2099-2138.

Gabaix, X., Landier, A., 2008. Why has CEO pay increased so much? The Quarterly Journal of Economics 123, 49-100.

Graham, J.R., Harvey, C.R., Puri, M., 2010. A corporate beauty contest: National Bureau of Economic Research.

Graham, J.R., Li, S., Qiu, J., 2012. Managerial attributes and executive compensation. Review of Financial Studies 25, 144-186.

Hayes, R.M., Lemmon, M., Qiu, M., 2012. Stock options and managerial incentives for risk taking: Evidence from FAS 123R. Journal of Financial Economics.

Hicks, J.R., 1963. The theory of wages: Macmillan London.

Murphy, K., Zabojnik, J., 2007. Managerial capital and the market for CEOs. Available at SSRN 984376.

Murphy, K.J., Zabojnik, J., 2004. CEO pay and appointments: A market-based explanation for recent trends. American economic review, 192-196.

Pan, Y., 2010. The determinants and impact of executive-firm matches. Available at SSRN 1571892.

Rajgopal, S., Taylor, D., Venkatachalam, M., 2011. Frictions in the CEO Labor Market: The Role of Talent Agents in CEO Compensation*. Contemporary Accounting Research 29, 119-151.

Tervio, M., 2008. The difference that CEOs make: An assignment model approach. The American Economic Review 98, 642-668.

Table 1
Descriptive Statistics

Panel A: Descriptive Statistics

	(1)		(2)		(3)	
	Current Firm$_t$		Current Firm$_{t-1}$		Prior Firm$_{t-1}$	
	Mean	Median	Mean	Median	Mean	Median
Total Compensation	6859.16	3973.62	5970.98	2369.19	5157.55	2955.84
Cash Compensation	2365.65	1763.85	1639.12	1000.90	1540.41	1026.34
Equity Compensation	4488.91	2029.21	4275.02	1161.62	3562.92	1465.58
Percent Cash	0.53	0.49	0.54	0.49	0.52	0.46
Total Assets	38644.85	6549.47	38495.46	5928.10	12010.52	2415.69
Net Income	665.12	92.26	-133.36	63.66	293.43	80.60
Market Value of Equity	13552.88	3718.93	12251.96	2862.84	6562.00	2522.91
One Year Return	0.15	0.10	0.00	-0.05	0.22	0.16

Panel B: Paired Sample t-Tests

	(4)	(5)	(6)
	Difference (1) - (2)	Difference (1)- (3)	Difference (2)-(3)
Total Compensation	888.19	1701.61***	813.43
Cash Compensation	726.53***	825.24***	98.70
Equity Compensation	213.89	925.99	712.10
Percent Cash	-0.01	0.01	0.02
Total Assets	149.39	26634.33***	26484.94***
Net Income	798.48*	371.70*	-426.78
Market Value of Equity	1300.92	6990.88***	5689.96***
One Year Return	0.15**	-0.07	-0.22***

This table includes descriptive statistics for our full panel of 134 observations.

. *, **, *** indicates statistical significance at 10%, 5% and 1% levels for tests of differences across the groups in a pair-wise test of differences in means. *TotalComp*= Sum of salary, bonus, non-equity incentives, value of restricted stock grants, and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *CashComp*= Sum of salary, bonus and non-equity incentives as reported in ExecuComp. *EqComp* = Sum of the value of restricted stock grants and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *CashPct*= CashComp/TotalComp. *AT*=Total assets of the firm as reported in COMPUSTAT. *NI*= Net income of the firm as reported in COMPUSTAT. MVE = Market value of equity of the firm as reported in COMPUSTAT (CEQ*CSHO). *RET*= One year buy-and-hold returns, assuming dividend reinvestment as reported in CRSP.

Table 2
OLS Regressions of Compensation on CEO and Firm- Fixed Effects

$$CEOComp_{a,t,i} = \alpha + \beta_1 CEOEffect_{b,t-1,i} + \beta_2 Firm\ Effect_{a,t-1,j} + \varepsilon$$

Full Sample:

	(1) TotalComp		(2) CashComp		(3) EqComp		(4) CashPct		(5) AbnormalPay
	One-Year	Two-Year Avg	One-Year	Two-Year Avg	One-Year	Two-Year Avg	One-Year	Two-Year Avg	One-Year
CEO Effect	0.724	0.684	0.646	0.850	0.628	0.554	0.509	0.371	0.468
	(3.24) ***	(2.92) **	(4.05)***	(3.91)***	(3.08)***	(2.98)***	(4.28)***	(3.13)***	(2.75)**
Firm Effect	0.073	0.081**	0.564	0.694	-0.019	0.014	-0.216	0.011	-0.059
	(1.21)	(2.18)	(3.21)***	(3.61)***	(-0.37)	(0.40)	(-2.34)**	(0.10)	(-0.53)
DecComp	-8183.57	-6603.71	-1373.00	1014.00	-6161.36	-5053.65	0.36	0.24	-0.88
	(-5.20)***	(-5.40)***	(-3.06)***	(-2.66)***	(-4.26)***	(-4.79)***	(5.55)***	(3.56)***	(-1.40)
Constant	1526.040	6392.424	659.749	-6502.180	896.975	9840.156	0.886	-0.082	1.955
	(0.45)	(0.98)	(0.73)	(-2.15)**	(0.31)	(3.23)***	(6.68)***	(-0.50)	(2.69)**
R^2	57.0%	62.2%	57.9%	69.9%	49.3%	57.8%	40.2%	49.6%	68.5%
Sample Size	134	105	134	105	134	105	134	105	134

t-statistcis based on Huber-White robust standard errors are in parentheses. *, **, *** indicates statistical significance at 10%, 5% and 1% levels. All models include year and industry fixed effects. *TotalComp*= Sum of salary, bonus, non-equity incentives, value of restricted stock grants, and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *CashComp*= Sum of salary, bonus and non-equity incentives as reported in ExecuComp. *EqComp* = Sum of the value of restricted stock grants and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *CashPct*= CashComp/TotalComp. *AbnormalPay* = the residual from a model of total pay based on firm and CEO characteristics. *FirmEffect*=compensation (matched with dependent variable) of the outgoing executive at the CEO's new firm as measured above. *CEOEffect*=compensation (matched with dependent variable) of the CEO in his prior position with his prior firm as measured above. *DecComp*=an indicator variable taking the value of one if the CEO's total compensation was greater in his prior position than in the current position.

Table 3
OLS Regressions of Compensation on CEO and Firm-effects with Cross-Sectional Tests

$$CEOComp_{a,t,i} = \alpha + \beta_1 CEO\ Effect_{b,t-1,i} + \beta_2 Firm\ Effect_{a,t-1,j} + \beta_3 CrossSectionalVar$$
$$+\beta_4 CEO\ Effect * CrossSectionalVar + \beta_5 Firm\ Effect * CrossSectionalVar$$

Panel A - Firm Related Variables:

	(1) LgPosΔAT		(2) LgPosΔMVE		(3) LgPosΔROA		(4) LgPosΔ1YRRet	
	One-Year	*Two-Year Avg.*	*One-Year*	*Two-Year Avg.*	*One-Year*	*Two-Year Avg.*	*One-Year*	*Two-Year Avg.*
CEO Effect	0.263	0.307	0.205	0.168	1.077	0.938	0.615	0.583
	(2.57)**	(1.04)	(2.60)**	(1.04)	(6.64)***	(6.51)***	(2.29)**	(1.84)*
Firm Effect	-0.018	0.074	-0.058	0.118	0.110	0.078	0.194	0.066
	(-0.17)	(0.65)	(-0.55)	(1.20)	(0.65)	(0.49)	(2.08)**	(2.04)**
Cross-Sectional Variable	1101.676	2757.648	-352.258	733.337	1940.888	1009.866	-60.893	211.371
	(0.70)	(1.47)	(-0.24)	(0.47)	(0.94)	(0.39)	(-0.03)	(0.10)
CEO*CSV	0.808	0.484	0.854	0.928	-0.563	-0.425	0.347	0.314
	(4.79)***	(1.66)*	(5.67)***	(4.06)***	(-1.92)*	(-1.12)	(1.00)	(0.75)
Firm*CSV	0.075	-0.006	0.085	-0.069	-0.013	0.020	-0.197	0.036
	(0.67)	(-0.05)	(0.79)	(-0.66)	(-0.07)	(0.13)	(-1.55)	(0.71)
DecComp	-7316.46	-5462.83	-6613.11	-4733.75	-8421.94	-6335.52	-8507.43	-7173.89
	(-6.26)***	(-5.46)***	(-5.63)	(-4.99)***	(-5.10)***	(-5.27)***	(-5.07)***	(-5.07)***
Constant	5588.004	12730.660	-449.485	-8250.036	1394.943	10109.450	807.839	365.596
	(1.23)	(1.62)	(-0.11)	(-1.98)*	(0.39)	(1.35)	(0.22)	(0.06)
R^2	72.9%	71.6%	71.7%	77.6%	61.0%	64.1%	59.2%	64.9%
Sample Size	134	105	134	105	134	105	134	105

Table 3 (CONT.)

