M&A and big CEO paydays: The effects of the 2006 SEC compensation disclosure regulation

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Abstract

The SEC amended compensation disclosure rules in 2006, requiring enhanced disclosure on firms' executive compensation practices. In this study, we investigate how this enhanced compensation disclosure requirement affects CEO compensation for firms engaging in large acquisitions. Prior research documents that acquiring CEOs receive large bonuses and enjoy increased compensation after completing mergers and acquisitions even with poor post-deal performance (Grinstein and Hribar 2004; Harford and Li 2007). Using a sample of firms making large acquisitions during the period 2000-2012, we find that acquiring CEOs no longer receive large bonuses after completing an acquisition and acquiring CEOs' pay becomes more sensitive to poor performance after the regulation became effective. Furthermore, we show that after 2006 these effects are more pronounced for acquiring firms with higher quality compensation disclosure. Collectively, our results indicate that enhanced compensation disclosure helps reduce opportunistic compensation practices in acquiring firms.

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1. Introduction

This study examines the impact of enhanced compensation disclosure on CEO compensation for firms engaging in large mergers and acquisitions (M&A hereafter). In 2006, the Securities and Exchange Commission (SEC) adopted a new regulation on executive compensation disclosure (effective for fiscal years ending after December 15, 2006), requiring publicly traded companies to provide more "complete and useful disclosure about executive compensation" (SEC 2006). This regulation responds to the demand for greater transparency in executive compensation policies to better protect shareholders' interests by improving investors' understanding and monitoring of executive compensation practices (Cox 2006).[1]

Evidence on the impact of the 2006 compensation disclosure regulation is limited to rules related to perquisite disclosure, peer group selection, and compensation consultant selection.[2] Our objective is to examine whether this regulation affects CEO compensation practices of acquiring firms. Prior research documents a widespread practice of awarding CEOs large M&A bonuses and a lack of CEO pay-performance sensitivity in acquiring firms, especially among firms with poor post-deal performance. Grinstein and Hribar (2004) document that CEOs receive large bonuses after mergers and acquisitions, but only about 39% of the acquiring firms in their sample period (1993-1999) actually cited completing an M&A deal to justify the bonuses in their compensation disclosures. Harford and Li (2007) examine the link between acquiring CEOs' pay and long-run post-deal stock performance and find a "decoupling" effect: acquiring CEOs' compensation and wealth are insensitive to poor post-acquisition performance. Both studies

[1] The SEC stated in the final ruling that "the amendments to the compensation disclosure rules are intended to provide investors with a clearer and more complete picture of compensation to principal executive officers, principal financial officers, the other highest paid executive officers and directors" (SEC 2006).
2 See Cadman et al. (2010), Armstrong et al. (2012), and Murphy and Sandino (2010) for research related to compensation consultants, Faulkender and Yang (2010), Bizjak et al. (2011), Gong et al. (2011), Albuquerque et al. (2013), and Cadman and Carter (2013) for research on the choice of peer group companies, and Grinstein et al. (2011) for research on perquisite compensation.

interpret their findings as evidence of opportunistic CEO compensation practices in acquiring firms.

Consistent with this interpretation, Bebchuk and Fried (2004) argue that the CEO compensation process is one that the CEO effectively sets his/her own pay, subject to some "outrage constraints." The "outrage" stems from the public reaction to excessive CEO compensation and depends on the public's perception of the CEO compensation arrangements. CEOs thus have an incentive to camouflage their rent extraction through compensation contacts. As such, Bebchuk and Fried (2004) suggest that the transparency of compensation disclosure might have a significant impact on CEO compensation practices. The focus on acquiring CEOs' compensation provides a powerful setting to investigate the impact of enhanced disclosure on compensation practices because the M&A setting, according to prior literature, is more susceptible to rent extraction by acquiring CEOs. [3] So regulations leading to increased transparency in compensation disclosures are likely to reduce acquiring CEOs' opportunistic compensation practices.

Several features of the 2006 compensation disclosure rules may help mitigate opportunistic compensation practices of acquiring firms. In particular, a Compensation Discussion and Analysis (CD&A hereafter) section is mandated in annual proxy statement filings, with a focus on explaining the objective of the company's compensation policies, the specific performance metrics used in determining bonuses and other incentive pay awards, and how the company decides on the timing and the pricing of new option grants. Therefore, it will be more difficult for acquiring firms to camouflage large increases in their CEOs' compensation that are unrelated to deal performance than under the previous disclosure regime.

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[3] Note that our study focuses on M&A firms and assumes these firms engage in at least some opportunistic CEO compensation practices based on prior research (Grinstein and Hribar 2004; Harford and Li 2007). Our study does *not* speak to whether the population of firms in general is subject to optimal contracting or managerial rent seeking.

On the other hand, the 2006 compensation disclosure rules may not affect acquiring CEOs' pay if the CEOs' compensation before the regulation already reflected efficient contracting (Jensen and Meckling 1976).[4] Efficient contracting would work against finding any changes in acquiring CEOs' pay because the compensation disclosure regulation simply requires more *disclosures* on CEO pay and does not regulate how firms should compensate their CEOs. The regulation also may have no effects if some firms fail to fully comply with the disclosure requirements. Robinson, Xue, and Yu (2011) show that noncompliance rates across different categories of compensation disclosure range from 28 to 74 percent in a set of firms reviewed by the SEC within the first year of the regulation's effectiveness, implying that the 2006 compensation disclosure rules might not lead firms to provide more useful information to investors. Firms could also respond to the rules by obfuscating the disclosure of their compensation practices (Hermalin and Weisbach 2012; Laksmana, Tietz, and Yang 2012).[5] Therefore, it remains an open question whether enhanced compensation disclosures under the 2006 regulation affect CEO compensation arrangements in acquiring firms.

Using a sample of *Execucomp* firms that complete large M&A transactions during the period of 2000-2012, we examine whether acquiring CEOs' bonus and pay-performance sensitivity change under the SEC 2006 compensation disclosure rules. For the period before the rules became effective, we confirm the findings in prior research that acquiring CEOs receive significantly larger bonuses in the year of completing the M&A transaction, and that their compensation is insensitive to negative performance in the year following the transaction

[4] Hermalin and Weisbach (2012) develop a model with symmetric learning to analyze how disclosure levels affect CEO compensation. Assuming that firms on average are subject to optimal contracting, Hermalin and Weisbach (2012) argue that increased disclosure imposes career concern risk on CEOs. Therefore, boards will increase CEO compensation to compensate them for the increased risk. Applying their model to our setting, if efficient contracting is the primary driver of acquiring CEOs' compensation arrangements, we would expect that increased disclosure is associated with *increased* rather than reduced M&A bonuses after the regulation.
[5] For example, a recent *Wall Street Journal* article reports that companies increasingly use nonstandard accounting measures to reward executive officers (Rapoport 2014).

(Grinstein and Hribar 2004; Harford and Li 2007). However, both effects disappear after 2006. Our results suggest that increased transparency in compensation disclosures under the 2006 regulation mitigates opportunistic CEO compensation practices among acquiring firms.

To further examine the effects of compensation disclosure transparency, we probe cross-sectional differences in acquiring CEOs' bonuses and pay-performance sensitivity based on characteristics of acquiring firms' compensation disclosures under the 2006 compensation disclosure rules. First, we examine whether noncompliance with the new regulation are associated with variation in acquiring CEOs' bonuses and pay-performance sensitivity. We find no differences in CEO bonuses in the year of deal completion between complying and noncomplying acquiring firms. However, we do find that acquiring CEOs' total pay decreases with negative firm performance for complying firms, but not for noncomplying firms. Next, we examine the transparency of compensation disclosure based on whether an acquiring firm's CD&A makes direct reference to the effects of mergers and acquisitions on CEO compensation. Our results show that, CEO bonuses are larger and the sensitivity of CEO pay to negative post-deal performance is greater in acquiring firms whose CD&As explicitly discuss mergers and acquisitions. Finally, we test whether differences in the quality of CD&A disclosure, focusing on the length and readability of CD&A, vary with acquiring CEOs' bonuses and pay-performance sensitivity. Our results show that acquiring firms with shorter and more readable CD&As award lower CEO bonuses and exhibit stronger CEO pay sensitivity to negative performance. By focusing on the variations *within* the sample of acquiring firms in the post regulation period, these analyses also help to rule out the possibility that correlated omitted variables associated with firms' decisions to make an acquisition drive our inferences.