Panel A - Firm Related Variables (Cont.):

	(5) LgPosΔMTB		(6) Time to Fill		(7) Abnormal Firm Pay	
	One-Year	*Two-Year Avg.*	*One-Year*	*Two-Year Avg.*	*One-Year*	*Two-Year Avg.*
CEO Effect	0.295	0.338	1.091	1.045	1.424	0.563
	(1.57)	(1.14)	(6.86)***	(5.73)***	(3.48)***	(1.89)*
Firm Effect	0.041	0.050	0.004	0.085	0.029	0.323
	(0.52)	(1.03)	(0.05)	(1.52)	(0.19)	(2.13)**
Cross-Sectional Variable	-3514.972	-2574.864	944.461	1151.008	3817.940	3331.622
	(-2.55)**	(-1.76)*	(0.64)	(0.75)	(1.97)*	(1.36)
CEO*CSV	0.694	0.654	-0.717	-0.659	-0.784	0.034
	(3.15)***	(2.00)**	(-3.00)***	(-1.98)**	(-1.66)*	(0.08)
Firm*CSV	0.017	0.095	0.249	0.043	0.018	-0.262
	(0.19)	(1.32)	(2.02)**	(0.65)	(0.11)	(-1.83)*
DecComp	-8259.92	-6117.04	-8231.66	-5669.24	-8707.868	-6732.773
	(-4.84)***	(-4.94)***	(-5.45)***	(-5.00)***	(-5.21)***	(-4.77)***
Constant	3139.21	-159.66	982.06	11163.11	-7130.39	3329.50
	(0.85)	(-0.04)	(0.31)	(1.86)*	(-1.31)	(0.34)
R^2	63.3%	68.7%	64.6%	67.6%	59.1%	64.4%
Sample Size	134	105	134	105	134	105

Table 3 (CONT.)

Panel B - CEO Specific Variables:

	(1) CEO Power		(2) CEO Tenure		(3) ΔInd		(4) Abnormal CEO Pay	
	One-Year	Two-Year Avg.	One-Year	Two-Year Avg.	One-Year	Two-Year Avg.	One-Year	Two-Year Avg.
CEO Effect	0.922	0.938	0.537	0.405	0.951	0.909	1.686	1.3625
	(3.92)***	(2.81)***	(1.98)**	(1.32)	(7.19)***	(5.45)***	(4.03)***	(3.34)***
Firm Effect	0.148	0.113	0.097	0.101	0.100	0.087	-1.202	-0.0363
	(2.75)***	(2.67)***	(1.24)	(2.75)***	(1.86)*	(1.94)*	(-1.99)**	(-0.25)
Cross-Sectional Variable	3314.185	1863.611	876.86	-1987.645	-943.877	-743.861	134.070	1943.516
	(1.80)*	(0.88)	(0.49)	(-1.17)	(-0.45)	(-0.36)	(0.08)	(1.07)
CEO*CSV	-0.215	-0.299	0.48	0.698	-0.670	-0.978	-1.055	-0.7372
	(-0.56)	(-0.69)	(1.66)*	(2.07)**	(-3.73)***	(-4.02)***	(-2.18)**	(-1.66)*
Firm*CSV	-0.336	-0.274	-0.02	-0.003	-0.001	0.242	1.309	0.1183
	(-1.66)*	(-1.84)*	(-0.23)	(-0.06)	(-0.01)	(1.43)	(2.17)**	(0.8)
DecComp	-8785.00	-6667.52	-8527.06	-5391.39	-8422.74	-6021.89	-8449.37	-6918.491
	(-4.91)***	(-4.96)***	(-5.23)***	(-4.52)***	(-5.66)***	(-5.61)***	(-5.51)***	(-5.08)***
Constant	1170.046	11641.920	-1939.462	-2127.067	4268.663	21484.600	2020.773	7166.45
	(0.31)	(1.65)	-0.45	(-0.46)	(0.96)	(5.61)***	(0.59)	(1.22)
R^2	59.4%	65.6%	62.1%	66.7%	66.9%	73.4%	63.4%	64.7%
Sample Size	134	105	134	105	134	105	134	105