Our study contributes to the literature in two ways. First, we extend the literature on acquiring CEO compensation and firm performance. While Harford and Li (2007) find that firms with stronger boards are able to retain CEO pay sensitivity to poor post-deal performance, we complement their study by showing that an alternative to changing the board's composition is to increase transparency in executive compensation disclosures. Presumably, providing better compensation disclosure can be a less costly solution than changing the board's composition.[6]

Second, our findings shed light on the effectiveness of the SEC's 2006 compensation disclosure rules on improving CEO compensation arrangements in firms that are supposedly subject to more managerial rent extraction. Although the 2006 compensation disclosure regulation intends to help investors better understand and more effectively monitor companies' compensation practices, it is possible that the compensation disclosures do not affect the negotiation between CEOs and the compensation committees. Robinson et al. (2011) find that firms receiving negative media attention on their CEOs' pay are less likely to fully comply with the 2006 compensation disclosure rules. Such compliance failure could hinder investors' ability to monitor firms' compensation practices, leaving pay-performance sensitivity unaffected. Our cross-sectional evidence on pay-performance sensitivity among acquiring firms indicates that those in compliance with the regulation have increased CEO pay-performance sensitivity after acquisitions. This finding suggests that regulators should continue to review firms' compensation disclosures to ensure the effectiveness of the 2006 compensation disclosure rules.

The paper proceeds as follows. The next section provides the background and our empirical predictions. The third section discusses our data and research design. The fourth section presents the results, and the final section concludes.

[6] Hermalin and Weisbach (2012) argue that increased disclosure is not always unambiguously good and that required disclosures beyond an optimal level can have unintended consequences. Future research can investigate whether the 2006 compensation disclosure rules result in a net benefit or a net cost to shareholders.

2. Background and Empirical Predictions

2.1. Background

There is a long history of regulations on executive compensation disclosures in the U.S. Since 1934 the SEC has mandated publicly traded companies to provide information on their executives' compensation in the proxy statement. The rules for executive compensation disclosure have changed over time, with major expansions in 1978, 1992, 1993, and most recently in 2006. For example, the 1992 compensation disclosure rules require that firms replace narrative disclosures with formatted tables to offer more information about executives' total compensation and to increase comparability across firms (Donahue 2008). However, the complexity in executive compensation programs has also evolved since the 1990s, leaving the compensation disclosure rules outdated (Cox 2006) and often providing insufficient and misleading information to investors (Robinson et al. 2011). Also responding to the demand for enhanced executive compensation information in the aftermath of stock option back-dating scandals (e.g., Bebchuk 2006; Cox 2006; Scannell and Lublin 2006), the SEC issued amendments to proxy statement disclosure requirements in 2006 that significantly change how public companies disclose their executive compensation. These rules became effective for fiscal years ending after December 15, 2006, with key features including the addition of the CD&A section, the disclosure of performance targets, compensation benchmark selection, expanded perquisite disclosure, and the disclosure regarding compensation consultants.

In his survey of the evolution of executive compensation over the past century, Murphy (2012) argues that political factors such as compensation disclosure requirements, tax policies, accounting rules, and legislation play a critical role in shaping executive compensation practices. A stream of research provides evidence on the economic consequences of compensation

disclosure regulations. On one hand, some studies conclude that increased compensation disclosures can lead to unintended consequences in executive compensation (Hermalin and Weisbach 2012). For example, McGahran (1988) documents that increased perquisite disclosure requirements implemented in 1978 resulted in a shift from perquisites to cash compensation. Perry and Zenner (2001) find that total compensation levels increased substantially following enhanced compensation disclosure requirements and the enactment of tax code 162(m) in 1993.

On the other hand, a number of studies document the benefits of compensation disclosures because such disclosures motivate the board of directors to better monitor top executives' pay. The empirical findings suggest that pay-performance sensitivity increases following the implementation of the compensation disclosure rules in 1992 (Vafeas and Afxentiou 1998; Perry and Zenner 2001). Lo (2003) studies the differences in market reactions and subsequent operating performance between firms that lobbied against the 1992 compensation disclosure rules and other firms. He concludes that enhanced compensation disclosures improve corporate governance. Studies using Canadian data find that the link between CEO wealth and shareholder value became stronger after the Ontario Securities Commission required listed firms to disclose executive pay details in proxy statements in 1993 (Park, Nelson, and Huson 2001; Zhou and Swan 2006).

Recent research investigates the economic impact of the SEC's 2006 compensation disclosure rules from different angles. Faulkender and Yang (2013) document that firms tend to select peer groups with higher CEO pay in the three years after the 2006 compensation disclosure rules became effective, suggesting that firms engage in more severe benchmark manipulation after the regulation. In contrast, Bizjak et al. (2011) find that biases in peer group selection are reduced shortly after the effectiveness of the 2006 compensation disclosure

regulation, indicating that firms are less opportunistic in their compensation practices.[7] Grinstein et al. (2011) find that firms disclosing executive perquisites for the first time after the 2006 compensation disclosure regulation experience negative market reactions around the filing date of proxy statements, but not in years after the first-time disclosure or for firms that already provided such disclosures before the regulation became effective. However, little evidence exists on whether the 2006 compensation disclosure rules improve compensation arrangements in general or among firms with more severe managerial rent seeking. Using a setting that is more susceptible to rent extraction, M&A, we investigate whether the 2006 compensation disclosure regulation mitigates opportunistic CEO compensation practices.

An extensive literature has examined CEO compensation in the M&A context. As one of the most important business decisions, M&As significantly affect shareholder wealth and are often costly to shareholders of acquiring firms (Jensen and Ruback 1983; Loughran and Vijh 1997; Moeller et al. 2004).[8] Because CEOs are the primary decision makers in M&A transactions, a natural question is whether CEO compensation aligns their interests with those of shareholders. Datta, Iskandar-Datta, and Raman (2001) find that acquiring CEOs' equity-based compensation has a positive impact on merger outcomes (measured as stock price performance around and following merger announcements). However, Bliss and Rosen (2001) examine bank mergers during the period 1986-1995 and find that mergers are positively associated with the level of acquiring CEOs' compensation, *regardless* of deal performance. Grinstein and Hribar (2004) document the common practices of awarding large M&A bonuses to acquiring CEOs, and find that managerial power, not deal performance, is a key determinant of CEOs' M&A bonuses.

[7] One difficulty in understanding the mixed inferences regarding the effects of enhanced disclosure on compensation peer group selection is whether such peer choices reflect self-serving behavior or optimal contracting (Albuquerque, De Franco, and Verdi 2013).

[8] Using a large sample of acquisition deals, Betton et al. (2008) document that acquiring firm announcement returns average close to zero for the overall sample, with 49% of the acquiring firm experiencing negative returns.

Finally, Harford and Li (2007) use a sample of large acquisition deals completed in the 1990s and offer new evidence on pay-performance sensitivity by linking acquiring CEOs' pay to long-run post-deal stock performance. They find strong asymmetries in the sensitivity of CEO pay to positive and negative long-term stock returns for acquiring firms. Specifically, they find that acquiring CEOs' compensation and wealth are "completely insensitive to poor post-acquisition performance" (Harford and Li 2007, p.919), a finding they refer to as the "decoupling" effect of acquisitions on CEO wealth. We add to this line of research by considering the role of compensation disclosure, and we investigate whether enhanced disclosure can mitigate the misalignment between CEO compensation and performance in acquiring firms.

2.2. Empirical Predictions

Prior literature shows that the M&A setting is more subject to managerial rent extraction (e.g., Morck, Shleifer, and Vishny 1990; Grinstein and Hribar 2004; Masulis, Wang, and Xie 2007; Harford and Li 2007; Harford, Humphery-Jenner, and Powell 2012). Bebchuk and Fried (2004) suggest that disclosure transparency can mitigate opportunistic compensation practices. However, prior research has not investigated compensation disclosures related to acquiring firms, with the exception of Grinstein and Hribar (2004) who report that about 39% of the acquiring firms in their sample cited the completion of the deal to justify awarding their CEOs large M&A bonuses. In contrast, the majority of acquiring firms provided little detailed explanations for large bonus payouts to CEOs. The lack of transparent disclosures on compensation practices is consistent with the view that acquiring CEOs tend to conceal rent extraction. Thus, enhanced

compensation disclosures may potentially mitigate or eliminate the opportunistic compensation practices of acquiring CEOs.[9]

Specifically, the SEC 2006 compensation disclosure rules have the potential to mitigate the opportunistic compensation practices of acquiring CEOs for the following reasons. First, the 2006 compensation disclosure rules mandate the CD&A section in annual proxy statement filings, which is a narrative disclosure providing a detailed overview of firms' executive compensation policies. Companies must disclose in the CD&A the objective of their compensation policies, the specific performance metrics used in determining bonuses and other incentive pay awards, among many other material aspects of the companies' compensation decisions. For example, the CD&A describes *how* the compensation committee determines each element of compensation (e.g., salary, bonuses, and equity incentives), and *why* the company chooses to do so. Given that M&A decisions are among the most significant corporate investment decisions and are highly visible to investors, we expect acquiring firms companies to provide more detailed reasons behind any compensation policies related to M&As, making it more difficult to camouflage large unjustified increases in acquiring CEOs' compensation.

Second, the 2006 compensation disclosure rules require companies to describe in detail executives' new option grants in the CD&A section, such as how firms decide on the timing and the pricing of option grants. This increased transparency will expose new equity grants associated with M&A deals to more investor scrutiny, which is likely to impact the compensation committee's decision-making in acquiring firms.

Third, more complete and detailed compensation disclosures presumably enable investors to better monitor the board and improve board effectiveness in tightening the link between CEO

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[9] Another outcome for making bad acquisitions is to fire the CEOs (Lehn and Zhao 2006). Our acquisition sample does not include firms with different CEOs between the year of and the year after deal completion. So our inferences do not generalize to acquiring firms that replace their CEOs in the year after the acquisition.

pay and firm performance (Leuz and Wysocki 2008 and De Franco et al. 2012). Consistent with this argument, research on past regulation of compensation disclosure shows that more disclosures on executive compensation are associated with increased pay-performance sensitivity (Perry and Zenner 2001).

3. Sample, Data, and Research Design

3.1. Sample and Data

SEC Releases 33-8732 and 34-54302 require enhanced compensation disclosures in proxy statements for fiscal years ending after December 15, 2006 (McGuireWoods 2007).[10] So we draw our sample from *Execucomp* for the period of 2000-2012 to allow for a relatively balanced panel before and after the SEC 2006 compensation disclosure rules.

We use the SDC database to identify firms that completed acquisitions of at least 50% of the target firm's outstanding shares. Grinstein and Hribar (2004) restrict their analyses to deals with a transaction value of $1 billion or more, whereas Harford and Li (2007) require the transaction value to be at least 10% of the market value of the acquiring firm's total assets. We apply both criteria to identify "large" acquisitions – classifying firms as making a large acquisition if the transaction value is greater than $1 billion *or* greater than 10% of the acquiring firm's market value of assets.

Table 1 Panel A summarizes the composition of our sample, partitioned before and after year 2006. Out of the 8,680 firm-year observations meeting our data requirements in the pre-regulation period, 660 complete a large acquisition. There are 139 large acquisitions completed in 2001, representing the largest total for any single year prior to the 2006 enhanced disclosure rules. In 2006, there are 18 acquisitions completed by firms with fiscal year-end dates prior to the effective date of the compensation disclosure rules. 10,706 firm-year observations appear in the

[10] See www.sec.gov/rules/final/2006/33-8732.pdf for the SEC ruling.

post-regulation period, with the largest number of large acquisitions completed (143) in 2008. Following the 2008 financial crisis, acquisition activities largely declined, but bounced back in 2012. Table 1 Panel B lists the industry composition of the acquiring firms based on Fama-French 48 industry membership.

3.2. Research Design

To investigate whether the 2006 compensation disclosure rules reduce the opportunistic compensation practices of acquiring firms, we run similar analysis as Grinstein and Hribar (2004) to examine how M&As affect the amount of bonuses acquiring CEOs receive during the year when a large acquisition is completed. Similar to Grinstein and Hribar (2004), we estimate the following regression model on M&A bonuses using the population of *ExecuComp* firms. We run the same analysis for the full sample, and then separately for the pre- and post-regulation periods.

$$logBONUS_{i,t} = \beta_0 + \beta_1 logASSETS_{i,t} + \beta_2 ROA_{i,t} + \beta_3 ROA_GROWTH_{i,t} + \beta_4 RET_{i,t} + \beta_5 SGGROWTH_{i,t} + \beta_6 MARGIN_{i,t} + \beta_7 MARGIN_GROWTH_{i,t} + \beta_8 ACQ_{i,t} + v_i + w_t + \varepsilon_{i,t} \quad (1)$$

The subscripts i and t correspond to the firm and year, respectively. The dependent variable, *logBONUS*, is defined as the natural log of one plus the bonus that the acquiring CEO receives at the end of year t.[11] The variable of interest is *ACQ*, an indicator variable that equals one if the firm makes at least one acquisition with a transaction value of greater than $1 billion or greater than 10% of the acquiring firm's market value of total assets, and zero otherwise. Using firms completing large acquisitions during 1993-1999, Grinstein and Hribar (2004) document a positive and significant coefficient on *ACQ*, indicating that the acquiring firms pay bonuses to CEOs for simply completing large M&A deals.

[11] As a result of the 2006 compensation disclosure rules, some bonus awards are now reported in *Execucomp* as non-equity incentive compensation. Therefore, we define bonus compensation as the sum of bonus and non-equity incentive compensation in *Execucomp* beginning in 2006 (Hayes, Lemmon, and Qiu 2012).

Equation (1) also includes the following control variables to capture firm size, performance, and growth: *logASSETS* is a proxy for firm size, measured as the natural log of one plus total assets for the year; *ROA* is return on assets, measured as net income divided by total assets; *ROA_GROWTH* is the percentage change in *ROA* from the previous year; *RET* is the annual stock return; *SGROWTH* is the percentage change in sales from the previous year; *MARGIN* is income before extraordinary items divided by sales; *MARGIN_GROWTH* is the percentage change in *MARGIN* from the previous year.

In general, we expect CEO bonuses to be positively associated with firm size, performance, and growth. If acquiring firms pay their CEOs solely based on achieving performance and growth targets, the control variables should capture these effects and the coefficient on *ACQ* should be insignificant. However, if bonuses paid to acquiring CEOs only relate to completing a deal, not to firm performance and growth, the coefficient on *ACQ* should be significantly positive. Consistent with Grinstein and Hribar (2004), we also include firm- and year- fixed effects. We report robust standard errors clustered at the firm level.