t-statistcis based on Huber-White robust standard errors are in parentheses. *, **, *** indicates statistical significance at 10%, 5% and 1% levels. All models include year and industry fixed effects. Dependent variable in all regressions is *TotalComp*. *TotalComp*= Sum of salary, bonus, non-equity incentives, value of restricted stock grants, and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *DecComp*=an indicator variable taking the value of one if the CEO's total compensation was greater in his prior position than in the current position. LgPosΔAT = An indicator variable taking a value of one if the change in total assets between the CEO's old and new firms is above the median. LgPosΔMVE = An indicator variable taking a value of one if the change in market value of equity between the CEO's old and new firms is above the median. LgPosΔROA = An indicator variable taking a value of one if the change in return on assets between the CEO's old and new firms is above the median. LgPosΔ1YRRet = An indicator variable taking a value of one if the change in one year buy and hold dividend reinvested returns between the CEO's old and new firms is above the median. *LgPosΔMTB*= An indicator variable taking a value of one if the change in the market-to-book ratio between the CEO's old and new firms is above the median. *Time to Fill*=An indicator variable taking on the value of one if the amount of time required to fill the vacant CEO position at the new firm is above the median. *Abnormal Firm Pay*= An indicator variable taking on the value of one if the level of abnormal pay (as measured by the residuals from a compensation prediction model) at the new firm for the prior CEO are above the median. *CEOPower* = An indicator variable taking a value of one if the gap between the CEO and second highest paid executive in his prior firm is greater than the median pay gap. *CeoTenure* = An indicator variable taking on a value of one if the tenure of the CEO at his old firm is greater than the median tenure. *SameInd* = An indicator variable taking on a value of one if the CEO's old and new firms are not in the same industry. *AbnormalCEOPay*= An indicator variable taking on the value of one if the level of abnormal pay (as measured by the residuals from a compensation prediction model) at the prior firm for the new CEO are above the median.

Table 4
OLS Regressions of Compensation on CEO and Firm-effects with Cross-Sectional Tests (Cash & Equity)

$$CEOComp_{a,t,i} = \alpha + \beta_1 CEO\ Effect_{b,t-1,i} + \beta_2 Firm\ Effect_{a,t-1,j} + \beta_3 CrossSectionalVar$$
$$+\beta_4 CEO\ Effect * CrossSectionalVar + \beta_5 Firm\ Effect * CrossSectionalVar$$

Panel A - Firm Related Variables:

	(1) LgPosΔAT		(2) LgPosΔMVE		(3) LgPosΔROA		(4) LgPosΔ1YRRet	
	Cash	Equity	Cash	Equity	Cash	Equity	Cash	Equity
CEO Effect	0.819	0.188	0.774	0.161	0.605	0.984	0.679	0.538
	(6.50)***	(2.38)**	(4.77)***	(2.14)**	(2.34)**	(5.56)***	(2.41)**	(2.27)**
Firm Effect	0.083	-0.088	0.164	-0.097	0.383	0.108	0.606	0.113
	(0.97)	(-0.95)	(1.17)	(-0.84)	(1.60)	(0.53)	(2.32)**	(1.53)
Cross-Sectional Variable	719.205	1530.014	754.869	576.308	-705.354	2079.664	440.909	-131.805
	(1.08)	(1.06)	(1.18)	(0.45)	(-0.85)	(1.24)	(0.76)	(-0.09)
CEO*CSV	-0.432	0.793	-0.403	0.805	-0.047	-0.576	-0.041	0.288
	(-2.01)**	(4.77)***	(-1.66)*	(4.78)***	(-0.13)	(-2.32)**	(-0.12)	(0.81)
Firm*CSV	0.665	0.056	0.540	0.043	0.332	-0.119	-0.076	-0.207
	(2.72)***	(0.59)	(1.98)*	(0.39)	(1.16)	(-0.58)	(-0.22)	(-1.95)*
DecComp	-1381.73	-5364.00	-1162.57	-4966.06	-1383.40	-6240.38	-1407.00	-6389.58
	(-3.33)***	(4.86)***	(-2.73)***	(-4.51)***	(-2.97)***	(-4.00)***	(-3.10)***	(-4.12)***
Constant	1802.089	2073.266	145.202	-611.464	1113.040	-882.204	525.760	1071.476
	(2.47)**	(0.57)	(0.15)	(-0.17)	(0.98)	(-0.28)	(0.56)	(0.35)
R^2	63.1%	65.5%	61.9%	63.7%	58.7%	54.1%	58.1%	51.3%
Sample Size	134	134	134	134	134	134	134	134

Table 4 (CONT.)