Next, we run similar analysis as Harford and Li (2007) to examine acquiring CEOs' total compensation after the year of completing a large acquisition, focusing on the differences in pay sensitivities to positive and negative long-term post-deal performance. We estimate the following regression model for the full sample, and then run the analysis separately for the pre- and post-regulation periods:

$$\begin{aligned} logTOTALPAY_{i,t+1} = {} & \alpha_0 + \beta_1 logSALES_{i,t+1} + \beta_2 MTB_{i,t+1} + \beta_3 SGROWTH_{i,t+1} \\ & + \beta_4 ROA_{i,t+1} + \beta_5 SD_ROA_{i,t+1} + \beta_6 SD_RET_{i,t+1} + \beta_7 ACQ_{i,t} + \beta_8 POSRET_{i,t+1} + \beta_9 NEGRET_{i,t+1} \\ & + \beta_{10} ACQ_{i,t}*POSRET_{i,t+1} + \beta_{11} ACQ_{i,t}*NEGRET_{i,t+1} + u_i + w_t + \varepsilon_{i,t} \qquad (2) \end{aligned}$$

The dependent variable, *logTOTALPAY*, is defined as the natural log of one plus total CEO compensation as reported in *Execucomp* at the end of the year *after* deal completion.[12] We are interested in acquiring CEOs' pay-performance sensitivities and whether they vary with positive and negative performance after the deal completion. Therefore, we allow pay sensitivities to positive and negative performance to vary: *POS_RET* is the annual fiscal year stock return if the return is positive, and zero otherwise; *NEG_RET* is the annual fiscal year stock return if the return is negative, and zero otherwise. We include *ACQ* to capture the additional total compensation earned as a result of completing an M&A deal. Following Harford and Li (2007), we lag *ACQ* by one year to capture the pay differential earned by acquiring CEOs in the year *after* deal completion while controlling for other determinants of CEO pay. We interact both *POS_RET* and *NEG_RET* with *ACQ* to examine differential sensitivities of acquiring CEOs' pay to positive and negative firm performance. Harford and Li (2007) find a significantly positive coefficient on *NEG_RET*, consistent with total CEO pay decreasing with negative firm performance in general. However, they find the coefficient on the interaction term of *NEG_RET* and *ACQ* to be negative and insignificant. More importantly, they find that the sum of the coefficients on *NEG_RET* and *NEG_RET*ACQ* are jointly insignificant, which they interpret as the "decoupling" of CEO compensation and negative post-deal performance.

Similar to Harford and Li (2007), we control for firm size (measured as the natural log of sales, *logSALES*), market-to-book ratio (*MTB*), sales growth (*SGROWTH*), return on assets (*ROA*), standard deviation of *ROA* over the previous five years (*SD_ROA*), and standard deviation of annual stock return over the previous five years (*SD_RET*). Consistent with Harford

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[12] Throughout our analyses, we adjust CEO bonuses and total pay using the 2002 CPI index to ensure our results are not attributable to a time-series trend. Inferences are unchanged when using unadjusted measures of CEO compensation.

and Li (2007), we also include industry- and year- fixed effects.[13] We report robust standard errors clustered at the firm level. The focus of this analysis is on the *sum* of the coefficients on *NEG_RET* and *NEG_RET*ACQ*. If the 2006 compensation disclosure rules reduce the "decoupling" effect, the sum of the coefficients on *NEG_RET* and *NEG_RET*ACQ* should be significantly positive for the post-regulation subsample.

3.3. Descriptive Statistics

Table 2 presents descriptive statistics for the variables used in our main analyses. The compensation variables are skewed with mean (median) bonus of $982.42 ($514.38) thousand, and mean (median) total compensation of $5,185.03 ($3,099.78) thousand. Therefore we use a log transformation for the compensation variables in our empirical tests. About 7.3% of our sample firms made at least one acquisition during the period 2000-2012. Table 2 also shows that sample firms vary significantly in firm size, growth, performance, and risk exposure.

Table 3 reports the univariate differences in CEO bonus and total compensation in the pre- and post-regulation periods. Panel A shows that for the acquisition sample, CEO bonuses (mean and median) appear to increase from the pre- to the post-regulation period ($p< 0.01$) while median CEO total pay shows a marginal increase ($p<0.10$). Panel B shows that for the non-acquisition sample, both CEO bonus and CEO total pay increase from the pre- to the post-regulation period ($p< 0.01$), although the levels of CEO bonus and total pay are lower than those in the acquisition sample. The patterns of changes in CEO bonus and total pay are similar across both subsamples, suggesting that the changes may reflect an overtime trend in CEO pay.

[13] Following Harford and Li (2007), we eliminate firm-year observations corresponding to firms making multiple large acquisitions in consecutive years. When an acquisition is completed by a predecessor CEO, we code the *ACQ* indicator to be zero to make sure that we measure the pay performance sensitivity for the same CEOs who are in position in the year of and the year after the acquisition. Imposing these restrictions allows for clear identification of the effects of large acquisitions completed by a CEO in year *t*, on the same CEO's post-acquisition pay-performance sensitivity in year *t+1*.

4. Empirical Results

4.1. The Effects of the 2006 Compensation Disclosure Rules on Acquiring CEOs' Pay

To examine the impact of the 2006 compensation disclosure rules on acquiring CEOs' bonuses, we estimate model (1) and report the regression results in Table 4. Column (1) of Table 4 shows that during our sample period of 2000-2012 firm size (*logASSETS*) and firm performance (*ROA* and *RET*) are positively associated with CEO bonuses in general ($p < 0.05$). Growth in sales (*SGROWTH*) and growth in profit margin (*MARGIN_GROWTH*) are also positively associated with CEO bonuses, while growth in *ROA* is negatively associated with CEO bonuses.

The coefficient on *ACQ* is insignificant in column (1) for the entire sample period. But it is significantly positive for the pre-regulation period (column 2), suggesting that CEOs tend to receive a larger bonus in the year of completing a large acquisition even after controlling for firm performance ($p < 0.10$). In the post-regulation period this relationship is insignificant (column 3).[14] These findings indicate that the 2006 compensation disclosure rules may have raised the bar for justifying the decisions on CEO pay and reduced companies' tendency to pay out incremental bonuses to CEOs in the year they complete a large acquisition. This evidence suggests that Grinstein and Hribar's (2004) finding of excessive CEO bonuses disappears after acquiring firms are required to provide clear and enhanced disclosures on their CEOs' pay.

Next, we test whether the 2006 compensation disclosure rules affect the "decoupling" between CEO pay and negative post-deal performance identified in Harford and Li (2007). Panel A of Table 5 reports the results of our regression analysis where the dependent variable is CEO total pay in the year after completing a large acquisition. We find that over the entire sample

[14] We also find that the coefficient on *ACQ* in the post-regulation period is significantly smaller than that in the pre-regulation period ($p<0.01$, untabulated).

period from 2000 to 2012 (column 1) negative stock returns (*NEGRET*) are associated with lower CEO total pay ($p<0.05$), but subsample analyses reported in columns (2) and (3) show that this association is mainly driven by the post-regulation period ($p<0.01$), not the pre-regulation period. Consistent with Harford and Li (2007), the coefficient on *ACQ*NEGRET* reported in columns (1) is insignificant, suggesting that in general acquiring CEOs' total pay in the year after completing the acquisitions is *insensitive* to negative performance. However, subsample analyses reported in columns (2) and (3) show after the 2006 disclosure rules became effective acquiring CEOs' total pay is more sensitive to negative post-deal performance because the coefficient on *ACQ*NEGRET* becomes significantly positive in the post-regulation period ($p<0.05$).

Most importantly, the bottom of Table 5 shows the results of testing for the decoupling effect in the pre- and post-regulation periods. Column (1) shows that, on average, the decoupling effect exists among firms completing large acquisitions over the entire sample period between 2000 and 2012. However, when we partition the sample period into pre- and post-regulation periods, columns (2) and (3) show differences surrounding the regulation. The sum of the coefficients in column (2) is insignificant, showing that acquiring CEOs' total pay is insensitive to negative post-deal performance in the pre-regulation period. On the other hand, column (3) shows that in the post-regulation period, the decoupling between acquiring CEOs' total pay and negative performance disappears ($p<0.01$).[15] These findings imply that there are real effects of increased investor monitoring of acquiring firms after these firms provide more transparent disclosures on why and how they pay their CEOs.

4.2. Robustness Tests

[15] *Execucomp* defines total CEO pay in two ways using (1) the grant date fair value of stock option awards, and (2) the value realized from stock option exercises. Our inferences are the same using both measures of total CEO pay.

To rule out alternative explanations for our findings in the post-regulation period, we conduct several robustness tests. First, we test for the impact of CEO power in our analysis of CEO bonuses because Grinstein and Hribar (2004) find that acquiring firms with more powerful CEOs tend to pay out larger bonuses in the year of completing a large acquisition. Following Grinstein and Hribar (2004), we consider CEO/chairman duality, board size, and the nominating committee independence. We construct a CEO power index by summing indicator variables capturing CEO-chairman status, whether board size is in the bottom quintile of the sample, and whether the nominating committee is less than 100% independent. We add the CEO power index variable as an additional control and re-estimate our bonus model within the post-regulation period. The regression results reported in column (1) of Table 6 Panel A show that the coefficient on *ACQ* remains insignificant when we control for CEO power, and that the CEO power index is also insignificant. In column (2), we interact the CEO power index with the *ACQ* indicator to test whether more powerful acquiring CEOs earn larger bonuses during the post-regulation period. Both the interaction term and the main effect on *ACQ* remain insignificant. This evidence confirms our earlier finding that after the 2006 compensation disclosure rules became effective, acquiring CEOs no longer receive excessive bonuses that are unrelated to firm performance. We fail to find that CEO power has a significant effect on CEO M&A bonuses in the post-regulation period.

Second, we rerun our analysis of CEO pay performance sensitivity after controlling for characteristics of corporate governance because Harford and Li (2007) find that CEO pay remains sensitive to negative post-deal performance when acquiring firms have a strong board. Following Harford and Li (2007) we construct an indicator variable for a strong board (*Strong Board*) when the CEO's tenure is below the annual sample median. Panel B of Table 6 shows

that in general, a stronger board is negatively associated with total CEO pay (p<0.01). The sum of the coefficients on *NEGRET* and *ACQ*NEGRET* is still significantly positive (p<0.01), but the coefficient on *Strong Board*ACQ*NEGRET* is insignificant. These results suggest that the sensitivity of acquiring CEOs' total pay to negative post-deal performance no longer depends on the strength of the board in the post-regulation period. This evidence indicates that the 2006 compensation disclosure rules reduce the need for stronger boards to monitor CEO pay-performance sensitivity (especially to negative performance).

Third, we rerun both the bonus and pay-performance sensitivity analyses while eliminating the potential impact of the financial crisis. The 2008 financial crisis may drive our results if it attracts more investor attention to CEO compensation practices.[16] Therefore, we exclude all firm-year observations from 2008 and 2009 and rerun models (1) and (2). The coefficient on *ACQ* reported in column (1) of Panel C in Table 6 remains insignificant, indicating that CEO bonuses are not associated with whether the firm completes a large acquisition. This result is consistent with our earlier findings reported in Table 4, further supporting our inference that after the 2006 compensation disclosure rules became effective, acquiring CEOs no longer receive excessive bonuses purely for completing a large acquisition. Column (2) in Panel C reports the results of the CEO pay performance sensitivity analysis. Again, the results are similar, in fact even stronger, compared to those reported in Table 5. That is, after the 2006 compensation disclosure rules became effective, acquiring CEOs' total pay is no longer decoupled from negative stock performance after completing large acquisitions (the sum of the

[16] Alternatively, one could argue that during the financial crisis most firms experience abnormal negative performance (e.g., financial institutions) so that CEO pay may not have a linear relationship with negative performance. In that case, we expect CEO pay to be less sensitive to negative performance given that all firms in the industry are experiencing poor performance, which biases against finding increased sensitivity to negative post-deal performance after 2006.

coefficients on *NEGRET* and *ACQ*NEGRET* is significantly positive at the 1% level). So it appears that the financial crisis does not explain our findings.

In untabulated analyses we perform a battery of robustness tests to assess the sensitivity of our results for the post-regulation period. First, our results are robust to controlling for firm fixed effects, helping to rule out unspecified firm characteristics as alternative explanations for our findings. Second, when we relax the requirement to eliminate firm-year observations where large acquisitions are made in consecutive years, we add an additional 620 observations to the pay-performance sensitivity model. Inferences are unchanged and the sum of the coefficients for *NEGRET+ACQ*NEGRET* remains positive and significant (sum of coefficients = 0.475; p-value = 0.014). Finally, to mitigate the impact of influential observations we drop observations with absolute studentized residuals greater than 3.0. We continue to find an insignificant coefficient on *ACQ* in the bonus analysis (n=10,618), while the sum of the coefficients on *NEGRET+ACQ*NEGRET* remains significantly positive in the CEO pay-performance sensitivity analysis (n=9,240).

4.3. Cross-Sectional Analyses within Acquiring Firms in the Post-regulation Period

So far our findings indicate that the 2006 compensation disclosure rules help improve pay performance sensitivity and curtail excessive bonuses paid to acquiring CEOs purely for completing a large acquisition. Our next set of analyses seeks to validate whether it is the enhanced compensation disclosures in 2006 that drive our findings and to understand the mechanisms through which the compensation disclosures work.

One important feature of the SEC's 2006 compensation disclosure rules is that CD&As provide "material information about compensation objective and policies for its named executives without resorting to boilerplate disclosure," focusing on *why* and *how* boards

determine compensation levels in a clear and concise manner based on the SEC's plain English principle (SEC 2007). Using a sample of S&P 500 firms, Laksmana et al. (2012) examine whether the readability of CD&A is associated with excessive CEO pay. They find that in the first year after the 2006 compensation disclosure regulation became effective, the readability of CD&A is lower among firms with more excessive CEO pay, but the readability of CD&A improves in the subsequent year. Their findings suggest that firms initially attempt to obfuscate the CD&A but the SEC's reviews or investor demand for more readable CD&A disclosures help curb firms' opportunistic disclosure behavior. If acquiring firms provide obfuscated CD&A disclosures, it is less likely that investors can understand why and how firms decide their CEOs' compensation. In that case, it is possible that acquiring CEOs whose firms provide less transparent CD&As can still "decouple" their compensation from poor post-deal performance.[17]

We now focus only on the sample of acquiring firms and analyze whether there are cross-sectional differences in these firms' compensation disclosure practices that might lead to differential CEO bonus payouts and pay-performance sensitivity. We partition the acquisition sample along three dimensions based on: 1) whether the SEC issues comment letters concerning executive compensation disclosures, 2) whether the acquiring firms discuss the effects of M&As in the CD&A section of the proxy statement, and 3) the disclosure quality of the CD&A. We describe the details of these partitioning variables below.

First, after the 2006 compensation disclosure rules went into effect, the SEC regularly reviews firms' proxy statements and issues comment letters to companies whose regulatory

[17] Alternatively, CD&As that are difficult to read may alert investors about firms' opportunistic behavior to obfuscate CEO pay practices, causing investors to pressure firms to provide for more useful information on executive pay. However, Laksmana et al. (2012) find that firms with excessive CEO pay do not appear to provide more readable CD&As.

filings deemed as failing to comply with the SEC disclosure requirements.[18] For the review on executive compensation disclosures, the SEC staff focuses on firms' CD&As (Ernst & Young 2012).[19] Acquiring firms that receive SEC comment letters on executive compensation disclosures likely provided inadequate or opaque disclosures within the CD&A, which hinders investors' ability to monitor executive compensation practices. So we construct an indicator variable (*Disclosure Noncompliance*) for when a firm receives SEC comment letters on its proxy statements related to compensation issues. Second, based on findings in Grinstein and Hirbar, we create an indicator variable (*M&A discussed*) that equals to one when the words "merger" or "acquisition" are mentioned in the CD&A section. Finally, we capture the overall quality of the CD&A using the length of the report (i.e., word count) and the Fog readability index.[20] We partition the acquiring firms into those with higher quality CD&A (shorter and with lower Fog index) and those with lower quality CD&A (longer and with higher Fog index). The indicator variable *LowLength_HighReadability*, is coded one when both the CD&A's length and Fog index are below the annual sample mean, zero otherwise.

Panel A of Table 7 shows that 7.9 percent of firms making large acquisitions in the post-regulation period receive an SEC comment letter indicating noncompliance with the compensation disclosure rules. Of the firms making large acquisitions in the post-regulation period, 77.8 percent discuss the effects of M&A on executive compensation in the CD&A. Panel

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[18] Section 408 of SOX requires the SEC to conduct 10-K reviews of each public company at least once every three years. Based on our communication with a former SEC staff member, the SEC has traditionally reviewed proxy statements in conjunction with their 10-K reviews, and in certain cases, conducted a special review of proxy statements. For example, a proxy vote for a proposed merger could initiate a targeted review of the proxy statement disclosures being the primary disclosure filing reviewed. In addition, the SEC will from time to time focus on certain issues of concern or new regulations. That was the case with the 2006 compensation disclosures, which generated targeted reviews over a two to three-year period.