Panel A - Firm Related Variables (Cont.):

	(6) LgPosΔMTB		(7) Time to Fill		(8) Abnormal Firm Pay	
	Cash	Equity	Cash	Equity	Cash	Equity
CEO Effect	0.230	0.218	0.581	0.998	1.059	1.605
	(0.73)	(2.12)**	(2.47)**	(5.89)***	(4.37)***	(2.82)***
Firm Effect	0.639	-0.007	0.526	-0.085	0.226	-0.031
	(1.76)*	(-0.10)	(2.24)**	(-1.13)	(1.24)	(-0.17)
Cross-Sectional Variable	-663.363	-2077.490	255.548	-138.882	771.104	2704.550
	(-0.83)	(-1.80)*	(0.44)	(-0.10)	(1.49)	(1.87)*
CEO*CSV	0.539	0.698	0.149	-0.735	-0.599	-1.029
	(1.47)	(3.95)***	(0.43)	(-3.84)***	(-2.03)**	(-1.73)*
Firm*CSV	-0.113	-0.062	0.037	0.248	0.541	0.000
	(-0.28)	(-0.70)	(0.12)	(2.58)**	(1.90)*	(0.00)
DecComp	-1392.23	-6341.83	-1381.25	-6220.94	-1646.236	-6782.915
	(-2.76)***	(-4.14)***	(-3.15)***	(-4.54)***	(-3.41)***	-(4.39)***
Constant	747.388	2322.880	862.821	382.701	-580.117	-5429.531
	(0.75)	(0.71)	(0.80)	(0.12)	(-0.51)	(-1.23)
R^2	59.2%	56.6%	59.0%	59.2%	61.6%	51.0%
Sample Size	134	134	134	134	134	134

Table 4 (CONT.)

Panel B - CEO Specific Variables:

	(1) CEO Power		(2) CEO Tenure		(3) ΔInd		(4) Abnormal CEO Pay	
	Cash	*Equity*	*Cash*	*Equity*	*Cash*	*Equity*	*Cash*	*Equity*
CEO Effect	1.292	0.602	0.687	0.449	0.476	0.799	0.322	1.7315
	(2.6z0)**	(2.63)***	(2.65)***	(2.16)**	(3.23)***	(4.97)***	(2.09)**	(4.33)***
Firm Effect	0.371	0.053	0.484	0.027	0.890	-0.004	0.088	-1.3456
	(1.32)	(0.94)	(2.49)**	(0.38)	(4.50)***	(-0.07)	(0.33)	(-2.33)**
Cross-Sectional Variable	-640.768	2685.811	112.56	1506.764	-545.995	-1570.592	-216.847	-519.7488
	(-1.51)	(1.89)*	(0.19)	(1.08)	(-0.87)	(-0.84)	(-0.40)	(-0.41)
CEO*CSV	-0.542	0.078	-0.09	0.508	0.707	-0.541	0.485	-1.2086
	(-1.09)	(0.21)	(-0.26)	(2.03)**	(2.41)**	(-3.09)***	(1.79)*	(-2.70)***
Firm*CSV	0.071	-0.382	0.16	-0.064	-0.835	0.001	0.393	1.35758
	(0.21)	(-1.80)*	(0.48)	(-0.76)	(-3.40)***	(0.01)	(1.23)	(2.36)**
DecComp	-1171.51	-6888.35	-1371.60	-6648.88	-1339.50	-6270.27	-1589.37	-6165.254
	(-2.84)***	(-4.13)***	(-3.09)***	(-4.48)***	(-3.22)***	(-4.41)***	(-3.42)***	(-4.74)***
Constant	1729.576	-1108.884	475.293	-2162.092	266.098	2564.487	279.798	2609.421
	(1.20)	(-0.32)	(0.41)	(-0.60)	(0.29)	(0.67)	(0.29)	(0.80)
R^2	62.3%	52.3%	58.2%	55.8%	63.9%	57.0%	60.9%	59.0%
Sample Size	134	134	134	134	134	134	134	134