[19] Survey evidence suggests that the SEC staff routinely asks registrants to provide details on individual and corporate performance criteria and targets, both quantitative and qualitative, for each named executive (Ernst & Young, 2012).

[20] The mean number of words in the CD&A section is 5,828 and the mean Fog index is 21.928 (untabulated), comparable with prior research (e.g., Li 2008; Laksmana et al. 2012).

B of Table 7 presents the results of our cross-sectional tests examining disclosure noncompliance. Column (1) shows that among acquiring firms, *Disclosure Noncompliance* is not associated with CEO bonuses in the year of completing an acquisition. Column (2) shows that the coefficient on *NEGRET* is significantly positive ($p<0.01$), suggesting that when acquiring firms comply with the compensation disclosure rules, their CEOs' total pay is more sensitive to negative stock performance after completing a large acquisition. In contrast, the sum of the coefficients (*NEGRET* + *Disclosure Noncompliance*NEGRET*) is insignificant, indicating that CEOs' total pay in acquiring firms with disclosure noncompliance is insensitive to negative stock performance. This analysis also highlights the importance of SEC reviews on improving the quality of compensation disclosures, especially if managers have incentives to distort information when facing increased disclosure requirements (Hermalin and Weisbach 2012).

Next, we investigate whether acquiring CEOs' pay practices vary when the CD&A makes direct reference to mergers and acquisitions. Completely ignoring the effects of M&A transactions on executive compensation indicates that an acquiring firm may attempt to obfuscate its compensation disclosures. However, investors may not find the CD&A to be useful if acquiring firms merely mention M&As in the CD&A without providing transparent details about the precise effects of M&A transactions on CEO pay. Panel C of Table 7 presents the results on the cross-sectional analysis based on whether acquiring firms' CD&A sections refer to mergers or acquisitions when explaining why and how CEOs are compensated. Column (1) shows that the coefficient on *M&A discussed* is positive and significant ($p<0.05$), suggesting that firms' compensation disclosures explain how M&A deals affect compensation when CEOs receive larger bonuses. This finding is consistent with firms providing more transparent compensation disclosures when CEOs receive larger bonuses in the year of M&A deal completion, rather than

attempting to hide excessive CEO compensation as documented by Grinstein and Hribar (2004). Column (2) shows that the coefficient on *NEGRET* is insignificant, indicating that acquiring CEOs' total pay is not sensitive to negative post-deal stock performance when firms fail to mention mergers or acquisitions in their CD&As. However, the sum of the coefficients (*NEGRET* + *M&A discussed* * *NEGRET*) is significantly positive, suggesting that for acquiring firms with negative post-deal performance discussing the effects of M&A in their CD&As increases CEO pay sensitivity.

Finally, we consider the overall quality of CD&A disclosure by considering its length and readability. Regulators have expressed concerns about the impact of long and less readable qualitative disclosure on the information processing of investors (White 2013).[21] Because CD&As contain narrative disclosures about executive compensation policies, the quality of CD&A disclosures could affect how investors evaluate and monitor firms' compensation practices. Given regulators' concerns, we focus on two dimensions of CD&A disclosure, the length and the readability.

Panel D reports the results of the analysis on cross-sectional differences in the overall quality of the CD&As within the acquiring firms in the post-regulation period. Column (1) shows that acquiring CEOs' bonuses are lower in firms with higher quality CD&As than those with lower quality CD&As ($p<0.05$). Column (2) shows an insignificant coefficient on *NEGRET*, suggesting that total CEO pay is insensitive to negative stock performance among acquiring firms with lower quality (i.e., longer and less readable) CD&As. However, the sum of coefficients (*NEGRET* + *LowLength_HighReadability* **NEGRET*) is significantly positive ($p<0.05$), indicating that among acquiring firms with negative post-deal performance, higher quality CD&As are associated with greater CEO pay-performance sensitivity.

[21] See http://www.sec.gov/News/Speech/Detail/Speech/1370539878806#.U5iWL_ldV8F.

Taken together, our cross-sectional analyses imply that enhanced compensation disclosures resulting from the 2006 compensation disclosure rules help mitigate opportunistic CEO compensation practices within the sample of acquiring firms. In addition, the differential results from using features of firms' compensation disclosures helps to confirm that the findings in our main tests are more likely attributable to the effects of the 2006 compensation disclosure regulation, but not due to correlated omitted variables.

5. Conclusion

In this paper, we examine the impact of compensation disclosure on CEOs' bonuses and pay-performance sensitivity for firms engaging in large acquisitions in the context of the SEC's 2006 compensation disclosure rules. Prior research generally finds that acquiring CEOs enjoy higher compensation and increased wealth after completing mergers and acquisitions, regardless of firm performance (Grinstein and Hribar 2004; Harford and Li 2007). We conjecture that the enhanced compensation disclosure could expose acquiring firms' CEO compensation to more investor scrutiny and mitigate opportunistic compensation arrangements.

In the post-regulation period, we find that on average acquiring CEOs no longer earn excessive bonuses in the year of completing the acquisition, and their total pay becomes sensitive (instead of insensitive) to negative performance in the year following the acquisition. More importantly, we find that CEO pay sensitivity to negative post-deal performance is stronger in acquiring firms with more transparent CD&As as reflected in whether firms are in compliance with the SEC compensation disclosure rules, whether firms directly discuss how mergers and acquisitions affect CEO compensation in their CD&As, and firms' overall quality of CD&A disclosures.

Collectively, our results indicate that the 2006 compensation disclosure rules increase transparency in compensation disclosures and mitigate potential opportunistic compensation practices among acquiring firms. Our study documents the impact of the SEC’s 2006 compensation disclosure rules on acquiring firms’ CEO compensation, and contributes to the broad literature on the economic implications of compensation disclosures.

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Table 1. Sample composition

This table summarizes the composition of the sample consisting of all *Execucomp* firms with available data from 2000 through 2012. Firms are classified as making large acquisitions if at least one acquisition has a transaction value greater than $1 billion or 10% of the market value of total assets. SEC Releases 33-8732 and 34-54302 require enhanced compensation disclosures in proxy statements for fiscal years ending after December 15, 2006.

Panel A: Number of observations by year

Before the 2006 compensation disclosure rules			After the 2006 compensation disclosure rules		
Fiscal Year	Number of observations	Number of large acquisitions	Fiscal Year	Number of observations	Number of large acquisitions
2000	1,396	129	2006	1,235	94
2001	1,337	139	2007	1,639	124
2002	1,351	103	2008	1,576	143
2003	1,441	88	2009	1,580	99
2004	1,459	81	2010	1,538	92
2005	1,446	102	2011	1,665	75
2006	250	18	2012	1,476	130
Total	8,680	660	Total	10,709	757

Panel B: Industry composition of acquiring firms

Fama-French 48 industry description	N	Fama-French 48 industry description	N
Food Products	26	Shipbuilding, railroad equipment	6
Beer and liquor	3	Precious metals	1
Recreation	9	Coal	4
Entertainment	14	Petroleum and natural gas	93
Printing and publishing	18	Utilities	44
Consumer goods	14	Communication	45
Apparel	10	Business services	180
Healthcare	37	Computers	77
Medical equipment	40	Electronic equipment	127
Pharmaceutical products	79	Measuring and control equipment	40
Chemicals	26	Business supplies	27
Rubber and plastic products	8	Shipping containers	4
Textiles	1	Transportation	13
Construction materials	14	Wholesale	38
Construction	7	Retail	39
Steel works	31	Restaurants, hotels, motels	9
Fabricated products	4	Banking	84
Machinery	31	Insurance	48
Electrical equipment	21	Real estate	1
Automobiles and trucks	8	Trading	106
Aircraft	10	Other non-classified	20

Table 2. Descriptive statistics

This table presents descriptive statistics for the dependent and independent variables used in the main empirical tests. *logBONUS is* defined as the natural log of one plus the CEO bonus taken from *Execucomp*. *logASSETS* is the natural log of one plus total assets; *ROA* is return on assets; *logSALES* is the natural log of one plus sales; *logTOTALPAY* is defined as the natural log of one plus the CEO's total pay taken from *Execucomp*. *logSALES* is the natural log of one plus sales; *MTB* is the market-to-book ratio for year *t*; *SGROWTH* is the percentage change in sales from period *t-1* to *t*; *ROA* is return on assets for year *t*; *ROA_GROWTH* is the percentage change in *ROA* from the previous year; *SD_ROA* is the standard deviation of *ROA* over the previous five years; *SD_RET* is the standard deviation of annual raw stock returns over the previous five years; *RET* is the concurrent annual raw return; *POS_RET* is the concurrent annual raw return, zero if negative; *NEG_RET* is the concurrent annual raw return, zero if positive; *MARGIN* is the ratio of income before extraordinary items to sales for year *t*; *MARGIN_GROWTH* is the percentage change in *MARGIN* from the previous year; *ACQ* is an indicator variable coded one if the firm made at least one acquisition in period *t* where the transaction value is greater than $1 billion or 10% of the market value of total assets, zero otherwise.

	N	**Mean**	**Median**	**Std. Dev**	**p25**	**p75**
CEO Compensation						
BONUS ($thousands)	19,389	982.32	514.37	1,862.88	137.37	1,183.81
logBONUS	19,389	5.3141	6.2449	2.6831	4.9299	7.0773
TOTALPAY ($thousands)	16,603	5,185.03	3,099.78	8,291.92	1,473.73	6,252.16
logTOTALPAY	16,603	7.8205	7.7755	1.1255	6.9958	8.5878
Control variables						
logASSETS	19,389	7.7112	7.5737	1.7388	6.4441	8.8518
logSALES	16,603	7.1893	7.0949	1.5624	6.1281	8.2229
ROA	19,389	0.0372	0.0414	0.0991	0.0104	0.0845
ROA_GROWTH	19,389	-0.2189	-0.0680	2.7064	-0.5340	0.1953
RET	19,389	0.1216	0.0821	0.4646	-0.1567	0.3220
POSRET	16,603	0.2280	0.0857	0.3493	0.0000	0.3190
NEGRET	16,603	-0.1048	0.0000	0.1844	-0.1468	0.0000
SGROWTH	19,389	0.0969	0.0727	0.2366	-0.0177	0.1748
MARGIN	19,389	0.0396	0.0592	0.1954	0.0177	0.1131
MARGIN_GROWTH	19,389	-0.2260	-0.0474	2.7710	-0.5087	0.1892
MTB	16,603	2.6638	2.0157	2.9365	1.3305	3.1895
SD_ROA	16,603	0.0456	0.0238	0.0605	0.0105	0.0546
SD_RET	16,603	0.4911	0.3313	0.6155	0.2190	0.5183
ACQ	19,389	0.0731	0.0000	0.2603	0.0000	0.0000

Table 3. Univariate tests of differences in CEO compensation

This table presents univariate tests of differences in CEO pay before and after the 2006 enhanced SEC compensation disclosure rules. Panel A reports univariate tests of differences within the subsample of firms making large acquisitions and firms not making large acquisitions in Panel B. *logBONUS is* defined as the natural log of one plus the CEO's bonus taken from *Execucomp*. *logSALES* is the natural log of one plus sales; *logTOTALPAY* is defined as the natural log of one plus the CEO's total pay taken from *Execucomp*. Differences in means (medians) partitioned by the pre- and post-CD&A disclosure periods are assessed using a t-test (Wilcoxon rank sum test). *, **, and *** indicates significance at the 0.10, 0.05, and 0.01 level, respectively.

Panel A: Acquisition sample

	N	Mean	Median	Std. Dev
Before the 2006 compensation disclosure rules				
BONUS ($thousands)	660	1,173.37	631.12	1,600.64
logBONUS	660	5.44	6.45	2.81
TOTALPAY ($thousands)	359	6,493.52	2,958.36	9,108.71
logTOTALPAY	359	8.00	7.99	1.26
After the 2006 compensation disclosure rules				
BONUS ($thousands)	757	1,442.72***	875.00***	1.708.91
logBONUS	757	6.09***	6.78***	2.43
TOTALPAY ($thousands)	389	6,583.76	3219.69*	8,468.29
logTOTALPAY	389	8.16	8.08*	1.15

Panel B: Non-acquisition sample

	N	Mean	Median	Std. Dev
Before the 2006 compensation disclosure rules				
BONUS ($thousands)	8,020	771.92	409.22	1,161.44
logBONUS	8,020	5.00	6.02	2.75
TOTALPAY ($thousands)	6,926	4,413.54	1,924.67	7,019.34
logTOTALPAY	6,926	7.66	7.56	1.15
After the 2006 compensation disclosure rules				
BONUS ($thousands)	9,952	984.70***	583.79***	1,282.32
logBONUS	9,952	5.49***	6.37***	2.60
TOTALPAY ($thousands)	8,929	4,884.20***	2,756.30***	6,322.73
logTOTALPAY	8,929	7.92***	7.92***	1.08

Table 4. Regression analyses of CEO bonuses in the acquisition year

This table reports the results of OLS regressions where the dependent variable is *logBONUS* defined as the natural log of one plus the CEO bonus taken from *Execucomp*. *logASSETS* is the natural log of one plus total assets; *ROA* is return on assets for year *t*; *ROA_GROWTH* is the percentage change in *ROA* from the previous year; *RET* is the concurrent annual raw return; *SGROWTH* is the percentage change in sales from the previous year; *MARGIN* is the ratio of income before extraordinary items to sales for year *t*; *MARGIN_GROWTH* is the percentage change in *MARGIN* from the previous year; *ACQ* is an indicator variable coded one if the firm made at least one acquisition where the transaction value is greater than $1 billion or 10% of the market value of total assets, zero otherwise. Robust standard errors are clustered at the firm level and reported in parentheses. *, **, and *** indicates significance at the 0.10, 0.05, and 0.01 level, respectively.

Dependent variable: $logBONUS_t$	(1) Entire sample 2000-2012	(2) Pre-regulation period	(3) Post-regulation period
$logASSETS_t$	0.141**	0.092	0.156
	(0.067)	(0.122)	(0.095)
ROA_t	6.214***	7.520***	5.660***
	(0.512)	(0.799)	(0.667)
ROA_GROWTH_t	-0.101***	-0.136***	-0.087*
	(0.034)	(0.044)	(0.053)
RET_t	0.673***	0.609***	0.643***
	(0.044)	(0.060)	(0.063)
$SGROWTH_t$	1.313***	1.422***	1.392***
	(0.096)	(0.122)	(0.138)
$MARGIN_t$	-0.063	-1.155***	0.087
	(0.254)	(0.347)	(0.336)
$MARGIN_GROWTH_t$	0.131***	0.170***	0.112**
	(0.034)	(0.043)	(0.053)
ACQ_t	0.033	0.188*	-0.067
	(0.070)	(0.107)	(0.086)
Firm and Year Dummies?	YES	YES	YES
Adjusted R^2	0.3984	0.4393	0.4508
N	19,389	8,680	10,709

Table 5. Regression analyses of CEO pay-performance sensitivity following acquisitions

This table reports the results of OLS regressions where the dependent variable is *logTOTALPAY,* defined as the natural log of one plus the total CEO pay taken from *Execucomp*. *logSALES* is the natural log of one plus sales; *MTB* is the market-to-book ratio for year *t*; *SGROWTH* is the percentage change in sales from the previous year; *ROA* is return on assets for year *t*; *SD_ROA* is the standard deviation of *ROA* over the previous five years; *SD_RET* is the standard deviation of annual raw stock returns over the previous five years; *POS_RET* is the concurrent annual raw return, zero if negative; *NEG_RET* is the concurrent annual raw return, zero if positive; *ACQ* is an indicator variable coded one if the firm made at least one acquisition where the transaction value is greater than $1 billion or 10% of the market value of total assets, zero otherwise. Industry dummies are based on the Fama-French 48 classification. Robust standard errors are clustered at the firm level and reported in parentheses. *, **, and *** indicates significance at the 0.10, 0.05, and 0.01 level, respectively.