t-statistcis based on Huber-White robust standard errors are in parentheses. *, **, *** indicates statistical significance at 10%, 5% and 1% levels. All models include year and industry fixed effects. Dependent variable in all regressions is either *CashComp* or *EqComp* as labeled. *CashComp*= Sum of salary, bonus and non-equity incentives as reported in ExecuComp. *EqComp* = Sum of the value of restricted stock grants and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *DecComp*=an indicator variable taking the value of one if the CEO's total compensation was greater in his prior position than in the current position. LgPosΔAT = An indicator variable taking a value of one if the change in total assets between the CEO's old and new firms is above the median. LgPosΔMVE = An indicator variable taking a value of one if the change in market value of equity between the CEO's old and new firms is above the median. LgPosΔROA = An indicator variable taking a value of one if the change in return on assets between the CEO's old and new firms is above the median. LgPosΔ1YRRet = An indicator variable taking a value of one if the change in one year buy and hold dividend reinvested returns between the CEO's old and new firms is above the median. *LgPosΔMTB*= An indicator variable taking a value of one if the change in the market-to-book ratio between the CEO's old and new firms is above the median. *Time to Fill*=An indicator variable taking on the value of one if the amount of time required to fill the vacant CEO position at the new firm is above the median. *Abnormal Firm Pay*= An indicator variable taking on the value of one if the level of abnormal pay (as measured by the residuals from a compensation prediction model) at the new firm for the prior CEO are above the median. *CEOPower* = An indicator variable taking a value of one if the gap between the CEO and second highest paid executive in his prior firm is greater than the median pay gap. *CeoTenure* = An indicator variable taking on a value of one if the tenure of the CEO at his old firm is greater than the median tenure. *SameInd* = An indicator variable taking on a value of one if the CEO's old and new firms are not in the same industry. *AbnormalCEOPay*= An indicator variable taking on the value of one if the level of abnormal pay (as measured by the residuals from a compensation prediction model) at the prior firm for the new CEO are above the median.

Table 5
OLS Regressions of Compensation on CEO and Firm- Fixed Effects
Excluding observations with Decreases in Compensation

$$CEOComp_{a,t,i} = \alpha + \beta_1 CEOEffect_{b,t-1,i} + \beta_2 Firm\ Effect_{a,t-1,j} + \varepsilon$$

	(1) TotalComp		(2) CashComp		(3) EqComp		(4) CashPct	
	One-Year	Two-Year Avg	One-Year	Two-Year Avg	One-Year	Two-Year Avg	One-Year	Two-Year Avg
CEO Effect	1.424	1.209	0.712	1.131	1.270	0.986	0.244	0.388
	(7.90)***	(5.27)***	(2.59)**	(4.38)***	(4.09)***	(4.11)***	(1.78)*	(3.58)***
Firm Effect	0.108	0.068	0.507	0.658	0.005	0.006	-0.130	-0.006
	(1.35)	(1.70)*	(2.43)**	(3.01)***	(0.06)	(0.18)	(-1.18)	(-0.07)
Constant	-3461.441	-836.242	953.102	-1095.779	-24.275	-404.074	0.944	0.324
	(-0.71)	(-0.19)	(0.85)	(-0.89)	(-0.01)	(-0.12)	(4.73)***	(2.35)**
R^2	72.8%	77.6%	60.2%	72.9%	61.6%	71.9%	47.8%	67.3%
Sample Size	83	72	93	72	83	72	83	72

t-statistcis based on Huber-White robust standard errors are in parentheses. *, **, *** indicates statistical significance at 10%, 5% and 1% levels. All models include year and industry fixed effects. *TotalComp*= Sum of salary, bonus, non-equity incentives, value of restricted stock grants, and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *CashComp*= Sum of salary, bonus and non-equity incentives as reported in ExecuComp. *EqComp* = Sum of the value of restricted stock grants and value of option grants as reported in ExecuComp using the restricted stock grant and Black-Scholes value of options before FAS 123R and the fair value of both options and restricted stock granted after. *CashPct*= CashComp/TotalComp. *AbnormalPay* = the residual from a model of total pay based on firm and CEO characteristics. *FirmEffect*=compensation (matched with dependent variable) of the outgoing executive at the CEO's new firm as measured above. *CEOEffect*=compensation (matched with dependent variable) of the CEO in his prior position with his prior firm as measured above. *DecComp*=an indicator variable taking the value of one if the CEO's total compensation was greater in his prior position than in the current position.