Dependent variable: $logTOTALPAY_{t+1}$	(1) Entire sample 2000-2012	(2) Pre-regulation period	(3) Post-regulation period
$logSALES_{t+1}$	0.430***	0.418***	0.433***
	(0.010)	(0.013)	(0.012)
MTB_{t+1}	0.035***	0.049***	0.020***
	(0.004)	(0.006)	(0.005)
$SGROWTH_{t+1}$	0.399***	0.459***	0.328***
	(0.045)	(0.058)	(0.060)
ROA_{t+1}	1.112***	1.260***	0.978***
	(0.131)	(0.174)	(0.157)
SD_ROA_{t+1}	0.008	0.200	-0.177
	(0.198)	(0.286)	(0.239)
SD_RET_{t+1}	0.033*	0.061	0.007
	(0.019)	(0.042)	(0.014)
$POSRET_{t+1}$	0.052*	0.061	0.047
	(0.027)	(0.038)	(0.036)
$NEGRET_{t+1}$	0.125**	-0.059	0.225***
	(0.056)	(0.089)	(0.065)
ACQ_{t}	0.067	0.057	0.094
	(0.050)	(0.076)	(0.062)
$ACQ_{t}*POSRET_{t+1}$	0.017	0.122	-0.128
	(0.102)	(0.140)	(0.139)
$ACQ_{t}*NEGRET_{t+1}$	-0.002	-0.450	0.535**
	(0.231)	(0.362)	(0.236)
Industry and Year Dummies?	YES	YES	YES
Adjusted R^2	0.4352	0.4128	0.4551
N	16,603	7,285	9,318
Sum of coefficients test:			
*NEGRET + ACQ*NEGRET=0*	0.123	-0.509	0.760***
	(0.227)	(0.356)	(0.230)

Table 6. Robustness tests for the post-regulation period

This table presents the results of OLS regressions within the subsample from the post-regulation period. Panel A adds controls to the bonus model based on Grinstein and Hribar (2004) controlling for the effects of CEO power. *CEO Chair* is an indicator variable coded one when the CEO is the chairman of the board, zero otherwise; *Board Size* is the number of directors; *% Nominating Committee Independent* is the percentage of independent directors holding seats on the nominating committee; *CEO Power* is the sum of indicator variables capturing CEO chairman status, whether board size is in the bottom quintile, and whether the nominating committee is less than 100% independent. Panel B controls for the effects of corporate governance on post-acquisition CEO pay-performance sensitivity based on Harford and Li (2007). *Strong Board* is an indicator variable coded one when CEO tenure falls below the annual median. Panel C drops observations potentially sensitive to the financial crises by excluding all firm-year observations from 2008 and 2009. Robust standard errors are clustered at the firm level and reported in parentheses. *, **, and *** indicates significance at the 0.10, 0.05, and 0.01 level, respectively.

Panel A: Controlling for CEO power

Dependent variable: $logBONUS_t$	(1)	(2)
ACQ_t	-0.089	0.124
	(0.095)	(0.345)
$CEO\ Power_t$	-0.044	-0.031
	(0.063)	(0.072)
ACQ_t * $CEO\ Power_t$		-0.139
		(0.201)
Controls	Included	Included
Adjusted R^2	0.4550	0.4550
N	8,146	8,146

Table 6. Robustness tests for the post-regulation period (continued)

Panel B: Controlling for the effects of corporate governance

Dependent variable: $logTOTALPAY_{t+1}$	
$NEGRET_{t+1}$	0.221***
	(0.065)
ACQ_t	0.077
	(0.061)
$Strong\ Board_{t+1}$	-0.255***
	(0.024)
ACQ_t *$NEGRET_{t+1}$	0.751**
	(0.316)
$Strong\ Board_{t+1}$ *ACQ_t *$NEGRET_{t+1}$	-0.511
	(0.372)
	(0.309)
Controls	Included
Adjusted R^2	0.4683
N	9,318
Sum of coefficients test:	
$NEGRET_{t+1} + ACQ_t *NEGRET_{t+1} = 0$	0.973***
	(0.309)

Panel C: Dropping the financial crisis period

Dependent variable:	(1) CEO Bonus ($logBONUS_t$)	(2) Pay-performance sensitivity ($logTOTALPAY_{t+1}$)
ACQ_t	-0.039	0.154**
	(0.102)	(0.070)
$NEGRET_{t+1}$		0.203**
		(0.089)
ACQ_t *$NEGRET_{t+1}$		0.846***
		(0.300)
Controls	Included	Included
Adjusted R^2	0.4723	0.4510
N	7,553	6,635
Sum of coefficients test:		
$NEGRET + ACQ *NEGRET = 0$		1.049***
		(0.291)

Table 7. Cross-sectional analyses of compensation disclosures in acquiring firms during the post-regulation period

This table presents descriptive statistics and the results of cross-sectional OLS regressions within the subsample of firms making large acquisitions in the enhanced SEC compensation disclosure regulation period. *Disclosure Noncompliance* is an indicator variable coded one if the firm receives an SEC comment letter indicating noncompliance with executive compensation disclosure requirements, zero otherwise. *M&A discussed* is an indicator variable coded one if the CD&A discusses the effects of a merger or acquisition on executive compensation. *LowLength_ HighReadability* is an indicator variable coded one if both the Fog Index and number of words in the CD&A are below the annual sample mean, zero otherwise. Robust standard errors are clustered at the firm level and reported in parentheses. *, **, and *** indicates significance at the 0.10, 0.05, and 0.01 level, respectively.

Panel A: Descriptive statistics

	N	Mean	Median	Std. Dev
Disclosure Noncompliance	757	0.079	0.000	0.270
M&A discussed	559	0.778	1.000	0.416
LowLength_ HighReadability	559	0.306	0.000	0.461

Panel B: SEC comment letter analysis

	(1)	(2)
Dependent variable:	CEO Bonus ($logBONUS_t$)	Pay-performance sensitivity ($logTOTALPAY_{t+1}$)
Disclosure Noncompliance	0.371	-0.071
	(0.291)	(0.427)
NEGRET		0.887***
		(0.331)
*Disclosure Noncompliance * NEGRET*		-1.735*
		(1.025)
Controls	Included	Included
Adjusted R^2	0.2419	0.5091
N	757	340
Sum of coefficients test:		
*NEGRET + Disclosure Noncompliance * NEGRET* = 0		-0.848
		(0.952)

Table 7. Cross-sectional analysis of compensation disclosures in acquiring firms during the post-regulation period (continued)

Panel C: Disclosure of whether acquisitions affect compensation

	(1)	(2)
Dependent variable:	CEO Bonus ($logBONUS_t$)	Pay-performance sensitivity ($logTOTALPAY_{t+1}$)
M&A discussed	0.585**	0.317
	(0.269)	(0.198)
NEGRET		0.747
		(0.574)
*M&A discussed * NEGRET*		0.108
		(0.662)
		(0.403)
Controls	Included	Included
Adjusted R^2	0.2419	0.5546
N	559	286
Sum of coefficients test:		
*NEGRET + M&A discussed *NEGRET* = 0		0.855**
		(0.403)

Panel D: Overall disclosure quality of CD&As

	(1)	(2)
Dependent variable:	CEO Bonus ($logBONUS_t$)	Pay-performance sensitivity ($logTOTALPAY_{t+1}$)
LowLength_ HighReadability	-0.592**	-0.386
	(0.245)	(0.265)
NEGRET		1.043
		(0.857)
$LowLength_HighReadability_t$ **NEGRET*		-0.244
		(0.897)
Controls	Included	Included
Adjusted R^2	0.2554	0.5580
N	559	286
Sum of coefficients test:		
*NEGRET + LowLength_ HighReadability *NEGRET* = 0		0.799**
		(0.367)